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4 **SECTION 309 REGIONAL HAZE**  
5 **STATE IMPLEMENTATION PLAN ELEMENT:**  
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7 **ALBUQUERQUE-BERNALILLO COUNTY,**  
8 **NEW MEXICO**  
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13  
14 **JUNE 28, 2008**  
15 **PUBLIC REVIEW DRAFT**  
16 **Main Document**  
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29

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31  
32 City of Albuquerque Environmental Health Department  
33 Air Quality Division  
34 Control Strategies Section

1  
2 **PREFACE**  
3

4 This request [~~is~~] was first submitted pursuant to the U.S. Environmental Protection Agency  
5 (EPA) requirements published as a Federal Register notice (FR Vol. 64, No. 126) on  
6 Thursday, July 1, 1999. The documentation in this report addresses requirements found in  
7 Part 51, Appendix V relating to completeness of State Implementation Plan (SIP)  
8 submissions. This report was [~~taken to~~] first presented at a public hearing before the  
9 Albuquerque-Bernalillo County Air Quality Control Board (AQCB) held on October 8, 2003  
10 and continued on November 12, 2003. Appropriate public notices and opportunities for  
11 public comment were provided. The AQCB adopted the initial Regional Haze SIP on  
12 November 12, 2003.  
13

14 In 1999 the first regulation to address the type of visibility impairment known as Regional  
15 Haze was promulgated by EPA. Since that time it has been judicially challenged twice. On  
16 May 24, 2002, the U.S. Court of Appeals for the District of Columbia Circuit issued a ruling  
17 vacating the Regional Haze Rule in part and sustaining it in part, based on a finding that  
18 EPA's prescribed methods for determining best available retrofit technology (BART) were  
19 inconsistent with the Clean Air Act (CAA) [American Corn Growers Association v. EPA, {291  
20 F.3d 1 (DC Cir. 2002)}]. EPA finalized a rule on July 6, 2005 addressing the court's ruling in  
21 this case [FR Vol. 70 No. 128 39104-39172]. On February 18, 2005, the U.S. Court of  
22 Appeals for the District of Columbia Circuit issued another ruling, in Center for Energy and  
23 Economic Development (CEED) v. EPA, [398 F.3d 653(DC Cir. 2005)], granting a petition  
24 challenging provisions of the Regional Haze Rule governing an optional emissions trading  
25 program for certain western States and Tribes [the Western Regional Air Partnership  
26 (WRAP) Annex Rule]. EPA published proposed regulations to revise the provisions of the  
27 Regional Haze Rule governing alternative trading programs, and to provide additional  
28 guidance on such programs in August 2005. EPA received several comments on the August  
29 2005 proposal. This final rule [Federal Register: October 13, 2006 (Volume 71, Number  
30 198)] finalized the proposed revisions, including changes in response to the public  
31 comments. This rule became effective December 12, 2006. The following report has been  
32 amended to address all these actions, as well as addressing comments received by the  
33 Department, from EPA on 11/3/04, and in 2007.

1 **ACKNOWLEDGEMENTS IN THE PREPARATION OF THIS REPORT**

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## ACRONYMS

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4	ACI	Air Curtain Incinerator
5	AEG	Annual Emissions Goal
6	AQD	Air Quality Division (City of Albuquerque)
7	AQCB	Albuquerque-Bernalillo County Air Quality Control Board
8	ATS	Allowance Tracking System
9	BACT	Best Available Control Technology
10	BART	Best Available Retrofit Technology
11	CAA	The Clean Air Act
12	CFR	Code of Federal Regulations
13	Dv	DeciView
14	EATS	Emission Allowance Tracking System
15	EC	Elemental Carbon
16	EDMS	Emissions Data Reporting, Management and Tracking System
17	EIB	Environmental Improvement Board
18	EPA	U.S. Environmental Protection Agency
19	ERT	Emission Reduction Technique
20	ESMP	Enhanced Smoke Management Policy
21	FEJF	Fire Emissions Joint Forum
22	FEP	Fire Emissions Project
23	FIP	Federal Implementation Plan
24	FLM	Federal Land Manager
25	GCVTC	Grand Canyon Visibility Transport Commission
26	I&M	Inspection and Maintenance Program
27	MOU	Memorandum of Understanding
28	MW	MegaWatts
29	NAAQS	National Ambient Air Quality Standards
30	NMAC	New Mexico Administrative Code
31	NMED	New Mexico Environment Department
32	NOx	Nitrogen Oxides
33	NSPS	New Source Performance Standards
34	NSR	New Source Review
35	NVC	Natural Visibility Conditions
36	OC	Organic Carbon
37	PBII	Prescribed Burn II
38	PM	Particulate Matter
39	RATA	Relative Accuracy Test Audit
40	RAVI	Reasonable Attributable Visibility Impairment
41	RHR	Regional Haze Rule
42	SEP	Supplemental Environmental Project
43	SIP	State Implementation Plan
44	SMP	Smoke Management Plan or Smoke Management Program
45	SO2	Sulfur Dioxide
46	TIP	Tribal Implementation Plan
47	TPY	Tons per Year
48	TSA	Tracking System Administrator
49	TSD	Technical Support Document
50	VMT	Vehicle Miles Traveled
51	VOCs	Volatile Organic Compounds

- 1 WEB Western Emissions Budget
- 2 WEB ~~[ATS]~~ EATS WEB Emission Allowance Tracking System
- 3 WESTAR Western States Air Resources Council
- 4 WFU Wildland Fire Managed for Resource Benefit
- 5 WGA Western Governor's Association
- 6 WRAP Western Regional Air Partnership

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[http://www.wrapair.org/forums/fejf/documents/altwild/nonburning\\_manual.pdf](http://www.wrapair.org/forums/fejf/documents/altwild/nonburning_manual.pdf)

[WRAP's guidance on Burning Management Alternatives on Agricultural Lands in the Western US.](#)

<http://www.wrapair.org/forums/fejf/tasks/FEJFtask4.html>

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## Glossary

(After Malm, W. C., *Introduction to Visibility*, National Park Service, May 1999  
<http://vista.cira.colostate.edu/improve/Education/IntroToVisinstr.htm> )

**Absorption:** a class of processes by which one material is taken up by another.

**Absorption Coefficient:** a measure of the ability of particles or gases to absorb photons; a number that is proportional to the number of photons removed from the sight path by absorption per unit length.

**Aerosol:** a dispersion of microscopic solid or liquid particles in a gaseous medium, such as smoke and fog.

**Air Parcel:** a volume of air that tends to be transported as a single entity.

**Anthropogenic:** produced by human activities.

**Apportionment:** to distribute or divide and assign proportionately.

**Attenuation:** the diminuation of quantity. In the case of visibility, attenuation or extinction refers to the loss of image-forming light as it passes from an object to the observer.

**Coagulation:** the process by which small particles collide with and adhere to one another to form larger particles.

**Condensation:** the process by which molecules in the atmosphere collide and adhere to small particles.

**Condensation Nuclei:** the small nuclei or particles with which gaseous constituents in the atmosphere (e.g., water vapor) collide and adhere.

**Deciview:** a unit of visibility proportional to the logarithm of the atmospheric extinction, an index of haziness. Under many circumstances a change in one deciview will be perceived to be the same on clear and hazy days.

**Extinction:** the attenuation of light due to scattering and absorption as it passes through a medium.

**Extinction Coefficient:** a measure of the ability of particles or gases to absorb and scatter photons from a beam of light; a number that is proportional to the number of photons removed from the sight path per unit length. See absorption.

**Haze:** an atmospheric aerosol of sufficient concentration to be visible. The particles are so small that they cannot be seen individually, but are still effective in visual range restriction. See visual range.

**Homogenous Nucleation:** process by which gases interact and combine with droplets made up of their own kind. For instance, the collision and subsequent adherence of water vapor to a water droplet is homogenous nucleation. See nucleation.



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**Hydrocarbons:** compounds containing only hydrogen and carbon. Examples: methane, benzene, decane, et cetera.

**Hygroscopic:** readily absorbing moisture, as from the atmosphere.

**IMPROVE:** Interagency Monitoring of PROtected Visual Environments.

**Integrating Nephelometer:** an instrument that measures the amount of light scattered (scattering coefficient).

**Isopleth:** a line drawn on a map through all points having the same numerical value.

**LAC or See Light Absorbing Carbon Light-Absorbing Carbon [(LAG):** carbon particles in the atmosphere that absorb light. Black carbon.

**Light Extinction Budget:** the percent of total atmospheric extinction attributed to each aerosol and gaseous component of the atmosphere.

**Micron:** a unit of length equal to one millionth of a meter; the unit of measure for wavelength.

**NO<sub>2</sub> or Nitrogen Dioxide:** a gas [(NO<sub>2</sub>)] consisting of one nitrogen and two oxygen atoms. It absorbs blue light and therefore has a reddish-brown color associated with it.

~~[NO<sub>2</sub>; See nitrogen dioxide.]~~

**Nucleation:** process by which a gas interacts and combines with droplets. See homogenous nucleation.

**Perceived Visual Air Quality (PVAQ):** an index that relates directly to how human observers perceive changes in visual air quality.

**Photon:** a bundle of electromagnetic energy that exhibits both wave-like and particle-like characteristics.

**Plume Blight:** visual impairment of air quality that manifests itself as a coherent plume.

**Point Source:** 1) generally, any stationary source for which individual records are maintained for emission inventory purposes; distinguished from area source, often by a criterion involving emission rate, such as 100 tons per year. 2) A source of pollution that is point-like in nature. An example is the smoke stack of a coal-fired power plant or smelter. See source.

**Polar Nephelometer:** an instrument that measures the amount of light scattered in a specific direction. See also integrating nephelometer.

**Precursor Emissions:** emissions from point or regional sources that transform into pollutants with varied chemical properties.

1 **Rayleigh Scattering:** the scattering of light by particles much smaller than the wavelength  
2 of the light. In the ideal case, the process is one of a pure dipole interaction with the electric  
3 field of the light wave.  
4

5 **Relative Humidity:** the ratio of the partial pressure of water to the saturation vapor  
6 pressure, also called saturation ratio; often expressed as a percentage.  
7

8 **Scattering (light):** an interaction of a light wave with an object that causes the light to be  
9 redirected in its path. In elastic scattering, no energy is lost to the object.  
10

11 **Scattering Coefficient:** a measure of the ability of particles or gases to scatter photons out  
12 of a beam of light; a number that is proportional to the amount of photons scattered per unit  
13 length.  
14

15 **Secondary Aerosols:** aerosol formed by the interaction of two or more gas molecules  
16 and/or primary aerosols.  
17

18 **SO<sub>2</sub>:** See sulfur dioxide.  
19

20 **Source:** in atmospheric chemistry, the place, places, group of sites, or areas where a  
21 substance is injected into the atmosphere. Can include point sources, elevated sources,  
22 area sources, regional sources, multiple sources, etc.  
23

24 **Sulfates:** those aerosols which have origins in the gas-to-aerosol conversion of sulfur  
25 dioxide; of primary interest are sulfuric acid and ammonium sulfates.  
26

27 **Sulfur Dioxide:** a gas (SO<sub>2</sub>) consisting of one sulfur and two oxygen atoms. Of interest  
28 because sulfur dioxide converts to an aerosol that very efficiently scatters light. Also, it can  
29 convert into acid droplets consisting primarily of sulfuric acid.  
30

31 Temperature Inversion: in meteorology, a departure from the normal decrease of  
32 temperature with increasing altitude such that the temperature is higher at a given height in  
33 the inversion layer than would be expected from the temperature below the layer. This  
34 warmer layer leads to increased stability and limited vertical mixing of air.  
35

36 **Visual Range:** the distance at which a large black object just disappears from view.  
37

38 **VOC:** Volatile Organic Compound - gaseous hydrocarbon.  
39

40 Wavelength: the distance, measured in the direction of propagation of a wave, between two  
41 successive points in the wave that are characterized by the same phase of oscillation.  
42

1 **I. BACKGROUND ON REGIONAL HAZE**

2  
3  
4 **A. Introduction**

5  
6 Regional haze is a type of air pollution that is transported long distances and reduces visibility in  
7 national parks and wilderness areas across the country. Over the years this haze has reduced the  
8 visual range from 90 miles (145 kilometers) to 15-31 miles (24-50 kilometers) in the East, and from  
9 140 miles (225 kilometers) to 35-90 miles (56-145 kilometers) in the West. The pollutants that  
10 create this haze are sulfates, nitrates, organic carbon, elemental carbon, and soil dust.  
11 Anthropogenic haze sources include industry, motor vehicles, agricultural and forestry burning, and  
12 windblown dust from roads and farming practices.

13  
14 In 1999, the Environmental Protection Agency (EPA) issued regulations to address regional haze  
15 in 156 national parks and wilderness areas across the country. These regulations were published  
16 in the Federal Register on July 1, 1999 [64 FR 35714]. The goal of the Regional Haze Rule (RHR)  
17 is to eliminate anthropogenic visibility impairment in national parks and wilderness areas across  
18 the country. It contains strategies to improve visibility over the next 60 years, and requires states  
19 to adopt implementation plans to address Regional Haze.

20  
21 EPA's RHR provides two paths to address regional haze. One is 40 CFR 51.308 ("Section 308"),  
22 and requires most states to develop long-term strategies out to the year 2064. These strategies  
23 must be shown to make "reasonable progress" in improving visibility in Class I areas inside the  
24 state and in neighboring jurisdictions. The other is 40 CFR 51.309 (Section 309"), and is an option  
25 for nine states - Arizona, California, Colorado, Idaho, Nevada, New Mexico, Oregon, Utah, and  
26 Wyoming - and the 211 Tribes located within those States to adopt regional haze strategies for the  
27 period from 2003 to 2018. These strategies are based on recommendations from the Grand  
28 Canyon Visibility Transport Commission (GCVTC) for protecting the 16 Class I areas in the  
29 Colorado Plateau area. Adopting these strategies constitutes reasonable progress until 2018.  
30 These same strategies can also be used by the nine western states and tribes to protect the other  
31 Class I areas within their own jurisdiction.

32  
33 Best Available Retrofit Technology (BART) is one of the main provisions in the RHR. It applies to  
34 certain industrial sources built between 1962 and 1977. Section 308 requires states to identify  
35 BART-eligible sources, estimate the expected visibility improvements, and determine BART for  
36 each eligible source. Section 309 initially provided an alternative method of satisfying the 308  
37 BART requirements by setting voluntary SO2 emission reductions for BART sources, with a  
38 backup market trading program if the SO2 reduction milestones are not met. This alternative to  
39 BART in Section 309 was referred to as the Annex. SO2 reductions in the Annex were designed to  
40 be "better than BART". However, in response to lawsuits filed by CEED and American Corn  
41 Growers, EPA has modified the Regional Haze Rule so that: Section 309 States must also  
42 determine BART eligibility for sources and the "Annex" is unaffected.

43  
44  
45 **B. 1977 Clean Air Act**

46  
47 In 1977, Congress amended the Clean Air Act (CAA), including provisions to protect the scenic  
48 vistas of the nation's national parks and wilderness areas. Section 169A was added to the CAA for  
49 the protection of visibility in mandatory Class I Federal areas (Class I Areas) of great scenic  
50 importance. In Section 169A(a)(1), Congress established the national goal for visibility protection:

1 “Congress hereby declares as a national goal the prevention of any future, and the  
2 remedying of any existing, impairment of visibility in mandatory class I Federal areas  
3 which impairment results from man-made air pollution”.  
4

5 In 1980, the EPA developed regulations to address this goal by reducing the impact of large  
6 industrial sources on nearby Class I areas<sup>1</sup>. It was recognized at the time that regional haze,  
7 which comes from a wide variety of sources that may be located far away from a Class I area, were  
8 also a part of the visibility problem. However, monitoring networks and visibility models were not  
9 yet developed to the degree necessary to understand the causes of regional haze. Therefore,  
10 EPA deferred additional rulemaking until scientific knowledge of visibility impairment had improved.  
11

12 The final Regional Haze Rule (RHR), which precipitated the development of this SIP element, was  
13 promulgated on July 1, 1999 and became effective on August 30, 1999 (See Appendix A-O). In  
14 response to the lawsuits brought by CEED and American Corn Growers Ass’n, EPA has since  
15 issued amendments to the Regional Haze Rule (See 7/6/05 FR & 10/13/06 FR). See Appendix  
16 2007-A  
17

### 18 **C. Grand Canyon Visibility Transport Commission** 19

20  
21 Amendments to the Clean Air Act in 1990 created the Grand Canyon Visibility Transport  
22 Commission (GCVTC). The Commission was given the charge to assess the currently available  
23 scientific information pertaining to adverse impacts on visibility from potential growth in the region,  
24 identify clean air corridors, and recommend long-range strategies for addressing regional haze.  
25 The GCVTC completed significant technical analyses and developed recommendations to improve  
26 visibility in the 16 mandatory federal Class I areas on the Colorado Plateau. The Commission  
27 found that visibility impairment on the Colorado Plateau was caused by a wide variety of sources  
28 and pollutants. A comprehensive strategy was needed to address all of the causes of regional  
29 haze. The GCVTC submitted these recommendations to EPA in a report dated June 1996 for  
30 consideration in rule development. These recommendations were:  
31

32 **Air Pollution Prevention.** Air pollution prevention and reduction of per capita pollution was a high  
33 priority for the Commission. The Commission recommended policies based on energy  
34 conservation, increased energy efficiency and promotion of the use of renewable resources for  
35 energy production.  
36

37 **Clean Air Corridors.** Clean air corridors are key sources of clean air at Class I areas, and the  
38 Commission recommended careful tracking of emissions growth that may affect air quality in these  
39 corridors.  
40

41 **Stationary Sources.** For stationary sources, the Commission recommended closely monitoring  
42 the impacts of current requirements under the Clean Air Act and ongoing source attribution studies.  
43 Regional targets for SO<sub>2</sub> emissions from stationary sources should be set, starting in 2000. If  
44 these targets are exceeded, this will trigger a regulatory program, probably including a regional cap  
45 and market-based trading.  
46

47 **Areas In and Near Parks.** The Commission's research and modeling showed that a host of  
48 identified sources adjacent to parks and wilderness areas, including large urban areas, have  
49 significant visibility impacts. However, the Commission lacked sufficient data regarding the visibility

---

1 Class I Areas generally include national parks, monuments, wildlife refuges and wildernesses.

1 impacts of emissions from some areas in and near parks and wilderness areas. In general, the  
2 models used by the Commission were not readily applicable to such areas. Pending further  
3 studies of these areas, the Commission recommended that local, state, tribal, federal, and private  
4 parties cooperatively develop strategies, expand data collection, and improve modeling for  
5 reducing or preventing visibility impairment in areas within and adjacent to parks and wilderness  
6 areas.

7  
8 **Mobile Sources.** The Commission recognized that mobile source emissions are projected to  
9 decrease through about 2005 due to improved control technologies. The Commission  
10 recommended capping emissions at the lowest level achieved and establishing a regional  
11 emissions budget, and also endorsed national strategies aimed at further reducing tailpipe  
12 emissions, including the so-called 49-state low emission vehicle, or 49-state LEV.

13  
14 **Road Dust.** The Commission's technical assessment indicated that road dust is a large  
15 contributor to visibility impairment on the Colorado Plateau. As such, it requires urgent attention.  
16 However, due to considerable skepticism regarding the modeled contribution of road dust to  
17 visibility impairment, the Commission recommended further study in order to resolve the  
18 uncertainties regarding both near-field and distant effects of road dust, prior to taking remedial  
19 action. Since this emissions source is potentially such a significant contributor, the Commission  
20 felt that it deserved high priority attention and, if warranted, additional emissions management  
21 actions.

22  
23 **Emissions from Mexico.** Mexican sources are also shown to be significant contributors,  
24 particularly of SO<sub>2</sub> emissions. However, data gaps and jurisdictional issues made this a difficult  
25 issue for the Commission to address directly. The Commission recommendations called for  
26 continued bi-national collaboration to work on this problem, as well as additional efforts to complete  
27 emissions inventories and increase monitoring capacities. These matters should receive high  
28 priority for regional and national action.

29  
30 **Fire.** The Commission recognized that fire plays a significant role in visibility on the Plateau. In  
31 fact, land managers propose aggressive prescribed fire programs aimed at correcting the buildup  
32 of biomass due to decades of fire suppression. Therefore, prescribed fire and wildfire levels are  
33 projected to increase significantly during the studied period. The Commission recommended the  
34 implementation of programs to minimize emissions and visibility impacts from prescribed fire, as  
35 well as to educate the public.

36  
37 **Future Regional Coordinating Entity.** Finally, the Commission believed there was a need for an  
38 entity like the Commission to oversee, promote, and support many of the recommendations in their  
39 report. To support that entity, the Commission developed a set of recommendations addressing the  
40 future administrative, technical and funding needs of the Commission or a new regional entity. The  
41 Commission strongly urged the EPA and Congress to provide funding for these vital functions and  
42 give them a priority reflective of the national importance of the Class I areas on the Colorado  
43 Plateau.

#### 44 45 46 **D. Western Regional Air Partnership**

47  
48 The Western Regional Air Partnership (WRAP) was established in 1997 as the successor  
49 organization of the GCVTC. The WRAP is charged with coordinating and overseeing the  
50 implementation of the Commission's recommendations, as well as developing the technical and  
51 policy work that states and tribes in the West will need in order to implement the RHR. The WRAP

1 is a stakeholder-based organization, working cooperatively with States, tribes, federal agencies,  
2 environmental groups, and industry representatives to develop recommendations that meet the  
3 environmental goals most effectively. Since 2000, much of the work being conducted by the  
4 committees and forums of the WRAP have focused on identifying what information will be needed  
5 for Section 309 SIPs and TIPs.

## 8 **II. STATE IMPLEMENTATION PLAN**

### 11 **A [Purpose:] Objective**

13 This document presents ~~[and explains]~~ technical information to support the Albuquerque- Bernalillo  
14 County Air Quality Control ~~[Board]~~ Board's (AQCB) approval of this document as the Regional  
15 Haze element of the State Implementation Plan (SIP) for Bernalillo County, New Mexico. The  
16 AQCB proposes the following action: Approval of the report *Section 309 State Implementation*  
17 *Plan Element to Address Requirements of the final Regional Haze Rule*

19 The AQCB has opted to follow the recommendations of the Grand Canyon Visibility Transport  
20 Commission (GCVTC) and produce its regional haze SIP element to fulfill the requirements as  
21 specified in Section 51.309 (d) of the final Regional Haze Rule (RHR) [FR Vol. 64, No. 126] and  
22 subsequent rule changes.

24 Along with the State of New Mexico's Section 51.309(d) SIP governing thirty-two counties,  
25 Bernalillo County's regional haze SIP element will address all of the 16 Federal Class I Areas on  
26 the Colorado Plateau. ~~[If it elects to do so,]~~ The ~~[AQCB may]~~ Department will address additional  
27 Class I Areas in ~~[2008 as a]~~ this revision to the 2003 ~~[/2007]~~ regional haze SIP element.

### 30 **B. [Note on Jurisdiction:] Statutory Authority**

32 This SIP is adopted pursuant to the authority provided in the New Mexico Air Quality Control Act,  
33 NMSA 1978 Sections 74-2-4, 74-2-5.C; the Joint Air Quality Control Board Ordinance, Bernalillo  
34 County Ordinance 94-5 Sections 3 and 4; and the Joint Air Quality Control Board Ordinance,  
35 Revised Ordinances of Albuquerque 1994 Sections 9-5-1-3 and 9-5-1-4.

### 38 **C. Scope**

40 This SIP is applicable to sources within Bernalillo County, except those that are located on Indian  
41 lands over which the Albuquerque-Bernalillo County Air Quality Control Board (AQCB) lacks  
42 jurisdiction.

43 For air quality purposes, Bernalillo County operates the same way as a state-level air agency. The  
44 U.S. Environmental Protection Agency (EPA) ~~[treats]~~ regulates and funds Bernalillo County as it  
45 does any other [states] state air agency. Enacted in 1967, the New Mexico State Air Quality  
46 Control Act [NMSA 1978 Sections 74-2-4 & 74-2-5] allowed for the establishment of the AQCB as  
47 a local board and ~~[gave]~~ empowered it with the authority to administer and enforce its air quality  
48 regulations within Bernalillo County ~~[boundaries]~~.

50 Pursuant to the authority of the Air Quality Control Act, Chapter 74, Article 2 NMSA 1978, Sections  
51 74-2-5 and 74-2-7, the AQCB has jurisdiction over all of Bernalillo County, [which contains all of]

1 (including the City of Albuquerque), except Indian lands. The State of New Mexico Environmental  
2 Improvement Board (EIB) has jurisdiction over all other counties in New Mexico [~~except Bernalillo~~  
3 ~~County~~]. The City of Albuquerque Environmental Health Department, Air Quality Division (AQD)  
4 administers and staffs the air quality program for Bernalillo County. The term Department, as used  
5 in this document, refers to the Albuquerque Environmental Health Department. [~~The term~~  
6 ~~Albuquerque Bernalillo County is also used to indicate the Albuquerque Environmental Health~~  
7 ~~Department.~~]

## 9 **~~II.~~ BACKGROUND**

### 11 **~~A.) National Visibility Goal:~~**

13 ~~Section 169A of the Clean Air Act Amendments of 1977 sets forth a national visibility goal to~~  
14 ~~remedy any existing visibility impairment in Class I Areas and prevent any such future impairment.~~  
15 ~~In 1980, EPA developed its initial visibility regulations. These regulations required that states~~  
16 ~~revise their State Implementation Plans (SIPs) to incorporate the national visibility goal. EPA,~~  
17 ~~however, deferred national rulemaking until scientific knowledge of visibility impairment had~~  
18 ~~improved. The final Regional Haze Rule (RHR), which precipitated the development of this SIP~~  
19 ~~element, was promulgated on July 1, 1999 and became effective on August 30, 1999 (See~~  
20 ~~Appendix A-O).]~~

### 23 **~~B.)~~ D Options for Regional Haze SIPs:**

25 The final Regional Haze regulation, also referred to as the Regional Haze Rule (RHR), establishes  
26 a comprehensive national visibility program to protect Federal Class I Areas and requires states to  
27 develop a SIP element to address requirements of the final RHR. [~~The final RHR provides two~~  
28 ~~options to states in Sections 51.308 and 51.309, known as “308” and “309”, respectively.]~~

30 Class I areas are those designated as areas of special national or regional value from a natural,  
31 scenic, recreational, and/or historic perspective. These areas are the focus of federal visibility  
32 protection regulations, including the Regional Haze Rule. Across the country, Class I areas  
33 include such places as the Grand Canyon, Yosemite, Mt. Rainier, Great Smoky Mountains,  
34 Yellowstone, and the Everglades. There are a total of 156 mandatory federal Class I Areas in the  
35 U.S. There are nine Class I areas in New Mexico, including Carlsbad Caverns National Park,  
36 Bandelier National Monument, Bosque del Apache National Wildlife Refuge, and the Gila, Pecos,  
37 Salt Creek, San Pedro Parks, Wheeler Peak, and White Mountain Wilderness Areas.

39 [~~The 308 Option is the national regional haze program available to all states. The 309 Option,~~  
40 ~~however, is only available to nine Western states within the Colorado Plateau region; this includes~~  
41 ~~New Mexico and Bernalillo County. Also, there are two alternatives available within both the 308~~  
42 ~~and the 309 options.]~~

44 The final RHR provides two options to states under 40 CFR Sections 51.308 and 51.309, known as  
45 Section 308 or “308” and Section 309 or “309”, respectively. Section 309 of the Regional Haze  
46 Rule is an option only available to the nine western states that comprised the Grand Canyon  
47 Visibility Transport Commission (GCVTC), an organization formed by Congress in 1991 to study  
48 scientific and technical information on visibility protection for 16 Class I areas located on the  
49 Colorado Plateau, including the San Pedro Parks Wilderness Area in New Mexico. In 1996, the  
50 GCVTC submitted a report to EPA with recommendations on how to protect visibility for these  
51 areas. The Regional Haze Rule’s Section 309 incorporates many of the recommendations of the

1 GCVTC, which were developed through a consensus-based process that involved states, tribes,  
2 EPA, federal land managers, industry, citizens and environmental groups from the west.<sup>2</sup> New  
3 Mexico was an active participant in the process, as were New Mexico tribal governments, industry  
4 representatives and environmental groups.

5  
6 ~~{As stated}, The Albuquerque-Bernalillo County Air Quality Control Board (AQCB) chose to develop~~  
7 ~~its regional haze SIP element using the 309 Option. [Also the AQCB will follow the alternative~~  
8 ~~within 309 that permits states to address only the 16 Class I Areas of the Colorado Plateau<sup>3</sup>. The~~  
9 ~~309 Option is based upon the recommendations of the Grand Canyon Visibility Transport~~  
10 ~~Commission (GCVTC) issued in June 1996. Section 51.309 of the final Regional Haze Rule (FR~~  
11 ~~Vol. 64, No. 126) incorporates several of the GCVTC's recommendations.]~~

#### 14 **{C)} E. Requirements of the 309 Option:**

15  
16 ~~{Specifically}, The final RHR requires that States opting to follow Section 51.309 address the~~  
17 ~~following topics in their regional haze SIP elements:~~

- 19       ▪ Projection of Visibility Impairment
- 20       ▪ Treatment of Clean Air Corridors
- 21       ▪ Implementation of Stationary Source Reductions
- 22       ▪ Mobile Sources
- 23       ▪ Emissions Related to Fire
- 24       ▪ Dust from Roads
- 25       ▪ Pollution Prevention
- 26       ▪ Implementation of Additional Requirements
- 27       ▪ Periodic Implementation Plan Revisions, and
- 28       ▪ State Planning & Interstate Coordination

29  
30 The AQCB includes all of these topics in this regional haze SIP element, and identifies specific  
31 control strategies to address the different types of emission sources.

### 32 **III. APPROACH**

#### 33 **A) Western Regional Air Partnership (WRAP) Products & Bernalillo County:**

34  
35 ~~The work of the GCVTC and the Western Regional Air Partnership (WRAP) forms the basis of a~~  
36 ~~309 Regional Haze SIP. The WRAP is a multi-state organization formed to collaborate on the~~  
37 ~~technical and policy aspects of regional haze SIPs. The WRAP developed the majority of its~~  
38 ~~emissions inventories, reports and products for the nine GCVTC states to use. The State of New~~  
39 ~~Mexico is one of the GCVTC states. As with other states' local jurisdictions, the WRAP work~~  
40 ~~products focus attention on the State of New Mexico as opposed to Bernalillo County.]~~

### 41 **III COORDINATION WITH THE STATE OF NEW MEXICO**

42  
43  
44  
45  
46  

---

2 See Section XI H, Additional Recommendations, for a discussion of all of the GCVTC's recommendations.  
~~[3 One of these 16 Class I Areas lies within the State of New Mexico, though it is not within Bernalillo~~  
~~County.]~~



1 ~~[In]~~ Since 1967, when the New Mexico Air Quality Control Act was adopted, ~~[authorized]~~ the City of  
2 Albuquerque and Bernalillo County have acted as agents of the AQCB to implement, administer  
3 and enforce ~~a~~ the local air quality program within Albuquerque and Bernalillo County.  
4 ~~[Subsequently]~~, After Congress adopted the 1970 Clean Air Act (CAA), the AQCB (formed  
5 ~~[previously]~~ by Albuquerque and Bernalillo County prior to the CAA) became the federally-  
6 delegated authority to implement the Federal CAA. Therefore the, City of Albuquerque ~~[staff]~~  
7 acting as agents for the AQCB, administers and enforces the local Bernalillo County air quality  
8 program and interfaces with the U.S. Environmental Protection Agency (EPA) Region VI to  
9 implement CAA provisions.

10  
11 ~~**[B) Coordination with the State of New Mexico:]**~~

12  
13 This presents a unique situation for promulgating a 309 Regional Haze SIP element, ~~[Although]~~  
14 because Bernalillo County has independent delegation for CAA purposes, but it is still part of the  
15 State of New Mexico. Therefore, coordination between Bernalillo County and the State of New  
16 Mexico is necessary. To this end, City of Albuquerque staff participated in the State's Regional  
17 Haze Stakeholder Workgroup (for the 2003 Regional Haze SIP), a series of meetings to build  
18 consensus regarding whether the State should pursue the 308 or the 309 SIP option.

19  
20 However, consensus was not ~~[achieved]~~ reached. In a letter dated June 24, 2003 (see Appendix  
21 B-O), the New Mexico Secretary of the Environment recommended that the State pursue the 309  
22 SIP option so it could build upon the GCVTC's technical work developed specifically for certain  
23 western states. City of Albuquerque staff met with State staff in June 2003 to coordinate how each  
24 would develop it's separate, yet related, 309 SIP element.

25  
26  
27 **IV. SIP ELEMENTS**

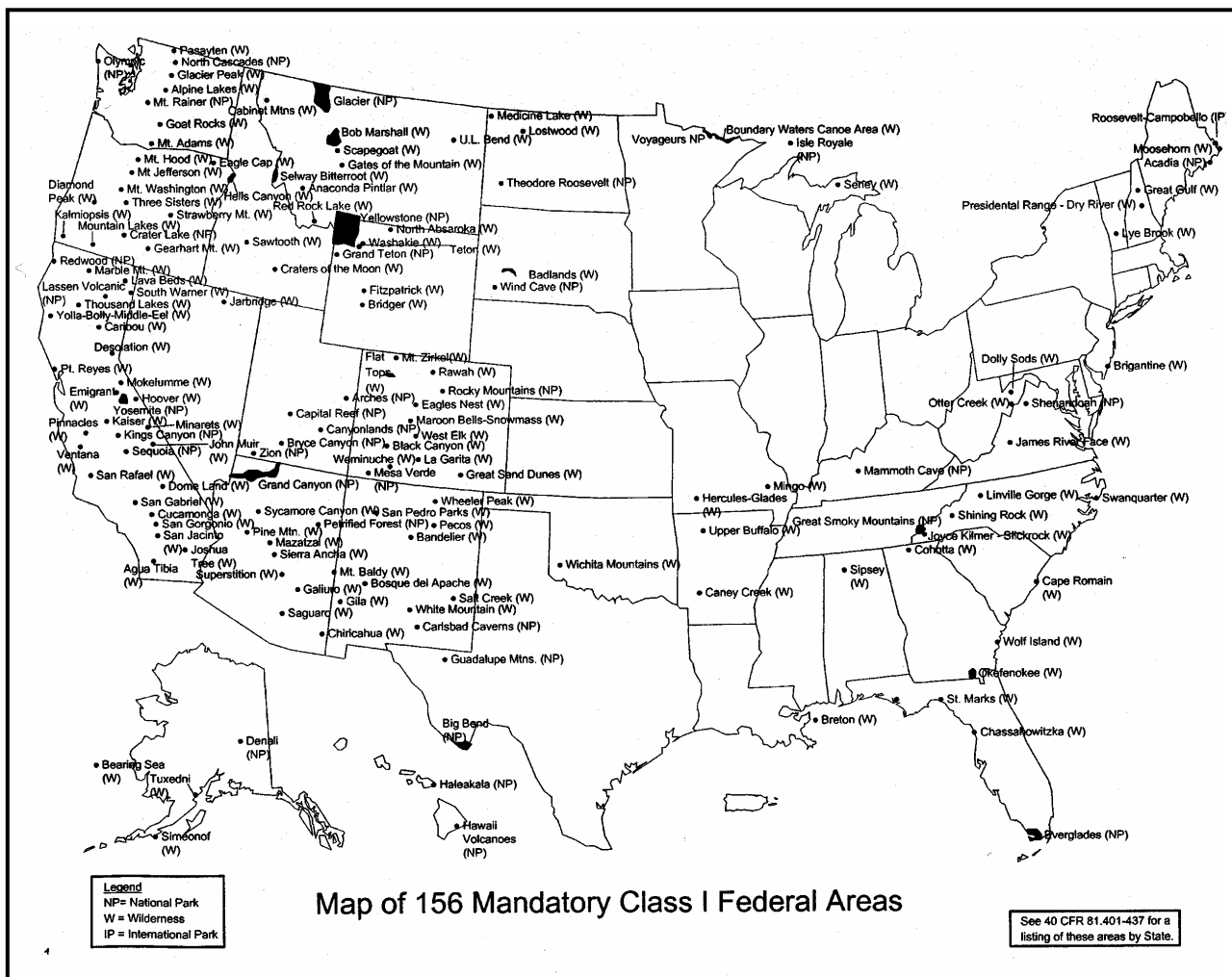
28  
29  
30 **SECTION A. PROJECTION OF VISIBILITY IMPROVEMENT**

31  
32 ~~**[A) Introduction & Requirements:]**~~

33  
34 Page 35751 of the Preamble to the Regional Haze Rule (RHR) discusses the requirement for  
35 projection of visibility improvement, which is only ~~[for]~~ applicable to the 16 Class I Areas of the  
36 Colorado Plateau (see ~~[Figure 2]~~ Figures 2a & 2b in Section B). There are, however, a total of 156  
37 federal Class I Areas within the United States (see Figure 1).

1  
2  
3

Figure 1: Federal Class I Areas in the United States



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21

This requirement for projection of visibility improvement applies to all transport region states, whether they have one or more of the 16 Class I Areas within their borders or whether they have none. States must show visibility improvement for each of the 16 Class I Areas. EPA requirements for the 2003 SIP submittal stipulated that, States do not need to show their individual contribution, just the regional contribution. Note that the same visibility improvement projections will be reflected in the SIPs of the transport region states because the states are utilizing technical work that the Western Regional Air Partnership (WRAP) has produced.

**[B] Applicable Class I Areas:**

Many of the 156 Mandatory Federal Class I Areas in the United States are found in the West (see Figure 1 [on the previous page]). As mentioned, Section 51.309 of the final Regional Haze Rule (RHR) offers two alternatives for addressing Federal Class I Areas<sup>4</sup>. As part of their 2003 SIP element submittal, States [may address] either addressed 1) all of the 16 Class I Areas of the Colorado Plateau, or 2) all of the 16 Class I Areas of the Colorado Plateau and additional Class I

4 For purposes here, the term Class I Areas means the Mandatory Class I Federal Areas.

1 Areas outside of the Colorado Plateau but inside the nine GCVTC state transport region.

2  
3 In 2003, as part of this SIP element, the Albuquerque-Bernalillo County Air Quality Control Board  
4 (AQCB) ~~has~~ elected to address only the 16 Class I Areas of the Colorado Plateau. However  
5 since that time WRAP has made efforts to model the impact transport region states have on  
6 additional Class I areas outside of the Colorado Plateau. These efforts were made to address  
7 additional requirements for the 2007 Regional Haze SIP submittal, specifically 40 CFR  
8 51.309(d)10(i) and 40 CFR 59.309(g), which call for an analysis the impacts each state has on  
9 other Class I areas. However, the WRAP has not analyzed transport impacts below the level of a  
10 state. Therefore, [the determination of whether emissions from Bernalillo County will cause a](#)  
11 [significant \(0.5 dv\) impact on nearby Class I areas \(i.e. Bosque del Apache\) will be more qualitative](#)  
12 [than quantitative.](#) The Department [has worked](#) with the WRAP to [characterize](#) this impact and [it](#)  
13 [has been included in this report. A more quantitative analysis will be performed for the periodic](#)  
14 [SIP update due in 2013.](#)

15  
16 **(a) Applicable Class I Areas**

17  
18 [~~The section on~~] This projection of visibility improvement (presented here) covers the 16 Class I  
19 Areas of the Colorado Plateau as defined in 40 CFR 51.309(b)(1).

20  
21 **Table 1: 16 Class I Areas of the Colorado Plateau**

22

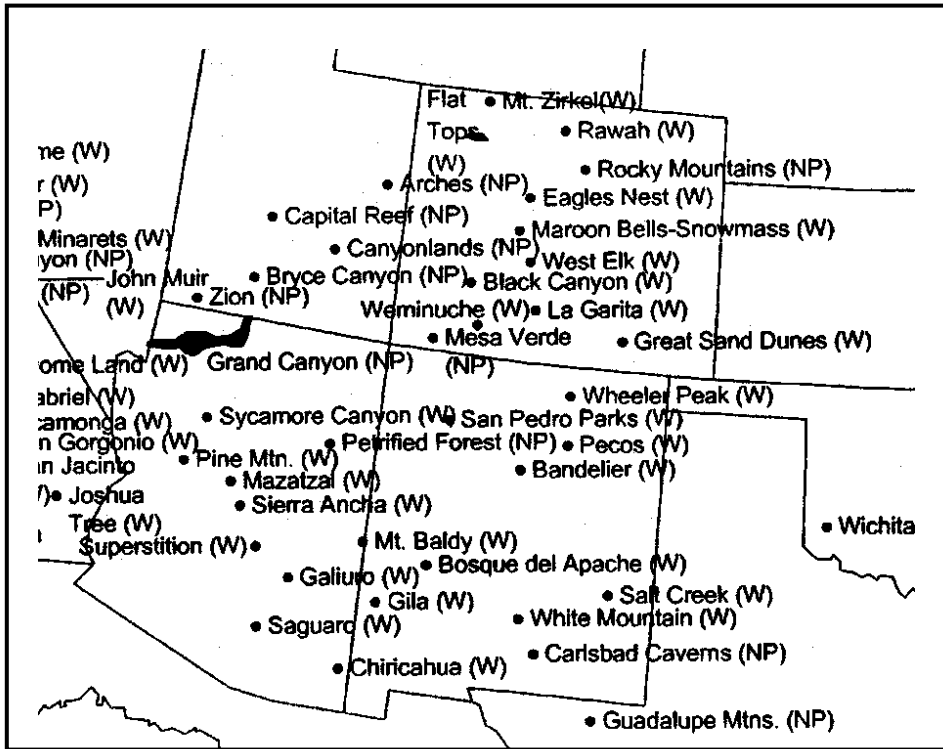
Area	Location
Grand Canyon National Park	Arizona
Sycamore Canyon Wilderness	Arizona
Petrified Forest National Park	Arizona
Mount Baldy Wilderness	Arizona
<b>San Pedro Parks Wilderness</b>	<b>New Mexico</b>
Mesa Verde National Park	Colorado
Weminuche Wilderness	Colorado
Black Canyon of the Gunnison Wilderness	Colorado
West Elk Wilderness	Colorado
Maroon Bells Wilderness	Colorado
Flat Tops Wilderness	Colorado
Arches National Park	Utah
Canyonlands National Park	Utah
Capital Reef National Park	Utah
Bryce Canyon National Park	Utah
Zion National Park	Utah

23  
24  
25 Of the 16 Class I Areas listed, only the San Pedro Parks Wilderness Area lies within New Mexico  
26 (See Figure 2). Note that no such Class I Areas are located within Bernalillo County. However,  
27 Bernalillo County's impact on these 16 Class I Areas is embodied in the regional technical work  
28 that the WRAP has conducted. Results of this work indicate a change in visibility in the San Pedro

- 1 Parks Wilderness Area on both the 20% worst visibility days and the 20% best visibility days (see
- 2 Appendix A-SIP for further explanation).

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2  
3  
4

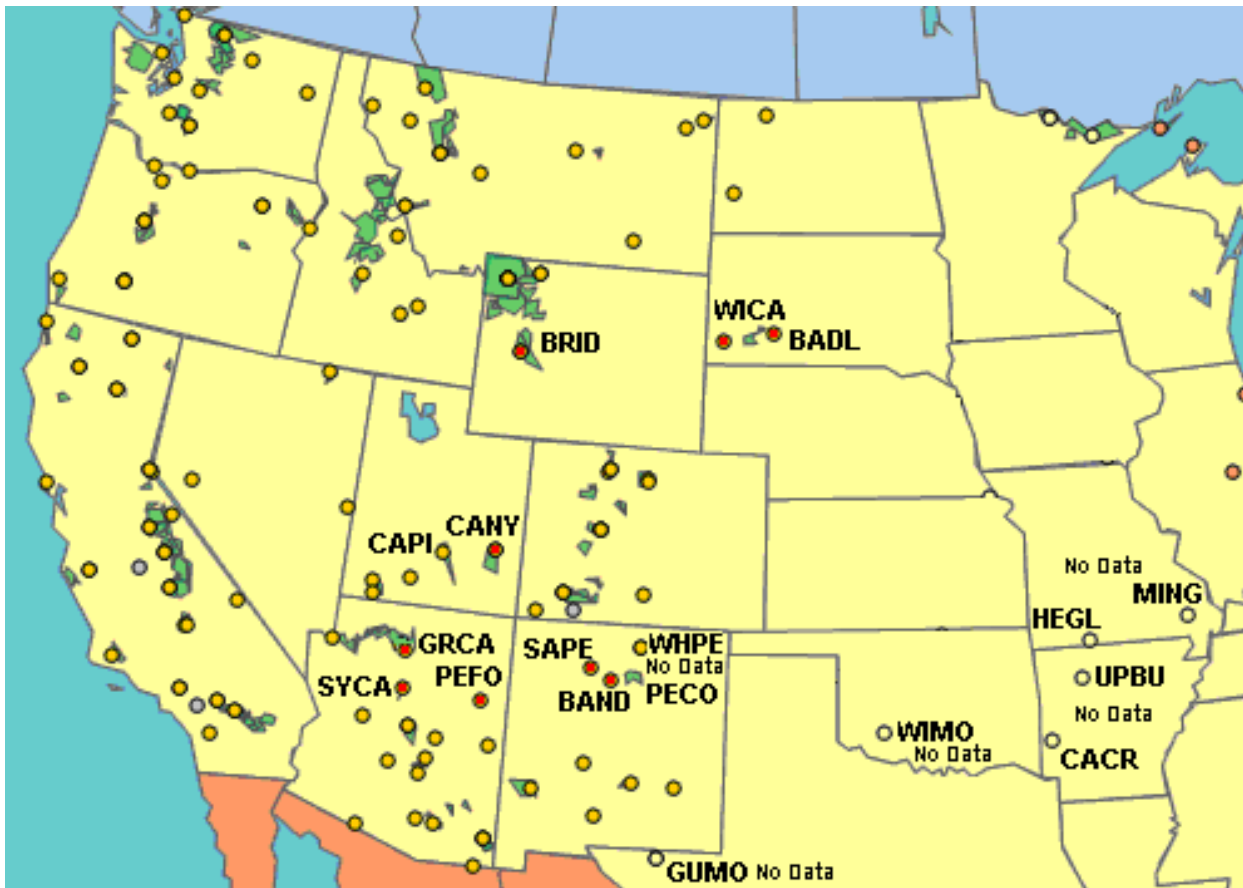
Figure 2a: [16] Class I Areas of the [Colorado Plateau] Southwestern U.S.  
Note: The San Pedro Parks Wilderness Area is the only such area in New Mexico.



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**Figure 2b: Class I Areas of the Central and Western United States**



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**[(C) Projected Visibility Improvement:]**

Pursuant to 40 CFR 51.309(d)(2), Tables 2a and 2b on the following pages indicate the projected visibility improvement in deciviews (dv) for each of the 16 Colorado Plateau Class I Areas, from the 1996 baseline year through December 31, 2018. This projection (expressed in deciviews), was made for the 20% worst (visibility) days (Table 2a) and 20% best (visibility) days (Table 2b).

Comparing the modeled data across the last three columns of the tables shows the improvement in visibility that would result from implementation of all of the 309 control strategies. The 2018 Base Case column shows the visibility that would result in the absence of the 309 control strategies. The last two columns show the improvement resulting from the control strategies combined with a base smoke management program (2018 Scenario 1) or with an optimal smoke management program (2018 Scenario 2).

Modeling results for the San Pedro Parks Wilderness Area are as follows: On the worst visibility days (Table 2a), visibility is predicted to worsen as indicated by an increase of 1.42 dV. On the best visibility days (Table 2b), visibility is also predicted to worsen as indicated by an increase of 1.51 dV. Therefore, for the worst and best visibility days (Table 2b), visibility in San Pedro Parks worsens. However, By implementing provisions of a Section 309 SIP, visibility in San Pedro Parks will improve over the scenario where no controls are put in place. A more detailed discussion of

26

1 ~~the modeling results for all Colorado Plateau Class I Areas is found in Appendix A-SIP of the SIP~~  
2 ~~Appendices.~~

1 **[Table 2a. Projected Visibility Improvement at the 16 Colorado Plateau Class I Areas in 2018**  
 2 **on the Average 20% Worst Visibility Days, resulting from implementation of “All §309**  
 3 **Control Strategies” 2018 Scenarios 1 and 2.**  
 4

Colorado Plateau Class I Area	State	[1997-2001 2000-2004 Monitoring Data (20% Worst Days' Visibility- deciviews)	Modeling Results (deciviews)		
			2018 Base Case (20% Worst Days' Visibility for all controls “on the books” as of 2002)	2018 Scenario 1 Base Case (base 18b) (20% Worst Days' Visibility for all §309 Control Strategies (SO <sub>2</sub> Annex Milestones and Pollution Prevention) with Base Smoke Management)	2018 Scenario 2 (20% Worst Days' Visibility for all §309 Control Strategies (SO <sub>2</sub> Annex Milestones and Pollution Prevention) with Optimal Smoke Management)
Grand Canyon NP	AZ	[12.30] <u>11.65</u>	11.62	11.56	11.51
Mount Baldy Wilderness	AZ	14.30	12.22	12.02	11.96
Petrified Forest NP	AZ	13.00	11.99	11.82	11.74
Sycamore Canyon Wilderness	AZ	15.40	11.63	11.51	11.48
Black Canyon of Gunnison NP	CO	11.30	10.90	10.76	10.60
Flat Tops Wilderness	CO	10.50	11.04	10.91	10.73
Maroon Bells-Snowmass WA	CO	10.60	11.15	11.00	10.84
Mesa Verde NP	CO	13.10	12.24	12.03	11.84
West Elk Wilderness	CO	10.60	11.19	10.99	10.84
Weminuche Wilderness	CO	11.30	11.08	10.89	10.72
San Pedro Parks Wilderness	NM	<b>10.70 update</b>	<b>12.33 update</b>	<b>12.12 update</b>	<b>11.71 update</b>
Arches NP	UT	12.10	12.41	12.29	12.15
Bryce Canyon NP	UT	11.80	12.26	12.24	11.95
Canyonlands NP	UT	12.10	12.41	12.31	12.18
Capitol Reef NP	UT	12.10	12.51	12.49	12.36
Zion NP]	UT	13.60	12.13	12.09	12.03





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**[Table 2b. Projected Visibility Improvement at the 16 Colorado Plateau Class I Areas in 2018, on the Average 20% Best Visibility Days, resulting from implementation of “All §309 Control Strategies”.**

Colorado Plateau Class I Area	State	<i>[1997-2001] 2000-2004 Monitoring Data (20% Best Days' Visibility- deciviews)</i>	Modeling Results (deciviews)		
			2018 Base Case (20% Best Days' Visibility for all controls “on the books” as of 2002)	2018 Scenario 1 (20% Best Days' Visibility for all §309 Control Strategies (SO <sub>2</sub> Annex Milestones and Pollution Prevention) with Base Smoke Management)	2018 Scenario 2 (20% Best Days' Visibility for all §309 Control Strategies (SO <sub>2</sub> Annex Milestones and Pollution Prevention) with Optimal Smoke Management)
Grand Canyon NP	AZ	4.80	4.76	4.72	4.64
Mount Baldy Wilderness	AZ	5.50	5.49	5.46	5.36
Petrified Forest NP	AZ	6.50	5.18	5.14	5.10
Sycamore Canyon Wilderness	AZ	6.30	4.85	4.82	4.75
Black Canyon of Gunnison NP	CO	4.60	3.89	3.83	3.75
Flat Tops Wilderness	CO	3.10	3.96	3.90	3.81
Maroon Bells-Snowmass WA	CO	3.10	3.90	3.85	3.80
Mesa Verde NP	CO	5.50	4.40	4.38	4.33
West Elk Wilderness	CO	3.10	3.89	3.83	3.74
Weminuche Wilderness	CO	4.60	3.97	3.92	3.82
San Pedro Parks Wilderness	NM	<b>4.00 update</b>	<b>5.59 update</b>	<b>5.51 update</b>	<b>5.36 update</b>
Arches NP	UT	5.50	4.85	4.72	4.61
Bryce Canyon NP	UT	4.30	3.91	3.92	3.89
Canyonlands NP	UT	5.60	4.87	4.76	4.67
Capitol Reef NP	UT	5.60	4.85	4.85	4.75
Zion NP]	UT	5.90	3.81	3.79	3.75

6

1 **[D) Some Technical Notes:**

2  
3 Note that these visibility projections assume that all states which contain the 16 Colorado Plateau  
4 Class I Areas<sup>5</sup> will develop 309 SIP elements, and therefore will collaborate to improve visibility on  
5 a regional level. If some states do not choose the 309 Option, it is possible that the degree of  
6 participation necessary to achieve the visibility improvement goals may not occur. In other words,  
7 the lack of participation of some states may render a regional visibility improvement goal difficult to  
8 achieve. This is certainly the case with respect to the Western SO<sub>2</sub> Backstop Trading Program,  
9 which will need a “critical mass” of states in order to be successful.

10  
11 The WRAP conducted technical work and evaluated the visibility improvements resulting from  
12 application of the regional haze control strategies and programs described in Chapter 2 of the  
13 WRAP’s Technical Support Document (TSD). See Appendices B-TSD to K-TSD of this SIP  
14 submittal for the results of these technical analyses.]

15  
16 **(b) Projected Visibility Improvement For Colorado Plateau Class I Areas Pursuant To**  
17 **§309(d)(2)**

18  
19 Table #2 shown below compares the monitored 2000-04 baseline visibility conditions in deciviews  
20 for the 20% Best and 20% Worst days to the projected visibility improvement resulting from the  
21 2018 Base Case (Base 18b) and 2018 Preliminary Reasonable Progress (PRP18) modeling  
22 scenarios completed to date.

23  
24 These 2018 modeling scenarios are defined as follows:

- 25  
26 • Base Case (base18b) = growth plus all controls “on the books” as of December 2004, No  
27 BART or SO<sub>2</sub> milestones assumptions  
28 • Preliminary Reasonable Progress Case (PRP18) = refined growth estimates plus all controls  
29 “on the books” as of May 2007, includes presumptive limit or known SO<sub>2</sub> BART on EGUs; and  
30 • [future] Final Reasonable Progress Case (FRP18) = all controls “on the books” as of 2007, will  
31 include all BART controls in the WRAP region and limits defined in the SO<sub>2</sub> milestone “better-  
32 than-BART” program.

33  
34 When SO<sub>2</sub> and NO<sub>x</sub> controls for all BART sources have been adopted in the WRAP region, and  
35 the §309 states re-adopt the SO<sub>2</sub> milestone program, a 2018 Final Reasonable Progress (FRP18)  
36 modeling scenario will then be analyzed and the remaining cells completed in the table below. The  
37 data in the table below satisfy §309(d)(2) of the RHR.

38  
39 All 16 Colorado Plateau Class I areas show a projected visibility improvement for 2018 using the  
40 monthly averages on the 20% Worst average visibility days, and no degradation on the 20% Best  
41 average visibility days for each monitoring site. The monthly average method for projecting  
42 visibility improvement is an allowed variation of EPA guidance, and the method description is found  
43 at:

44 [http://www.wrapair.org/forums/taf/meetings/070226c/Applying Monitoring Metrics for Regi](http://www.wrapair.org/forums/taf/meetings/070226c/Applying_Monitoring_Metrics_for_Regional_Haze_Planning_%20February_23_2007_finalreviewdraft.pdf)  
45 [onal Haze Planning %20February 23 2007 finalreviewdraft.pdf](http://www.wrapair.org/forums/taf/meetings/070226c/Applying_Monitoring_Metrics_for_Regional_Haze_Planning_%20February_23_2007_finalreviewdraft.pdf). The monthly averaging  
46 method was chosen because it was the shortest averaging period for making the future visibility  
47 projections, while avoiding the use of the EPA specific days method that only assesses  
48 improvements on the Worst and Best days observed during one year (2002) of the 2000-04  
49 baseline monitoring period.

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5 These states are Arizona, Colorado, Utah and New Mexico.

		<u>Visibility Impairment in Deciview<sup>s</sup>*</u>							
		<u>20% Worst Visibility Days</u>				<u>20% Best Visibility Days</u>			
<u>Colorado Plateau Class I areas under §309(d)(2)</u>	<u>State</u>	<u>2000-04 Regional Haze Rule Baseline Monitoring Data</u>	<u>Projected Visibility (Monthly Average Method)</u>			<u>2000-04 Regional Haze Rule Baseline Monitoring Data</u>	<u>Projected Visibility (Monthly Average Method)</u>		
			<u>2018 Base Case (Base 18b)</u>	<u>2018 Preliminary Reasonable Progress Case [RPC] (PRP18)</u>	<u>2018 Final RPC (FRP18)</u>		<u>2018 Base Case (Base 18b)</u>	<u>2018 Preliminary RPC (PRP18)</u>	<u>2018 Final RPC (FRP18)</u>
<u>Grand Canyon National Park</u>	<u>AZ</u>	<u>11.7</u>	<u>11.4</u>	<u>11.3</u>		<u>2.2</u>	<u>2.2</u>	<u>2.1</u>	
<u>Mount Baldy Wilderness</u>	<u>AZ</u>	<u>11.9</u>	<u>11.5</u>	<u>11.4</u>		<u>3.0</u>	<u>2.9</u>	<u>2.8</u>	
<u>Petrified Forest National Park</u>	<u>AZ</u>	<u>13.2</u>	<u>12.9</u>	<u>12.9</u>		<u>5.0</u>	<u>4.9</u>	<u>4.8</u>	
<u>Sycamore Canyon Wilderness</u>	<u>AZ</u>	<u>15.3</u>	<u>15.1</u>	<u>15.1</u>		<u>5.6</u>	<u>5.6</u>	<u>5.6</u>	
<u>Black Canyon of the Gunnison National Park Wilderness</u>	<u>CO</u>	<u>10.3</u>	<u>10.1</u>	<u>9.9</u>		<u>3.1</u>	<u>2.9</u>	<u>2.9</u>	
<u>Flat Tops Wilderness</u>	<u>CO</u>	<u>9.6</u>	<u>9.2</u>	<u>9.0</u>		<u>0.7</u>	<u>0.6</u>	<u>0.5</u>	
<u>Maroon Bells Wilderness</u>	<u>CO</u>	<u>9.6</u>	<u>9.2</u>	<u>9.0</u>		<u>0.7</u>	<u>0.6</u>	<u>0.5</u>	
<u>Mesa Verde National Park</u>	<u>CO</u>	<u>13.0</u>	<u>12.8</u>	<u>12.6</u>		<u>4.3</u>	<u>4.1</u>	<u>4.0</u>	
<u>Weminuche Wilderness</u>	<u>CO</u>	<u>10.3</u>	<u>10.1</u>	<u>9.9</u>		<u>3.1</u>	<u>2.9</u>	<u>2.9</u>	
<u>West Elk Wilderness</u>	<u>CO</u>	<u>9.6</u>	<u>9.2</u>	<u>9.0</u>		<u>0.7</u>	<u>0.6</u>	<u>0.5</u>	
<u>San Pedro Parks Wilderness</u>	<u>NM</u>	<u>10.2</u>	<u>10.0</u>	<u>9.8</u>		<u>1.5</u>	<u>1.3</u>	<u>1.2</u>	
<u>Arches National Park</u>	<u>UT</u>	<u>11.2</u>	<u>11.0</u>	<u>10.9</u>		<u>3.8</u>	<u>3.6</u>	<u>3.5</u>	
<u>Bryce Canyon National Park</u>	<u>UT</u>	<u>11.6</u>	<u>11.3</u>	<u>11.2</u>		<u>2.8</u>	<u>2.7</u>	<u>2.6</u>	
<u>Canyonlands National Park</u>	<u>UT</u>	<u>11.2</u>	<u>11.0</u>	<u>10.9</u>		<u>3.8</u>	<u>3.6</u>	<u>3.5</u>	
<u>Capitol Reef National Park</u>	<u>UT</u>	<u>10.9</u>	<u>10.6</u>	<u>10.5</u>		<u>4.1</u>	<u>4.0</u>	<u>3.9</u>	
<u>Zion National Park</u>	<u>UT</u>	<u>13.2</u>	<u>13.0</u>	<u>13.0</u>		<u>5.0</u>	<u>4.7</u>	<u>4.7</u>	

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\* Data are from: <http://vista.cira.colostate.edu/TSS/Results/HazePlanning.aspx> --> Modeling --> Visibility Projections

**[V]. SECTION B. TREATMENT OF CLEAN AIR CORRIDORS**

**[A] Introduction & Requirements:**

1 Clean Air Corridors (CACs) are geographic areas located within transport region states that  
2 contribute to good visibility in the 16 Class I Areas of the Colorado Plateau. In a CAC,  
3 additional restrictions on emissions increases may be appropriate to protect visibility in  
4 affected Federal Class I Areas. The Clean Air Act (CAA) Amendments of 1990 require that  
5 the Grand Canyon Visibility Transport Commission (GCVTC) address the establishment of  
6 CACs. The GCVTC found that, in general, clean air comes to the Colorado Plateau from the  
7 northwest. The Meteorological Subcommittee of the GCVTC delineated a CAC that  
8 encompasses roughly SE Oregon and most of Idaho, Nevada and Utah (see Figure 3 on the  
9 following page).

10  
11 Page 35751 of the Preamble to the RHR discusses the requirements for Clean Air Corridors  
12 (CACs). States are required to: 1) adopt an emissions tracking program; 2) identify the CAC  
13 boundary; 3) identify emissions growth that could be significant enough to result in visibility  
14 impairment at one or more of the 16 Class I Areas; 4) outside the CAC, identify significant  
15 emissions growth that could impact air quality inside the corridor; 5) if emission growth  
16 assessments inside and outside the CAC show visibility impairment in the CAC, conduct an  
17 analysis of the potential impact in the 16 Class I Areas; and 6) indicate if any other CACs  
18 exist. All transport-region states located within the CAC or not, need to address these  
19 requirements.

20  
21 **(B) Definition:**

22  
23 ~~Clean Air Corridors (CACs) are geographic areas located within transport region states that~~  
24 ~~contribute to good visibility in the 16 Class I Areas of the Colorado Plateau. In a CAC,~~  
25 ~~additional restrictions on emissions increases may be appropriate to protect visibility in~~  
26 ~~affected Federal Class I Areas. The Clean Air Act (CAA) Amendments of 1990 require that~~  
27 ~~the Grand Canyon Visibility Transport Commission (GCVTC) address the establishment of~~  
28 ~~CACs. The GCVTC found that, in general, clean air comes to the Colorado Plateau from the~~  
29 ~~northwest. The Meteorological Subcommittee of the GCVTC delineated a CAC that~~  
30 ~~encompasses roughly SE Oregon and most of Idaho, Nevada and Utah (see Figure 3 on the~~  
31 ~~following page).~~

32  
33 **C) Treatment of Clean Air Corridors:**

34  
35 **(4) (a) Comprehensive emissions tracking program.**

36  
37 Pursuant to 40 CFR 51.309(d)(3), a comprehensive emissions tracking system has been  
38 established to track emissions within portions of Oregon, Idaho, Nevada and Utah, that have  
39 been identified as part of the Clean Air Corridor (CAC), as specified in ~~[Figure 3 on the~~  
40 ~~following page]~~ B(b) below, to ensure that visibility is not degraded on the least-impaired  
41 days in any of the 16 Class I Areas of the Colorado Plateau. The WRAP developed this  
42 comprehensive emissions tracking system to assist these states in meeting this requirement.  
43 Note that the CAC emissions tracking system does not apply here, since no portion of the  
44 CAC lies within New Mexico.

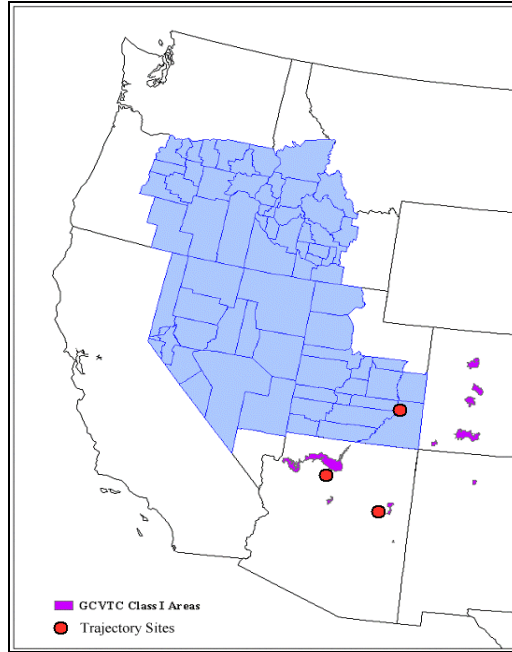
45  
46 Appendix B-SIP describes the comprehensive emissions tracking system and the process  
47 the WRAP will use to summarize annual emission trends in order to identify any significant  
48 emissions growth that could lead to visibility degradation in the 16 Class I Areas. Included in  
49 this [document includes procedures to assess] summary will be an assessment of whether  
50 any significant emissions growth has occurred within the CAC, in accordance with [Section 4]  
51 B(c) [of this chapter] below.

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**~~{(2)}~~ (b) Identification of Clean Air Corridors.**

Pursuant to 40 CFR 51.309(d)(3)(i), the ~~[Albuquerque-Bernalillo County Air Quality Control Board (AQCB)]~~ Department recognizes the Clean Air Corridor (CAC) indicated in Figure 3. This CAC was identified using studies conducted by the Meteorological Subcommittee of the GCVTC and updated by the Western Regional Air Partnership (WRAP), based on an assessment described in the *WRAP Policy Paper on Clean Air Corridors* and related technical analysis ~~[that]~~ conducted by the WRAP ~~[conducted]~~. Appendix B-SIP of this implementation plan summarizes the *WRAP Policy Paper on Clean Air Corridors* and contains additional technical work associated with the identification of the CAC.

1 **Figure 3: Map of the Clean Air Corridor in the Transport Region**  
2



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7  
8 **[(3)] (c) [Growth] Patterns [in] Of Growth Within the Clean Air Corridor.**  
9

10 Pursuant to 40 CFR 51.309(d)(3)(ii), the [AQCB] Department has determined, [~~the following:]~~  
11 based on the *WRAP Policy Paper on Clean Air Corridors* and technical analysis [~~that~~  
12 conducted by the WRAP [conducted], that inside the Clean Air Corridor identified in B(b)  
13 above there is no significant emissions growth occurring at this time [~~inside the Clean Air~~  
14 ~~Corridor (CAC) identified in 2]~~ that is causing visibility impairment in any of the 16 Class I  
15 Areas of the Colorado Plateau (see Appendix B-SIP).  
16

17 The [AQCB] Department has determined that emissions growth in the CAC does not  
18 adversely affect the 309 Federal Class I Area in New Mexico—the San Pedro Parks  
19 Wilderness Area. Nor does this emissions growth adversely affect the other [~~fifteen]~~ 15  
20 Class I Areas on the Colorado Plateau. Appendix B-SIP contains a discussion of these  
21 findings. Future emissions growth will be tracked as applicable in accordance with the  
22 comprehensive emissions tracking system in [4] B(a) above. The WRAP will summarize  
23 annual emission trends within the corridor and will assess whether any significant emissions  
24 growth has occurred within the corridor.  
25

26 **[(4)] (d) [Growth] Patterns Of Growth Outside the Clean Air Corridor.**  
27

28 Pursuant to 40 CFR 51.309(d)(3)(iii), the AQCB has determined, [~~the following:]~~ based on  
29 the *WRAP Policy Paper on Clean Air Corridors* and technical analysis [~~that~~ conducted by the  
30 WRAP, [conducted], that, outside the Clean Air Corridor identified in B(b) above there is no  
31 significant emissions growth occurring at this time [~~outside the Clean Air Corridor (CAC)~~  
32 ~~identified in 2 that is causing]~~ impairing air quality within the CAC sufficient to cause any

1 visibility impairment in any of the 16 Class I Areas of the Colorado Plateau (see Appendix B-  
2 SIP). As part of its annual summary of emission trends within the corridor, the WRAP will  
3 assess emission and monitoring data trends outside the CAC in order to determine if  
4 significant emissions growth is occurring outside the corridor that could be impairing air  
5 quality within the corridor and resulting in visibility impairment in the 16 Class I Areas (see  
6 Appendix B-SIP).

7  
8 **(5) (e) Actions if Impairment Inside or Outside the Clean Air Corridor Occurs.**

9  
10 The Department, in coordination with the ~~[State of New Mexico]~~ other transport region states  
11 and tribes, ~~[the Department]~~ will review the WRAP's annual summary of emission trends  
12 within the ~~[Colorado Plateau Clean]~~ Clean Air Corridor (CAC) and will determine if any  
13 significant emissions growth was identified either within the corridor or outside of it. If  
14 significant emissions growth is identified, the Department, in coordination with the ~~[State of~~  
15 ~~New Mexico]~~ other transport region states and tribes, will seek WRAP assistance in  
16 conducting an analysis of the effects of this emissions growth in terms of possible impact on  
17 air quality within the corridor and possible degradation of the least-impaired days in any of  
18 the 16 Class I Areas of the Colorado Plateau.

19  
20 Pursuant to 40 CFR 51.309(d)(3)(iv), if this analysis finds that this growth is causing visibility  
21 impairment in the 16 Class I Areas, the Department, in coordination with the ~~[State of New~~  
22 ~~Mexico]~~ other transport region states and tribes, will evaluate the need for additional  
23 emission reduction measures and will identify an implementation schedule for ~~[any]~~ such  
24 ~~[needed]~~ measures, if needed. The implementation of any additional emission reduction  
25 measures shall be coordinated between the ~~[AQCB]~~ Department and all appropriate  
26 transport region states and tribes, on a mutually agreed upon timetable, and reported to EPA  
27 in accordance with the periodic progress reports required under 40 CFR 51.309(d)(10)(i).

28  
29 **~~[(6)] (f) Other Clean Air Corridors (CACs).~~**

30  
31 Pursuant to 40 CFR 51.309(d)(3)(v), the ~~[AQCB]~~ Department has concluded that one other  
32 Clean Air Corridor (CAC), the Grand Canyon National Park CAC, can be identified. This  
33 finding is based on the WRAP Regional Technical Support Document (TSD), which  
34 ~~[mentions that]~~ cites Green, et al. (1996) who conducted an alternative analysis of CACs for  
35 the Grand Canyon (see Appendix B-SIP). Other than the two mentioned in this chapter, no  
36 additional CACs have been identified for the Colorado Plateau Region at this time. Note that  
37 no CAC or portion ~~[of a CAC]~~ thereof has been identified within New Mexico.

38  
39 Although no formal update on this finding is required, the ~~[AQCB]~~ Department recognizes  
40 that future modeling or monitoring data may indicate that other possible CACs exist. The  
41 ~~[AQCB]~~ Department will notify EPA if there is evidence to support such a finding in the future,  
42 and will take appropriate action pursuant to this requirement.

43  
44 **~~[(7) Clean Air Corridor Conclusion.]~~**

45  
46 Neither New Mexico nor Bernalillo County is included within the boundaries of either of the  
47 Clean Air Corridors (CACs) identified in this chapter. ~~[Therefore, pursuant to the~~  
48 ~~requirements in Section 51.309(d)(3)(v), the AQCB has determined that no additional clean~~  
49 ~~air corridors exist beyond the one mentioned in 6 above.]~~ Based on technical analysis that  
50 the WRAP conducted (see Appendix B-SIP), the ~~[AQCB]~~ Department does not believe that



1 Bernalillo County's emissions contribute to visibility impairment either within or outside of the  
2 CACs identified.

3  
4 This is ~~[mainly]~~ because the GCVTC found that clean air comes to the corridor mainly from  
5 the northwest. Bernalillo County is located about 200 miles southeast of the Utah border (the  
6 Corridor's southeastern-most edge). ~~[Therefore, Bernalillo County]~~ and lies generally  
7 downwind of the CAC ~~[and, in general,]~~ hence, its emissions are not likely to be transported  
8 into this Corridor and therefore are not likely to adversely affect it.

## 9 10 11 ~~[VI.]~~ SECTION C. EMISSION REDUCTIONS FOR STATIONARY SOURCES

### 12 13 ~~[A)]~~ **Background:**

14  
15 The SO<sub>2</sub> Milestones and Backstop Trading Program ~~[were]~~ was developed to implement the  
16 emissions reduction program for major industrial sources of sulfur dioxide (SO<sub>2</sub>) ~~[described]~~  
17 in accordance with ~~[40 CFR 51.309(h)]~~ 40 CFR 51.309(d)(4), [68 FR 33764, June 5, 2003].  
18 The program is implemented through the following documents:

- 19  
20 • The ~~[Bernalillo County]~~ Section 309 Regional Haze State Implementation Plan  
21 Element for Albuquerque and Bernalillo County describes the overall program and  
22 contains the ~~[Albuquerque-Bernalillo County Air Quality Control Board's (AQCB's)]~~  
23 Department's commitment to implement all parts of the program as outlined in the  
24 Implementation plan element. The Implementation plan element establishes the  
25 regional milestones, SO<sub>2</sub> emissions tracking requirements, and if the Western  
26 Backstop SO<sub>2</sub> Trading Program ("WEB Trading Program") is triggered, the  
27 Implementation plan element also describes how the Department shall determine  
28 allocations and manage the allowance tracking system that is needed to implement  
29 the program.
- 30  
31 • 20.11.46 NMAC - Sulfur Dioxide Emissions Inventory Requirements; Western  
32 Backstop SO<sub>2</sub> Trading Program (see Appendix D-O) ~~[contains the requirements]~~  
33 establishes the procedures and compliance requirements that shall apply to major  
34 industrial sources of sulfur dioxide (SO<sub>2</sub>) as a backstop regulatory program if the SO<sub>2</sub>  
35 milestones are exceeded. The trading program outlined in this regulation may never  
36 be implemented if the goal to meet the regional SO<sub>2</sub> milestones through voluntary  
37 ~~[means]~~ measures is achieved. ~~[If the regulation is implemented, it establishes the~~  
38 procedures and compliance requirements for sources in the Trading Program.]
- 39  
40 • ~~[Major industrial sources]~~ 20.11.46.9 NMAC stipulates that, all stationary sources with  
41 actual emissions of 100 tons per year or more of SO<sub>2</sub> are required to submit an  
42 annual emissions inventory in the pre-trigger phase of the program to measure  
43 compliance with the regional SO<sub>2</sub> milestones. If the backstop program is triggered  
44 then these requirements will eventually be overridden by more rigorous monitoring  
45 requirements in 20.11.46 NMAC.

### 46 47 ~~[B)]~~ **Requirements:**

48  
49 Pages 35751-35752 in the Preamble to the Regional Haze Rule (RHR) discuss the  
50 requirements for stationary sources. The stationary sources to which the requirements apply  
51 are those sources that emit 100 actual tons per year (tpy) or more of sulfur dioxide (SO<sub>2</sub>).

1 Section 309 originally contained two sets of requirements for controlling stationary source  
2 emissions. A third set of requirements in 40 CFR 51.309(h) was proposed via 67 FR 30418,  
3 May 6, 2002. These requirements were finalized via 68 FR 33764, June 5, 2003, and  
4 became known as “the Annex” or *Revisions to the Regional Haze Rule*.

5  
6 Section 309(f) of the RHR [64 FR 35773] required ~~[submitting]~~ submission of an Annex to the  
7 GCVTC report. A description of the requirements in Section 309(h) begins on page 33774 in  
8 *Revisions to the Regional Haze Rule*, 67 FR 33764, June 5, 2003. The Annex contains SO<sub>2</sub>  
9 emission reduction milestones showing steady and continuous reductions ~~[between]~~ during  
10 the period 2003-2018, greater than what would be achieved by applying Best Available  
11 Retrofit Technology (BART) (see Appendix G-O for the complete rule citation). Section  
12 309(d)(4) requires tracking emissions to ensure that the SO<sub>2</sub> milestones in the Annex are  
13 met, and that a backstop market trading program would be implemented if the milestones are  
14 not met. The new Section 309(h) has been added to reflect the elements of the submitted  
15 Annex, and contains requirements related to adjusting the SO<sub>2</sub> milestones, determining  
16 annual compliance with the milestones and key trading program elements.

17  
18 **~~[C]~~ Definitions:**

19  
20 Note: The definitions in this section apply only to this Implementation plan and correspond to  
21 the regulation 20.11.46 NMAC, *Sulfur Dioxide Emissions Inventory Requirements; Western*  
22 *Backstop SO<sub>2</sub> Trading Program* (“the regulation”).

23  
24 **Account Certificate of Representation** means the completed and signed submission  
25 required to designate an Account Representative for a WEB source or an Account  
26 Representative for a general account.

27  
28 **Account Representative** means the individual who is authorized through an Account  
29 Certificate of Representation to represent owners and operators of the WEB source with  
30 regard to matters under the WEB Trading Program or, for a general account, who is  
31 authorized through an Account Certificate of Representation to represent the persons having  
32 an ownership interest in allowances in the general account with regard to matters concerning  
33 the general account.

34  
35 **Act** means the federal Clean Air Act, as amended, 42 U.S.C. 7401, *et seq.*

36  
37 **Actual Emissions** means the total annual sulfur dioxide emissions determined in  
38 accordance with 20.11.46.16 NMAC, or determined in accordance with of 20.11.46.9 NMAC  
39 for sources that are not subject to 20.11.46.16 NMAC.

40  
41 **Allocate** means to assign allowances to a WEB source through Section ~~[F(4)]~~ C(1) of this  
42 Implementation plan.

43  
44 **Allowance** means the limited authorization under the WEB Trading Program to emit one ton  
45 of SO<sub>2</sub> during a specified control period or any control period thereafter subject to the terms  
46 and conditions for use of unused allowances as established by ~~[the Regulation]~~ 20.11.46  
47 NMAC.

48  
49 **Allowance Limitation** means the tonnage of SO<sub>2</sub> emissions authorized by the allowances  
50 available for compliance deduction for a WEB source for a control period under Subsection A  
51 of 20.11.46.19 NMAC on the allowance transfer deadline for that control period.

1  
2 **Allowance Tracking System** means the system developed by the Department where  
3 allowances under the WEB Trading Program are recorded, held, transferred and deducted.  
4

5 **Allowance Tracking System Account** means an account in the Allowance Tracking  
6 System established for purposes of recording, holding, transferring, and deducting  
7 allowances.  
8

9 **Allowance Transfer Deadline** means the deadline established in Subsection B of  
10 20.11.46.17 NMAC when allowances must be submitted for recording in a WEB source's  
11 compliance account in order to demonstrate compliance for that control period.  
12

13 **Annex** means the requirements in 40 CFR 51.309(h) of the Regional Haze Rule (RHR), also  
14 referred to as Revisions to the Regional Haze Rule, which was published in 67 FR 33764,  
15 June 5, 2003 and became effective August 4, 2003.  
16

17 **Bernalillo County** means the jurisdiction of the air quality program that covers the  
18 Albuquerque city limits and all of the remaining areas of Bernalillo County, except for Tribal  
19 lands.  
20

21 **Board ("the Board")** means the Albuquerque-Bernalillo County Air Quality Control Board  
22 (AQCB).  
23

24 **Compliance Account** means an account established in the Allowance Tracking System  
25 under Subsection A of 20.11.46.15 NMAC for the purpose of recording allowances that a  
26 WEB source might hold to demonstrate compliance with its allowance limitation.  
27

28 **Compliance Certification** means a submission to the ~~[Board]~~ Department by the Account  
29 Representative as required under Subsection B of 20.11.46.19 NMAC to report a WEB  
30 source's compliance or noncompliance with ~~[this regulation]~~ 20.11.46 NMAC.  
31

32 **Control Period** means the period beginning January 1 of each year and ending on  
33 December 31 of the same year, inclusive.  
34

35 **Department** means the City of Albuquerque Environmental Health Department, Air Quality  
36 Division.  
37

38 **Emissions Tracking Database** means the central database where SO<sub>2</sub> emissions for WEB  
39 sources, as recorded and reported in accordance with ~~[the regulation]~~ 20.11.46 NMAC, are  
40 tracked to determine compliance with allowance limitations.  
41

42 **Emission Unit or Unit** means any part of a stationary source that emits or would have the  
43 potential to emit any pollutant ~~[submitted to regulations under]~~ regulated pursuant to the  
44 Clean Air Act (CAA).  
45

46 **EPA Administrator** means the Administrator of the United States Environmental Protection  
47 Agency or the Administrator's duly authorized representative.  
48

49 **Existing Source** means a stationary source that commenced operation before the WEB  
50 Trading Program Trigger Date.  
51

1 **Floor Allocation** means the amount of allowances set by the ~~[Albuquerque-Bernalillo~~  
2 ~~County Air Quality Control Board]~~ AQCB in accordance with this Implementation plan  
3 element that represents the minimum necessary for a source to operate under stringent  
4 control assumptions.

5  
6 **Fugitive Emissions** are those emissions that could not reasonably pass through a stack,  
7 chimney, vent, or other functionally equivalent opening.

8  
9 **General Account** means an account established in the Allowance Tracking System under  
10 20.11.46.15 NMAC for the purpose of recording allowances held by a person that are not to  
11 be used to show compliance with an allowance limitation.

12  
13 **Milestone** means the maximum level of stationary source regional sulfur dioxide emissions  
14 for each year from 2003 to 2018, established according to the procedures in Section ~~[D]~~ A of  
15 this Implementation Plan.

16  
17 **New WEB Source** means a WEB source that commenced operation on or after the WEB  
18 Trading Program Trigger Date.

19  
20 **New Source Set-aside** means a pool of allowances that are available for allocation to new  
21 WEB sources and modified WEB sources that have increased capacity in accordance with  
22 the provisions of Section ~~[F(4)(d)]~~ C1.3 of this Implementation Plan.

23  
24 **Owner or Operator** means any person who is an owner or who operates, controls or  
25 supervises a WEB source, and includes, but is not ~~[be]~~ limited to, any holding company,  
26 utility system or plant manager.

27  
28 **Potential to Emit** means the maximum capacity of a stationary source to emit any air  
29 pollutant under its physical and operational design. Any physical or operational limitation on  
30 the capacity of a source to emit an air pollutant, including air pollution control equipment and  
31 restrictions on hours of operation or on the type or amount of material combusted, stored or  
32 processed, shall be treated as part of its design if the limitation is enforceable by the EPA  
33 Administrator.

34  
35 **Program Trigger Date** means the date that the AQCB determines that the WEB Trading  
36 Program has been triggered in accordance with the provisions of Section ~~[D(5)]~~ A2 of this  
37 Implementation Plan.

38  
39 **Program Trigger Years** means the years shown in Table 3, column 3, under Part C of ~~[the~~  
40 ~~SO<sub>2</sub> Milestones and Backstop Trading Program]~~ this Implementation Plan element for the  
41 applicable milestone if the WEB Trading Program is triggered as described in ~~[Section D of~~  
42 ~~the SO<sub>2</sub> Milestones and Backstop Trading Program]~~ Part A of this Implementation Plan  
43 element.

44  
45 **Reducible Allocation** means the amount of allowances set by the AQCB in accordance with  
46 Section ~~[F(4)(k)]~~ C1.1(b)(9) of this Implementation plan element that represents, for each  
47 source, emissions in excess of the floor allocation that shall be reduced over time as the  
48 regional milestone is decreased.

49  
50 **Renewable Energy Resource** means a resource that generates electricity by non-nuclear  
51 and non-fossil technologies that result in low or no air emissions. The term includes

1 electricity generated by wind energy technologies; solar photovoltaic and solar thermal  
2 technologies; geothermal technologies; technologies based on landfill gas and biomass  
3 sources, and new low-impact hydropower that meet the Low-Impact Hydropower Institute  
4 criteria. Biomass includes agricultural, food and wood wastes. For the purposes of this  
5 Implementation plan, a renewable energy resource does not include pumped storage or  
6 biomass from municipal solid waste, black liquor, or treated wood.

7  
8 **Retired Source** means a WEB source that has received a retired source exemption as  
9 provided in Subsection E of 20.11.46.11 NMAC. Any retired source resuming operations  
10 under Paragraph (4) of Subsection E of 20.11.46.11 NMAC must submit its exemption as  
11 part of its registration materials.

12  
13 **Serial Number** means, when referring to allowances, the unique identification number  
14 assigned to each allowance by the Tracking Systems Administrator, in accordance with  
15 Subsection B of 20.11.46.14 NMAC.

16  
17 **SO<sub>2</sub> Emitting Unit** means any equipment that is located at a WEB source or other stationary  
18 source that emits SO<sub>2</sub>.

19  
20 **Special Reserve Compliance Account** means an account established in the Allowance  
21 Tracking System under Subsection A of 20.11.46.15 NMAC for the purpose of recording  
22 allowances that a WEB source might hold to demonstrate compliance with its allowance  
23 limitation for emission units that are monitored for SO<sub>2</sub> in accordance with Subsection B of  
24 20.11.46.16 NMAC.

25  
26 **Stationary Source** means any building, structure, facility or installation that emits or may  
27 emit any air pollutant subject to regulation under the Clean Air Act (CAA).

28  
29 **Submit** means ~~sent~~ to send to the appropriate authority under the signature of the Account  
30 Representative. For purposes of determining when something is submitted, an official U.S.  
31 Postal Service postmark, or equivalent electronic time stamp, shall establish the date of  
32 submittal.

33  
34 **Ton** means 2000 pounds and, for any control period, any fraction of a ton equaling 1000  
35 pounds or more shall be treated as one ton and any fraction of a ton equaling less than 1000  
36 pounds shall be treated as zero tons.

37  
38 **Tracking System Administrator** means the person designated by the AQCB in  
39 collaboration with other participating states and tribes as the administrator of the WEB  
40 Allowance Tracking System and the emission tracking database.

41  
42 **Tribal Set Aside** means a 8,500-ton SO<sub>2</sub> WEB allowance allocated to tribes on an annual  
43 basis. The tribes will decide how to distribute the allowances in the set-aside among tribes in  
44 the region. The set-aside is intended to ensure equitable treatment for tribal economies and  
45 to prevent barriers to economic development.

46  
47 **Trigger** refers to the activation of the WEB Trading Program for SO<sub>2</sub> in accordance with  
48 Section A of the Implementation Plan.

49  
50 **WEB Source** means a stationary source that meets the applicability requirements of  
51 20.11.46.11 NMAC.

1  
2 **Western Backstop Sulfur Dioxide (SO<sub>2</sub>) Trading Program or WEB Trading Program**  
3 refers to Sections 20.11.46.11 NMAC through 20.11.46.22 NMAC of 20.11.46 NMAC, *Sulfur*  
4 *Dioxide Emissions Inventory Requirements; Western Backstop SO<sub>2</sub> Trading Program*, which  
5 shall be triggered as a backstop in accordance with the provisions in the [SO<sub>2</sub> Milestones and  
6 Backstop Trading Program] Implementation Plan element, if necessary, to ensure that  
7 regional SO<sub>2</sub> emissions are reduced.  
8

9 **Western Regional Air Partnership (WRAP)** means the collaborative effort of tribal  
10 governments, state governments, and federal agencies to promote and monitor  
11 implementation of recommendations from the Grand Canyon Visibility Transport Commission  
12 (GCVTC) authorized under Section 169B(f) of the CAA, and to address other common  
13 Western regional air quality issues.  
14

15  
16 **~~{D}~~ PART A - Milestones and Determination of Program Trigger:**

17  
18 **~~{1}~~ A1 Regional Sulfur Dioxide (SO<sub>2</sub>) Milestones.**

19  
20 **A1.1 Milestone Values**

21  
22 ~~[The term milestone, as found in 40 CFR 51.309(b)(5), means “the maximum level of annual~~  
23 ~~regional SO<sub>2</sub> emissions for a given year, assessed annually consistent with paragraph (h)(2)~~  
24 ~~of this section beginning in the year 2003.”] The regional SO<sub>2</sub> [base] milestones for the years~~  
25 ~~2003 through 2018 are provided in Table 3. The [base] milestones shall be adjusted~~  
26 ~~annually as described in [Paragraphs] Paragraph [2 and 3] A1.2 (on the following pages) of~~  
27 ~~this implementation plan.~~

1  
2  
3  
4

**Table 3. [Base] Sulfur Dioxide Emissions Milestones [(excludes Smelter Set-aside)]**

<b>[Column 1]</b>	<b>Column 2</b>	<b>Column 3]</b>
<b>For the year</b>	<b>the [base] regional sulfur dioxide milestone is*</b>	<b>and the annual SO<sub>2</sub> emissions for these years will determine whether emissions are greater than or less than the milestone</b>
<b>2003 ‡</b>	<del>[682,000]</del> <u>420,637</u> tons SO <sub>2</sub>	2003
<b>2004</b>	<del>[682,000]</del> <u>420,637</u> tons SO <sub>2</sub>	Average of 2003 and 2004
<b>2005</b>	<del>[682,000]</del> <u>420,637</u> tons SO <sub>2</sub>	Average of 2003, 2004 and 2005
<b>2006</b>	<del>[682,000]</del> <u>420,637</u> tons SO <sub>2</sub>	Average of 2004, 2005 and 2006
<b>2007</b>	<del>[682,000]</del> <u>420,637</u> tons SO <sub>2</sub>	Average of 2005, 2006 and 2007
<b>2008</b>	<del>[680,333]</del> <u>378,398</u> tons SO <sub>2</sub>	Average of 2006, 2007 and 2008
<b>2009</b>	<del>[678,667]</del> <u>336,160</u> tons SO <sub>2</sub>	Average of 2007, 2008 and 2009
<b>2010</b>	<del>[677,000]</del> <u>293,921</u> tons SO <sub>2</sub>	Average of 2008, 2009 and 2010
<b>2011</b>	<del>[677,000]</del> <u>293,921</u> tons SO <sub>2</sub>	Average of 2009, 2010 and 2011
<b>2012</b>	<del>[677,000]</del> <u>293,921</u> tons SO <sub>2</sub>	Average of 2010, 2011 and 2012
<b>2013</b>	<del>[659,667]</del> <u>278,985</u> tons SO <sub>2</sub>	Average of 2011, 2012 and 2013
<b>2014</b>	<del>[642,333]</del> <u>264,050</u> tons SO <sub>2</sub>	Average of 2012, 2013 and 2014
<b>2015</b>	<del>[625,000]</del> <u>249,114</u> tons SO <sub>2</sub>	Average of 2013, 2014 and 2015
<b>2016</b>	<del>[625,000]</del> <u>249,114</u> tons SO <sub>2</sub>	Average of 2014, 2015 and 2016
<b>2017</b>	<del>[625,000]</del> <u>249,114</u> tons SO <sub>2</sub>	Average of 2015, 2016 and 2017
<b>2018</b>	<del>[480,000]</del> <u>234,624</u> tons SO <sub>2</sub>	Year 2018 only
<b>[Each year after 2018]</b>	<del>[No more than 480,000]</del> <u>234,624</u> tons	<del>[3-year average of the year and the two previous years, or any alternative]</del>

\* These values are rolling three-year averages of the actual milestones for the years 2008 through 2017, pursuant to 40 C.F.R. § 51.309(d)(4)(i). Accordingly, these values shall be compared for compliance purposes with the emissions listed in the 3<sup>rd</sup> column

‡‡ The 2003 through 2007 milestones have been adjusted to include only the four states that are part of the regional backstop trading program using the adjustment methodology in the 2003 Regional Haze SIP

<b><u>2019 forward, until replaced by an approved SIP</u></b>	SO <sub>2</sub> [unless the milestones are replaced with a different program that meets any BART and reasonable progress requirements established in 51.309]	<del>provided in any future implementation plan revisions under 51.308(f)]</del> <u>Annual; no multiyear averaging</u>
---	--	---

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**~~[(2) Adjustments for participation by eligible States and Tribes.~~**

~~The amount provided in Table 4a below shall be subtracted from the milestone in Table 3 for each state and tribe that does not have an Implementation Plan approved by the EPA Administrator as meeting the requirements of 40 CFR 51.309 as of December 31 of the year following the milestone year. The first adjustment to the 2003 milestone shall be made no later than March 31, 2005, and shall be based on all states and tribes that do not have a federally approved Implementation Plan as of December 31, 2004.]~~



1 ~~Table 4a. (Years 2003-2010) Amounts of SO<sub>2</sub> tons to be Subtracted from the Base~~  
 2 ~~Milestones for States and Tribes that do not have an Approved Implementation Plan~~  
 3 ~~under 40 CFR 51.309. RESERVED~~  
 4

[State or Tribe	2003	2004	2005	2006	2007	2008	2009	2010
1. Arizona	117,372	117,372	117,372	117,372	117,372	117,941	118,511	119,080
2. California	37,343	37,343	37,343	[37,784] <del>37,343</del>	37,343	36,363	35,382	34,402
3. Colorado	98,897	98,897	98,897	98,897	98,897	98,443	97,991	97,537
4. Idaho	18,016	18,016	18,016	18,016	18,016	17,482	16,948	16,414
5. Nevada	20,187	20,187	20,187	20,187	20,187	20,282	20,379	20,474
6. New Mexico	84,624	84,624	84,624	84,624	84,624	84,143	83,663	83,182
7. Oregon	26,268	26,268	26,268	26,268	26,268	26,284	26,300	26,316
8. Utah	42,782	42,782	42,782	42,782	42,782	42,795	42,806	42,819
9. Wyoming	155,858	155,858	155,858	155,858	155,858	155,851	155,843	155,836
10. Navajo Nation	53,147	53,147	53,147	53,147	53,147	53,240	53,334	53,427
11. Shoshone-Bannock Tribe of the Fort Hall Reservation	4,994	4,994	4,994	4,994	4,994	4,994	4,994	4,994
12. Ute Indian Tribe of the Uintah & Ouray Reservation	1,129	1,129	1,129	1,129	1,129	1,131	1,133	1,135
13. Wind River Reservation	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384

5 ~~† These numbers differ from Annex opt-in/-out tables in that the smelter set-aside is~~  
 6 ~~excluded and the new source set-aside is included.]~~  
 7

8 ~~Table 4b. [Years 2011-2018] Amounts of SO<sub>2</sub> tons to be Subtracted from the Base~~  
 9 ~~Milestones for States and Tribes that do not have an Approved Implementation Plan~~  
 10 ~~under 40 CFR 51.309†.]RESERVED~~  
 11

[State or Tribe	2011	2012	2013	2014	2015	2016	2017	2018
1. Arizona	119,080	119,080	116,053	113,025	109,998	109,998	109,998	82,302
2. California	34,402	34,402	33,265	32,128	30,991	30,991	30,991	27,491
3. Colorado	97,537	97,537	94,456	91,375	88,294	88,294	88,294	57,675
4. Idaho	16,414	16,414	15,805	15,197	14,588	14,588	14,588	13,227
5. Nevada	20,474	20,474	20,466	20,457	20,449	20,449	20,449	20,232
6. New Mexico	83,182	83,182	81,682	80,182	78,682	78,682	78,682	70,000
7. Oregon	26,316	26,316	24,796	23,277	21,757	21,757	21,757	8,284
8. Utah	42,819	42,819	41,692	40,563	39,436	39,436	39,436	30,746
9. Wyoming	155,836	155,836	151,232	146,629	142,025	142,025	142,025	97,758
10. Navajo Nation	53,427	53,427	52,707	51,986	51,266	51,266	51,266	44,772
11. Shoshone-Bannock Tribe of the Fort Hall Reservation	4,994	4,994	4,994	4,994	4,994	4,994	4,994	4,994
12. Ute Indian Tribe of the Uintah & Ouray	1,135	1,135	1,135	1,135	1,135	1,135	1,135	1,135

<b>Reservation</b>								
<b>13. Wind River Reservation</b>	1,384	1,384	1,384	1,384	1,384	1,384	1,384	1,384

~~† These numbers differ from Annex opt in/ out tables in that the smelter set aside is excluded and the new source set aside is included.]~~

~~**[(3) A1.3 Adjustment for Future Operation of Copper Smelters in Arizona and New Mexico.**~~

~~If either the BHP San Manuel smelter in Arizona or the Phelps Dodge Hidalgo smelter in New Mexico resumes operation, the milestones shall be increased as described below. The adjustment shall occur only if the respective state has a State Implementation Plan (SIP) approved by the EPA Administrator under 40 CFR 51.309. Once the adjustments have been made, the milestones shall not be changed due to future suspensions or changes in plant operations, except as provided below. If Arizona or New Mexico elects not to submit a SIP under 40 CFR 51.309, the emissions for the smelters in the state opting out will be subtracted from the smelter set aside.~~

~~(a) If one or both smelters resume operations under their existing permits, the milestone shall automatically be adjusted upward for each smelter respectively by the following amounts:~~

- ~~\_\_\_\_\_ Phelps Dodge Corporation, Hidalgo Smelter: 22,000 tons SO<sub>2</sub>~~
- ~~\_\_\_\_\_ BHP, San Manuel Smelter: 16,000 tons SO<sub>2</sub>~~
- ~~\_\_\_\_\_ For the 2013 through 2018 milestones, the maximum increase shall be 30,000 tons SO<sub>2</sub>.~~

~~(b) If New Mexico determines that either smelter will resume operation by operating only a portion of the plant, the milestone adjustment in (a) shall be reduced by a percentage to reflect current conditions. If the smelter resumes normal operations at a later date, the full adjustment described in (a) shall be applied.~~

~~(c) If one or both smelters resume operations after going through new source review, the milestone adjustment shall be based on the new permitted level for the source, but in no instance may the adjustment to the milestones exceed 22,000 tons SO<sub>2</sub> per year for the Hidalgo Smelter or 16,000 tons SO<sub>2</sub> per year for the San Manuel Smelter.~~

~~[(d) If one or both smelters do not resume operation, each of the remaining existing smelters in the region shall be given a facility specific set aside as described in Table 3]~~

**A1.2. Smelter Specific Set-Aside.**

Since 1990 the existing copper smelters in the west have made significant SO<sub>2</sub> emission reductions. In addition, three of the six smelters that were operating in 1990 have now been permanently closed. Because of the global nature of this industry, it is not expected that any new copper smelters will be constructed between 2008 and 2018. Representative emission estimates were developed for the existing copper smelters in the 2003 SIP. [These estimates have been reviewed and determined to be a good estimate of future emissions from these smelters](#) through 2018. There is the possibility that ore from mines located near the closed smelters could be transported to the existing smelters for processing. A small smelter-specific set-aside has been created to account for this possible production increase. The smelter-specific set-aside will be determined using the calculation procedures in provision

1 A3.4, and the set-aside will be added to the milestone to account for capacity expansion at  
 2 the remaining smelters. This set-aside shall only be available for use if sulfur input and  
 3 emissions from the copper smelters are above the baseline [level] levels listed in [Table 3]  
 4 Table 5 in any particular year as a result of increased capacity. [The actual emissions above  
 5 the assumed baseline level up to the specified set aside level for each smelter shall be  
 6 added to the milestone to account for the increased capacity.] The increase to the milestone  
 7 will be based on a smelter's proportional increase above its baseline sulfur input. The set-  
 8 aside shall be recalculated every year to reflect actual operations of the remaining copper  
 9 smelters. The set-aside may not be traded. Table 5 (below) contains the preliminary smelter  
 10 set aside values.

11  
12  
13 **Table 5: Preliminary Smelter-Specific Set Aside**

14

Company / Smelter	Baseline Sulfur Input	Baseline Allocation	Smelter-Specific Set-Aside
<del>[BHP San Manuel]</del>	417,200 tons	16,000 tons SO <sub>2</sub>	1,500 tons SO <sub>2</sub>
Asarco Hayden	235,000 tons	23,000 tons SO <sub>2</sub>	3,000 tons SO <sub>2</sub>
<del>[Phelps Dodge Chino]</del>	212,800 tons	16,000 tons SO <sub>2</sub>	3,000 tons SO <sub>2</sub>
Phelps Dodge Hidalgo	256,800 tons	22,000 tons SO <sub>2</sub>	4,000 tons SO <sub>2</sub>
Phelps Dodge Miami	208,700 tons	8,000 tons SO <sub>2</sub>	<del>[2,000]</del> 0 tons SO <sub>2</sub>
Kennecott Salt Lake	340,269 tons	1,000 tons SO <sub>2</sub>	100 tons SO <sub>2</sub>
<b>TOTAL</b>	<del>[1,670,769]</del> <b>575,269 tons</b>	<del>[86,000]</del> <b>24,000</b> <b>tons SO<sub>2</sub></b>	<del>[13,600]</del> <b>3,100 tons</b> <b>SO<sub>2</sub></b>

15  
16 Note: The smelter baseline has decreased from 86,000 tons SO<sub>2</sub> in the 2003 SIP to the  
 17 current value of 24,000 tons SO<sub>2</sub> due to the permanent closure of the BHP San Manuel,  
 18 Phelps Dodge Chino, and Phelps Dodge Hidalgo smelters. [The Phelps Dodge Miami](#)  
 19 [smelter is not included in this table because the smelter is currently operating at its permitted](#)  
 20 [limit and therefore does not have a smelter specific set-aside.](#) Total smelter emissions were  
 21 148,510 tons SO<sub>2</sub> in 1990

22  
23 **~~[(4) A1.4 ] A1.3 Other Milestone Adjustments.~~**

24  
25 **(a)** All other milestone adjustments shall require a SIP revision. Section A3.3 of this  
 26 implementation plan element outlines adjustments to be made to the emissions inventory to  
 27 ensure a consistent comparison to the milestones. These adjustments shall be incorporated  
 28 into the milestones every five years as part of the periodic implementation plan revisions  
 29 required by 40 CFR 51.309(d)(10). The ~~[Albuquerque-Bernalillo County Air Quality Control~~  
 30 ~~Board AQCB]~~ Department shall track all adjustments to the milestone pursuant to Section  
 31 ~~[D(6)(e)]~~ A3.3.

1 **(b)** Within ~~[ninety]~~ 90 days of the periodic implementation plan revision incorporating  
2 adjustments based on section ~~[D(6)(e)]~~ A3.3, the ~~[AQCB]~~ Department shall provide the date  
3 of the SIP revision reflecting the milestone adjustment to sources whose records were used  
4 as the basis for the milestone adjustment and state that the source needs to retain the record  
5 at least five years from the date of the SIP revision, or ~~[ten]~~ 10 years from the date of  
6 establishing the record, whichever is longer.

7  
8 **(c)** ~~Opt-in~~ **[Opt-out]** Provision for States and Tribes. The regional milestones in Table 3  
9 were developed for a four-state region: Arizona, New Mexico, Utah, and Wyoming. Other  
10 western states and tribes may choose to join this backstop trading program in the future. ~~[In~~  
11 ~~addition, a participating state or tribe may opt out of the program in the future.]~~ The addition  
12 ~~[or subtraction]~~ of a state or tribe to the program will require a SIP/TIP revision for all  
13 participating states and tribes to adjust the regional milestones, and will not occur  
14 automatically. Any state or tribe that wishes to opt in ~~[or out of]~~ to the program will propose  
15 milestone adjustments to the participating states and tribes using the same methodology that  
16 was used to develop the milestones in Table 3. A new participant must agree to develop a  
17 SIP and backstop trading rule that is consistent with those adopted by the other participating  
18 states and tribes.

19  
20  
21 **~~[(5)]~~ A2 Regional Program Administration.**

22  
23 **~~[(a)]~~ A2.1 Pre-trigger tracking of regional SO<sub>2</sub> emissions.**

24  
25 The ~~[AQCB]~~ Department shall work cooperatively with the states and tribes that are  
26 participating in the SO<sub>2</sub> Milestones and Backstop Trading Program to ensure that an  
27 emission tracking system for the regional SO<sub>2</sub> inventory is developed and maintained. The  
28 Western Regional Air Partnership (WRAP) compiled the SO<sub>2</sub> emission inventories that were  
29 used during the development of the Annex and subsequent SIP revisions, and the WRAP  
30 continues to refine and improve the overall tracking system for regional haze.

31  
32 The WRAP shall maintain the pre-trigger emissions tracking functions outlined in this  
33 Implementation Plan element for the foreseeable future. If the WRAP is no longer able to  
34 fulfill this function, then the ~~[Albuquerque-Bernalillo County Air Quality Control Board AQCB~~  
35 ~~("the Board")]~~ Department shall ensure that other arrangements are made, either through a  
36 different regional organization, independently, through a contractor, or in collaboration with  
37 the State of New Mexico to maintain the SO<sub>2</sub> tracking system that is described in this  
38 Implementation plan. The ~~[AQCB]~~ Department is responsible for all regional program  
39 administration functions as described in this Implementation plan. The ~~[AQCB]~~ Department  
40 shall perform these functions through the WRAP, as the **AQCB** agent.

41  
42 The WRAP shall have no authority to make regulatory determinations. The WRAP has  
43 limited authority under this Implementation plan to perform tracking and accounting functions,  
44 prepare reports, and perform other administrative functions as directed by the states and  
45 tribes. The ~~[AQCB]~~ Department shall work expeditiously to correct any problems if the  
46 WRAP fails to perform any of the functions described in the SIP in a timely manner.

47  
48 **~~[(b)]~~ A2.2 Designation of the Tracking System Administrator (TSA).**

49  
50 If the backstop trading program is triggered due to an exceedance of the SO<sub>2</sub> milestones as  
51 outlined in Section ~~[D(6)]~~ A3 of this Implementation plan, the ~~[AQCB]~~ Department shall work

1 cooperatively with the other participating states and tribes to designate one Tracking System  
2 Administrator (TSA). The TSA shall be designated as expeditiously as possible, but no later  
3 than six months after the program trigger date. In addition, before the TSA is designated, the  
4 Department shall have entered into a binding contract or inter-governmental agreement with  
5 the TSA that shall require the TSA to perform all TSA functions described in this  
6 Implementation plan. In addition, the Department must obtain sufficient authority to ensure  
7 the functions in the Implementation Plan are carried out by the TSA.  
8

9 **~~[(e)]~~ A2.3 Information Provided by other States and Tribes.**

10  
11 The Department shall accept the emission inventory and permitting information provided by  
12 the other participating states and tribes in order to determine the milestone value and  
13 program trigger if such ~~[other]~~ states and tribes have provided proper documentation and  
14 followed the public notification process outlined in Sections ~~[D(6)(h-j)]~~ A3.6-A3.8 of this  
15 Implementation plan. ~~[In addition, the AQCB must obtain sufficient authority to ensure the~~  
16 ~~functions in the implementation plan element are carried out by the TSA.]~~  
17

18 **~~[(6)]~~ A3 Determination of Program Trigger (& Annual Emissions Report)**

19  
20 **If and only if, the actual SO<sub>2</sub> emissions from any source subject to 20.11.46 NMAC are**  
21 **greater than or equal to 100 tons per year (TPY), shall the AQCB comply with the**  
22 **requirements of Section A3 (below):**  
23

24 **(a) A3.1** The ~~[Albuquerque-Bernalillo County Air Quality Control Board (AQCB)]~~ Department  
25 shall submit an annual emissions report (covering the jurisdiction of the AQCB) to the WRAP  
26 and all participating states and tribes by September 30 of each year. The report shall  
27 document *actual* sulfur dioxide (SO<sub>2</sub>) emissions during the previous calendar year for all  
28 sources subject to the requirements of ~~[20.11.46 NMAC Sulfur Dioxide Emissions Inventory~~  
29 ~~Requirements; Western Backstop Sulfur Dioxide Trading Program]~~ 20.11.46.9 NMAC,  
30 Emission Tracking Requirements for Sulfur Dioxide Emission Inventories. The first report for  
31 calendar year 2003 ~~[shall be]~~ was submitted by September 30, 2004. This report was not  
32 required, but instead was generated due to a misunderstanding of the SO<sub>2</sub> threshold as  
33 being 100 TPY *Potential* To Emit (PTE) instead of 100 TPY *Actual* emissions. The  
34 Department shall prepare the supporting documentation that is included with the annual  
35 emissions report as noted in the provisions A3.2 & A3.3 (below).  
36

37 **~~[(b)]~~ A3.2** The annual emissions report for Bernalillo County shall include ~~[an emissions~~  
38 ~~exceptions]~~ a source emissions change report that contains the following information:  
39

40 (a) Identification of any new sources that were not contained in the previous calendar  
41 year's emissions report, and an explanation of why the source is now included in the  
42 program;

43 (b) Identification of any sources that were included in the previous year's report and are  
44 no longer included in the program, and an explanation of why this change has occurred;  
45 and  
46

47 (c) An explanation for emissions variations at any applicable source that exceeds +/- 20  
48 percent from the previous year.  
49  
50

1 ~~[(e)]~~ **A3.3** The annual emissions report for Bernalillo County shall include a proposed  
2 emissions adjustment as described in (a) through (c) below to ensure a consistent  
3 comparison to the milestones.  
4

5 **(a) Changes in flow rate measurement methods.** The provisions in this Subsection  
6 (a), shall apply only to the 2003-2007 milestone report. Actual emission inventories for  
7 utilities that use EPA's Reference Method 2F, 2G, or 2H to measure stack flow rate will  
8 be adjusted to be comparable with the flow rate assumptions that were used in 1999, the  
9 base year inventory for the Annex, ~~[except emissions for the year 2018 shall not be~~  
10 ~~adjusted].~~ The adjustment may be calculated using any of the following three methods.  
11

12 1. Directly determine the difference in flow rate through a side-by-side comparison  
13 of data collected with the new and old flow reference methods during a Relative  
14 Accuracy Test Audit (RATA) test.  
15

16 2. Compare the annual average heat rate using Acid Rain heat input data  
17 (MMBtu) and total generation (MWHrs) as reported to the federal Energy  
18 Information Administration (EIA). Under this approach, the flow adjustment factor  
19 shall be calculated using the following ratio:  
20

$$\frac{\text{Heat input/MW for } \textit{first} \text{ full year of data using } \textit{new} \text{ flow rate method}}{\text{Heat input/MW for } \textit{last} \text{ full year of data using } \textit{old} \text{ flow rate method}}$$

21  
22  
23  
24 3. Compare the standard CFM per MW before and after the new flow reference  
25 method based on CEMs data submitted in the Acid Rain Program, as follows:  
26

$$\frac{\text{SCF/Unit of Generation for } \textit{first} \text{ full year of data using } \textit{new} \text{ flow rate method}}{\text{SCF/Unit of Generation for } \textit{last} \text{ full year of data using } \textit{old} \text{ flow rate method}}$$

27  
28  
29  
30 ~~[[Note: Adjustments done under options 2 and 3 may be influenced by operational factors and~~  
31 ~~not just measurement bias. The Department will need to address this when changes to the~~  
32 ~~milestones are contemplated].]~~  
33

34 **(b) Changes in emission monitoring or calculation methods:** Actual emission  
35 inventories for sources that change the method of monitoring or calculating their  
36 emissions shall be adjusted to be comparable to the emission monitoring or calculation  
37 method that was used in the base year inventory ~~[for the Annex].~~  
38 The base year inventory for the 2003-2007 milestone report is 1999 for utilities and 1998  
39 for all other sources. The base year inventory for the 2008 and later milestone reports is  
40 the 2006 inventory for all sources.  
41

42 **(c) Changes due to enforcement actions:**  
43

44 1. **Adjustments due to enforcement actions arising from settlements.** ~~[The~~  
45 ~~implementation plan element must provide for]~~ Adjustments to the milestones  
46 shall be made as specified in Section ~~[D(6)(e) bullets 3 and 4]~~ A3.3(c)3 and  
47 A3.3(c)4, if:  
48

49 (A) an agreement to settle an action, arising from allegations of a failure of an  
50 owner or operator of an emissions unit at a source in the program to comply

1 with applicable regulations ~~[that]~~ which were in effect during the base year, is  
2 reached between the parties to the action;

3  
4 (B) the alleged failure to comply with applicable regulations affects the  
5 assumptions that were used in calculating the source's base year and  
6 forecasted sulfur dioxide emissions; and

7  
8 (C) the settlement includes or recommends an adjustment to the milestones.  
9

10 **2. Adjustments due to enforcement actions arising from administrative or**  
11 **judicial orders.** ~~[The implementation plan element must also provide for]~~  
12 Adjustments shall be made to the milestones as directed by any final  
13 administrative or judicial order, as specified in ~~[Section D(6)(c), bullets 3 and 4]~~  
14 Sections A3.3(c)3 and A3.3(c)4. Where the final administrative or judicial order  
15 does not include a reforecast of the source's baseline, the ~~[Albuquerque-Bernalillo~~  
16 ~~County Air Quality Control Board AQCB]~~ Department or its designee shall  
17 evaluate whether a reforecast of the source's baseline emissions is appropriate.  
18

19 **3. Adjustments for enforcement actions.** ~~[The implementation plan element~~  
20 ~~must provide that]~~ Based on ~~[Section D(6)(c), bullets 3 and 4]~~ Sections A3.3(c)3  
21 and A3.3(c)4, the milestone must be decreased by an appropriate amount based  
22 on a reforecast of the source's decreased sulfur dioxide emissions. The  
23 adjustments to the milestone do not become effective until after the source has  
24 reduced its sulfur dioxide emissions as required in the settlement agreement, or  
25 administrative or judicial order. All adjustments based upon enforcement actions  
26 must be made in the form of an implementation plan revision that complies with  
27 the procedural requirements of 40 CFR 51.102 and 40 CFR 51.103.  
28

29 **4. Documentation of adjustments for enforcement actions.** In the periodic  
30 implementation plan revision required under 40 CFR 51.309(d)(10), the  
31 Department shall include the following documentation of any adjustment due to an  
32 enforcement action:  
33

34 (A) Identification of each source under the AQCB's jurisdiction which has  
35 reduced sulfur dioxide emissions pursuant to a settlement agreement, or an  
36 administrative or judicial order;

37  
38 (B) For each source identified, a statement indicating whether the milestones  
39 were adjusted in response to the enforcement action;

40  
41 (C) Discussion of the rationale for the ~~[AQCB's]~~ Department's decision to adjust  
42 or not to adjust the milestones; and

43  
44 (D) If extra SO<sub>2</sub> emissions reductions (over and above those reductions needed  
45 for compliance with the applicable regulations) were part of an agreement to  
46 settle an action, a statement indicating whether such reductions resulted in any  
47 adjustment to the milestones or allowance allocations, and a discussion of the  
48 rationale for the ~~[AQCB's]~~ Department's decision on any such adjustment.  
49

1 ~~[(d)]~~ **A3.4** The annual SO<sub>2</sub> milestone and emissions report for Bernalillo County shall  
2 document any adjustments that should be made to the milestone for the previous year as  
3 described in (a) below.

4  
5 ~~[The Department shall document the submittal date of this Implementation Plan to~~  
6 ~~implement the regional WEB Trading Program, and the approval date by the EPA~~  
7 ~~Administrator, if applicable.~~

8  
9 ~~The State of New Mexico shall determine the status of Phelps Dodge Hidalgo copper~~  
10 ~~smelter during the previous year. If the smelter resumed operation in the milestone year,~~  
11 ~~the report shall include:~~

12 ~~The date the smelter resumed operation;~~

13  
14 ~~A determination by New Mexico that either,~~

15  
16 ~~the smelter resumed production consistent with past operations,~~

17  
18 ~~the smelter was required to go through new source review, in which~~  
19 ~~case New Mexico shall include the new permitted limit for sulfur~~  
20 ~~dioxide for the Phelps Dodge Hidalgo smelter in the report, or~~

21  
22 ~~the smelter resumed operations in a substantially different manner~~  
23 ~~such that emissions will be less than for past operations, in which case~~  
24 ~~New Mexico shall determine expected emissions from the operation;~~  
25 ~~and~~

26  
27 ~~a proposed adjustment to the sulfur dioxide milestone to account for the~~  
28 ~~operation of the Phelps Dodge Hidalgo smelter.]~~

29  
30 **(a) This provision applies only to Arizona and Utah.** Comparison of actual emissions  
31 from all smelters in ~~[New Mexico]~~ Arizona and Utah to the baseline emissions level for  
32 that smelter are listed in Table 5. If actual emissions and sulfur input are greater than the  
33 baseline ~~[level]~~ levels in Table 5, ~~[and either the BHP San Manuel smelter in Arizona or~~  
34 ~~the Phelps Dodge smelter in New Mexico have not resumed operation,]~~ the State of New  
35 Mexico in coordination with the Department and the WRAP, shall determine the  
36 milestone adjustment by ~~[subtracting the baseline level from the source's actual~~  
37 ~~emissions.]~~ determining the increase in the milestone based on the proportional increase  
38 in sulfur input over baseline levels. For each smelter, the adjustment shall not exceed the  
39 smelter-specific set-aside listed in Table 5.



1  
2 The following example is for illustrative purposes:  
3

4 Asarco's baseline SO<sub>2</sub> emissions are 23,000 tons  
5 Asarco's baseline sulfur input is 235,000 tons  
6

7 For example, in 2005:  
8 Asarco's SO<sub>2</sub> emissions were 25,000 tons  
9 Asarco's sulfur input was 250,000 tons.  
10

11 Because Asarco's 2005 emissions and sulfur input exceeded its baseline  
12 emissions and sulfur input: need to calculate the percent increase in sulfur  
13 input in the year 2005

14 = [(2005 sulfur input) - (baseline sulfur input)] ÷ [baseline sulfur input]  
15 = [250,000 - 235,000] ÷ [235,000]  
16 = [15,000] ÷ [235,000]  
17 = 0.0638  
18 = 6.38%  
19

20 The adjustment to the milestone based on Asarco's increase in production is  
21 to increase the milestone by [4,564] 1,467.4 tons of SO<sub>2</sub> (which is ok, since it  
22 is less than the maximum of 3,000 tons in Table 5 for Asarco).

23 adjustment = 6.38% x baseline emissions  
24 adjustment = 6.38% x 23,000  
25 adjustment = [4,564] 1,467.4 tons  
26

27  
28 **[(e)] A3.5 Compilation of Reports.**  
29

30 **(a)** All participating states and tribes shall submit annual emissions reports, [which] to the  
31 WRAP who will then compile these into a draft regional emission report for SO<sub>2</sub>. The WRAP  
32 will follow additional quality assurance procedures developed by states and tribes to identify  
33 possible errors in the emissions data, including screening for missing or added sources,  
34 name changes, and significant changes in reported emissions. Any questions or anomalies  
35 regarding the Department's report shall be referred back to the [AQCB] Department for  
36 resolution prior to the submission of the draft regional emission report.  
37

38 **(b)** By December 31 of each year, the WRAP [will] shall submit the draft regional emission  
39 and milestone report to the [AQCB] Department and shall post the draft report on the WRAP  
40 website for public review. The report shall include the following information [for all states and  
41 tribes that have an Implementation Plan that has been approved by the EPA Administrator  
42 under 40 CFR 51.309(h).]  
43

44 **1.** *Actual* regional sulfur dioxide emissions (tons/year).

45 **2.** Adjustments to account for:

46 **(i)** Changes in flow rate measurement methods (2003-2007 reports only),

47 **(ii)** Changes in emission monitoring or calculation methods, or

48 **(iii)** Enforcement actions or settlement agreements as a result of enforcement  
49 actions.

50 **3.** Average adjusted emissions for the last three years (if applicable) for comparison to

1 the regional milestone.

2 **4.** Regional milestone adjustments to account for ~~[participation by eligible states and~~  
3 ~~tribes and the future operation of smelters in Arizona and New Mexico.] the smelter~~  
4 ~~specific set-aside~~

5  
6 ~~[A separate report that includes additional states and tribes that have submitted~~  
7 ~~implementation plans that are still under review by the EPA shall also be prepared for~~  
8 ~~information purposes.]~~

9  
10 **(f) A3.6** The ~~[AQCB] Department~~ shall evaluate the draft regional emissions report and shall  
11 propose a draft determination that the SO<sub>2</sub> milestone has either been met in the region, or  
12 has been exceeded. In the event that the ~~[TSA] WRAP~~ has not submitted to the ~~[AQCB]~~  
13 ~~Department~~ a draft regional emissions and milestone report by the December 31 deadline for  
14 any year ~~[- the AQCB and] the Department [will] shall~~ prepare ~~[a] its own~~ report for that year  
15 based upon the annual emissions reports submitted by all participating states and tribes  
16 pursuant to Section ~~[D(6)(g)] A3.5~~ for that year. The Department ~~[may] shall~~ modify the data  
17 in these annual emissions reports, or use data where such report(s) have not been  
18 submitted, based upon direction received from the EPA.

19  
20 **(g) A3.7 Public Notice:**

21  
22 The Department ~~[will] shall~~ publish a notice of availability of the draft report in a newspaper of  
23 general circulation. When appropriate, the Albuquerque-Bernalillo County Air Quality Control  
24 Board (AQCB) ~~[will] shall~~ provide for the discussion of the report and accept public comment  
25 during a public meeting. The ~~[AQCB] Department~~ shall submit the draft determination to  
26 EPA for review and comment.

27  
28 **~~[(h)] A3.8 Comments:~~**

29  
30 The ~~[AQCB] Department~~ shall review any comments received during the comment period  
31 and shall submit a copy of all comments to the WRAP and to all participating states and  
32 tribes along with any responses to address the comments.

33  
34 **~~[(i)] A3.9 Draft WRAP Regional Emissions Report:~~**

35  
36 The WRAP shall compile the comments and any responses from all participating states and  
37 tribes and prepare a draft final regional emissions report. The report shall be submitted to  
38 the states and tribes that are participating in the program and, if necessary, the report shall  
39 propose a common Program Trigger Date.

40  
41 **~~[(j)] A3.10 Final Regional Emissions Report:~~**

42  
43 The Albuquerque-Bernalillo County Air Quality Control Board (AQCB) shall review and  
44 approve the final regional emissions report. The ~~[AQCB] Department~~ shall then submit this  
45 report to the EPA along with a final determination that the milestone has either been met in  
46 the region, or that the milestone has been exceeded and the WEB Trading Program has  
47 been triggered in Bernalillo County. This final determination shall be submitted to the EPA  
48 by the end of March, ~~[fifteen] 15~~ months following the milestone year.

49  
50 The first final determination ~~[shall be] was~~ due March 31, 2005 for the 2003 milestone. If the  
51 milestone ~~[has] had~~ been exceeded, the common trigger date proposed in the regional report

1 ~~[shall] would have~~ become the Program Trigger Date for purposes of implementing the WEB  
2 Trading Program. In the event that the Program Trigger Date must be established by the  
3 AQCB in the absence of a regional emissions and milestone report prepared by the ~~[TSA]~~  
4 WRAP the date shall be March 31 of the applicable year.

5  
6 ~~[(k)]~~ **A3.11** The ~~[Albuquerque-Bernalillo County Air Quality Control Board AQCB]~~  
7 Department shall notify the public of the final determination by publishing a notice in a  
8 newspaper of general circulation. ~~[The notice shall state the availability of the final Annual~~  
9 ~~Emissions report and final determination regarding the milestone, include the final calculation~~  
10 ~~of the milestone and state if the WEB Trading Program has been triggered and the date~~  
11 ~~when the program became effective. When appropriate, the Albuquerque-Bernalillo County~~  
12 ~~Air Quality Control Board (AQCB) will provide for the discussion of the report and accept~~  
13 ~~public comment during a public meeting. The notice shall also state the first year that WEB~~  
14 ~~sources must be in compliance with the WEB Trading Program provisions outlined in~~  
15 ~~Subsection D of 20.11.46.11 NMAC]. This notice shall include the final calculation of the~~  
16 ~~milestone and the final annual regional emissions. If the milestone has been exceeded, the~~  
17 ~~notice shall include the program trigger date and the first year that WEB sources must be in~~  
18 ~~compliance with the WEB Trading Program provisions outlined in Subsection D of 20.11.46~~  
19 ~~NMAC. When appropriate, the AQCB will provide for the discussion of the report and accept~~  
20 ~~public comment during a public meeting.~~ The ~~[AQCB]~~ Department shall submit the draft  
21 determination to EPA for review and comment.

22  
23 ~~[(7)]~~ **A4 Year 2013 Assessment.**

24  
25 ~~[(a)]~~ **A4.1 Initial Assessment in 2013 Periodic SIP ~~[-TIP]~~ Review.**

26  
27 **(a)** The ~~[AQCB]~~ Department shall work cooperatively with the WRAP and other participating  
28 states and tribes to develop a projected emission inventory for SO<sub>2</sub> through the year 2018,  
29 using the 2010 regional inventory as a baseline. This projected inventory shall be included in  
30 the 2010 annual emission and milestone report that shall be completed in March 2012 as  
31 outlined in Section D(6) of this Implementation plan.

32  
33 **(b)** The ~~[AQCB]~~ Department shall evaluate the projected inventory, and based upon this  
34 information, make an assessment of the likelihood of meeting the regional milestone for the  
35 year 2018. The ~~[AQCB]~~ Department shall include this assessment as part of Bernalillo  
36 County's progress report that must be submitted by December 31, 2013, as required by 40  
37 CFR 51.309 (d)(10).

38  
39 ~~[(b)]~~ **A4.2 Regional Emissions Report for 2012.**

40  
41 **(a)** The ~~[AQCB]~~ Department shall prepare an SO<sub>2</sub> emission report for the year 2012 by  
42 September 30, 2013 as described in Section ~~[D(6)(a)]~~ A3.1 of this Implementation plan. The  
43 ~~[AQCB]~~ Department shall include a list of all known projects in Bernalillo County that are  
44 anticipated to affect SO<sub>2</sub> emissions in 2018. This may include permitted projects, projects  
45 that are still in the planning stage, or projections from the affected sources of anticipated  
46 emissions in 2018. The status of these projects shall be described to provide a better  
47 understanding of the degree of certainty that individual projects will be completed by 2018.

48  
49 **(b)** The WRAP shall compile the information from all participating states and tribes, prepare  
50 draft SO<sub>2</sub> inventory projections for the year 2018, and estimate the effect of known future  
51 projects on SO<sub>2</sub> emissions. Projected 2018 emissions will be compared to the 2018

1 milestone. This information shall be included in the draft regional emissions report that shall  
2 be submitted to the AQCB by December 31, 2013, as part of the report for the year 2012, as  
3 outlined in Section ~~[D(6)(g)]~~ A3.5 of this Implementation plan.

4  
5 **~~(e)~~ A4.3 Consensus Decision.**

6 The AQCB Department commits to meet with the participating states and tribes in March  
7 2014 to discuss any comments received on the 2018 emission projections in the draft report.  
8 The participating states and tribes shall decide, through a consensus process, whether an  
9 early trigger of the WEB Trading Program is necessary to meet the SO<sub>2</sub> emission reduction  
10 goals in 2018.  
11

12  
13 **~~(d)~~ A4.4 Official Trigger.**

14  
15 If the participating states and tribes decide under Section ~~[D(7)(c)]~~ A4.3 that an early trigger  
16 of the ~~[WEB]~~ backstop trading program is necessary, the AQCB Department shall trigger  
17 the WEB Trading Program and the timing of various program elements shall be adjusted as  
18 follows to ensure that the WEB Trading Program is in place in 2018. The date of the  
19 consensus decision by the participating states and tribes to voluntarily trigger the WEB  
20 trading program shall become the Program Trigger Date.

21  
22 **(a)** Allowances shall be distributed to WEB sources by January 1, 2015.

23  
24 **(b)** The first control period shall be the year 2018. WEB sources will need to  
25 demonstrate at the end of the first control period that they have enough allowances to  
26 cover their SO<sub>2</sub> emissions ~~[of SO<sub>2</sub>]~~ in 2018.

27  
28 **~~[(e)]~~ A4.5 Public Notification.**

29  
30 The ~~[Albuquerque-Bernalillo County Air Quality Control Board AQCB]~~ Department shall  
31 provide notice to the public of the consensus decision. The notice of availability of the  
32 consensus decision to trigger the WEB Trading Program, and the date when the program will  
33 become effective, ~~[will]~~ shall be published in a newspaper of general circulation. If  
34 applicable, the notification shall include a statement that the WEB Trading Program is in  
35 effect and a notification of the official program trigger date.

36  
37 **~~[(8)]~~ A5 Special Penalty Provisions for [Year] the 2018 Milestone.**

38  
39 **(a)** If the WEB Trading Program ~~[has not been triggered before 2018, and the AQCB~~  
40 ~~determines in accordance with Section D(6)(l) of this Implementation plan element that the~~  
41 ~~2018 milestone has been exceeded]~~ is triggered, as outlined in Subsection A.3 of this  
42 Implementation Plan, and the first control period will not occur until after the year 2018, a  
43 special penalty shall be assessed for the exceedance of the 2018 milestone.

44  
45 ~~[The AQCB shall allocate allowances to all WEB sources as established in the 2013 SIP~~  
46 ~~revision described in Section J of this Implementation plan element within one year of the~~  
47 ~~program trigger date. WEB sources will have the option to buy and sell allowances during a~~  
48 ~~two-month allowance transfer period as provided in Paragraph (3) of Subsection A of~~  
49 ~~20.11.46.20 NMAC.~~

1 ~~At the end of this two month allowance transfer period, compliance with the allowance~~  
2 ~~limitation shall be determined as provided in Subsection A of 20.11.46.19 NMAC. Penalties~~  
3 ~~shall be assessed for SO<sub>2</sub> emissions that are greater than the allowance limitation for each~~  
4 ~~WEB source as provided in Subsection C of 20.11.46.19 NMAC. However, notwithstanding~~  
5 ~~Subsections A and C of 20.11.46.19 NMAC, SO<sub>2</sub> emissions in the year 2018 for each WEB~~  
6 ~~source shall be determined in accordance with the pre-trigger emission tracking~~  
7 ~~requirements in Section D(9) of this Implementation plan.]~~

8  
9 Details on the penalty provisions for violation of the 2018 milestone can be found in Section  
10 20.11.46.20 NMAC. In general, the penalty involves an assessment of the minimum \$5000  
11 per ton of SO<sub>2</sub> emissions in excess of the WEB source's allowance limitation. The source  
12 can resolve its excess emissions violation by agreeing to a streamlined settlement approach  
13 outlined in Subparagraph (a) of Paragraph (5) of Subsection A of 20.11.46.20 NMAC.

14  
15 The amount of the *minimum monetary* penalty in Section 20.11.46.20 NMAC, shall be  
16 evaluated at each five-year SIP review, and adjusted to ensure that penalties per ton  
17 substantially exceeds the expected cost of allowances to ensure that this remains a stringent  
18 penalty.

19  
20 The 2018 special penalty provisions shall continue to be applied each year after 2018 until  
21 the 2018 ~~[milestones have]~~ milestone has been achieved.

22  
23  
24 **[(9)] PART B Pre-Trigger Emission Tracking Requirements.**

25  
26 **[(a)] B1 SO<sub>2</sub> Emission Inventory (Per 20.11.46.9 NMAC, Emission Tracking**  
27 **Requirements For Sulfur Dioxide Emission Inventories).**

28  
29 **(a) Applicability.** ~~[The inventory requirements of the WEB Trading Program must~~  
30 ~~require] Beginning with the 2003 emission inventory all stationary sources with ***actual***  
31 ***emissions*** of 100 tons per year or more of SO<sub>2</sub> in the year 2000, or in any subsequent  
32 year,~~[to]~~ shall submit an annual inventory of SO<sub>2</sub> emissions, ~~[beginning with the 2003~~  
33 ~~emission inventory].~~ A source that meets these criteria ~~[that]~~ and then emits less than  
34 100 tons/year in a later year must still submit an SO<sub>2</sub> inventory for tracking compliance  
35 with the regional SO<sub>2</sub> milestones until the ~~[WEB]~~ Western Backstop Sulfur Dioxide  
36 Trading Program has been fully implemented, and emission tracking [is occurring] has  
37 commenced under 20.11.46.9 NMAC.~~

38  
39 **(b)** The inventory ~~[requirements]~~ rule, 20.11.46 NMAC, Sulfur Dioxide Emissions  
40 Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program. ~~[must~~  
41 ~~include]~~ includes federally enforceable provisions ~~[requiring WEB sources to:]~~ that require  
42 stationary sources subject to this rule to:

43  
44 **(1)** Submit an annual inventory of SO<sub>2</sub> emissions

45  
46 **(2)** Document the emissions monitoring/estimation methodology used, and  
47 demonstrate that the selected methodology is acceptable under the inventory  
48 program;

49  
50 **(3)** Include emissions from start up, shut down, and upset conditions in the annual  
51 total inventory;

1  
2 **(4)** Use 40 CFR Part 75 methodologies for reporting emissions for all sources subject  
3 to the federal acid rain program;

4  
5 **(5)** Smelters must submit an annual report of sulfur input, in tons/year;

6  
7 **(6)** Maintain all records used in the calculation of the emissions, including but not  
8 limited to the following:

9 **(i)** Amount of fuel consumed;

10 **(ii)** Percent sulfur content of fuel and how the content was determined;

11 **(iii)** Quantity of product produced;

12 **(iv)** Emissions monitoring data;

13 **(v)** Operating data; and

14 **(vi)** How the emissions are calculated.

15  
16 **(7)** Maintain records of any physical changes to facility operations or equipment, or  
17 any other changes [~~e.g. raw material or feed~~] that may affect the emissions  
18 projections;

19  
20 **(8)** Retain records for a minimum of 10 years from the date of establishment, or if the  
21 record was the basis for an adjustment to the milestone, five years after the date of  
22 an implementation plan revision, whichever is longer.

23  
24 **(c)** The Department shall retain 2006 emission inventory records, including the emissions  
25 monitoring methodology, for non-utilities [~~from 1996 and 1998~~] until the year 2018 to  
26 ensure that changes in emissions monitoring techniques can be tracked.

27  
28 **~~{E}~~ B2 Development of Emission Tracking System:**

29  
30 **~~{4}~~** The [~~Albuquerque-Bernalillo County Air Quality Control Board (AQCB)~~] Department  
31 shall work cooperatively with the states and tribes that are participating in the WEB Trading  
32 Program to ensure that an emission tracking system for the regional SO<sub>2</sub> inventory is  
33 developed and maintained.

34  
35 **~~{2}~~ B3 Periodic Audit of Pre-Trigger Emission Tracking Database.**

36  
37 **~~{a} Scope of Audit.~~**

38  
39 During the pre-trigger phase when the [~~AQCB~~] Department is tracking compliance with the  
40 regional SO<sub>2</sub> milestones, the [~~AQCB~~] Department shall work cooperatively with the  
41 participating states and tribes to ensure that an independent audit of the tracking database is  
42 conducted to ensure that the WRAP is accurately compiling the regional emissions report.  
43 The first audit shall occur during the year 2006 and shall review data collected during the first  
44 two years of the program. Subsequent audits shall occur in 2011 (which shall cover  
45 emissions years 2005-2009) and 2016 (which shall cover emissions years 2010-2014).

46  
47 The primary focus of the audit will be the process that is used to compile the regional  
48 inventory from the data provided by each state and tribe, and the tracking of accumulated  
49 changes during the period between SIP revisions. The audit shall also review the accuracy  
50 and integrity of the regional reports that the [~~AQCB~~] Department uses to determine  
51 compliance with the milestones.

1  
2 The audit is not intended to be a full review of the process for compiling and reporting SO<sub>2</sub>  
3 emissions, but shall include a broad review of the ~~[AQCB]~~ Department's inventory  
4 management and quality assurance systems (i.e. presence and exercise of systems to  
5 assure data quality and integrity).

6  
7 The audit shall discuss the uncertainty of emissions calculations, and whether this  
8 uncertainty is likely to affect the annual determination of whether the milestone is exceeded.  
9 The audit shall identify any recommended changes to emissions monitoring or calculation  
10 methods or data quality assurance systems. The audit shall also review and recommend  
11 any changes to improve the administrative process of collecting the annual emissions data at  
12 the state and tribal level, compiling a regional emission inventory, and making the annual  
13 determination of whether the WEB Trading Program has been triggered.

14  
15 Changes to the WEB trading program, including any changes to the milestones due to the  
16 results of these periodic audits, shall be submitted to EPA as a SIP revision as part of the  
17 five-year SIP review required by 40 CFR 51.309(d)(10).

18  
19 ~~[(b) Public Comment.]~~

20  
21 The Department ~~[will]~~ shall publish a notice of availability of the draft audit report in a  
22 newspaper of general circulation. When appropriate, the Albuquerque-Bernalillo County Air  
23 Quality Control Board (AQCB) will provide for the discussion of the report and accept public  
24 comment during a public meeting. The ~~[AQCB]~~ Department shall submit the final audit report  
25 to the EPA regional office.

26  
27  
28 ~~[(F)]~~ PART C WEB Trading Program Requirements:

29  
30 ~~[(4)]~~ C1 Allowance Allocations

31  
32 C1.1 Initial Allocation of SO<sub>2</sub> Allowances.

33  
34 (a) Draft Allocation Report.

35 ~~[from the Albuquerque-Bernalillo County Air Quality Control Board AQCB] to the Tracking~~  
36 ~~System Administrator (TSA):] Within six months of the program trigger date, as outlined in~~  
37 ~~[Section D(6)(m)] Paragraph A3.11 of this Implementation plan, the ~~[AQCB]~~ Department shall~~  
38 submit a draft allocation report to all participating states and tribes and to the TSA. This  
39 report shall contain the following information:

40  
41 ~~(b)~~ 1. A list of all WEB sources in Bernalillo County as defined in 20.11.46.11 NMAC.  
42 The list shall group the sources into two categories:

43  
44 (i) Category 1: WEB sources that commenced operation prior to January 1, ~~[2003]~~  
45 2008. These sources shall receive a floor allocation and shall be eligible for the reducible  
46 portion of the allocation.

47  
48 (ii) Category 2: WEB sources that commenced operation on January 1, ~~[2003]~~ 2008 or  
49 a later date. These sources shall receive a floor allocation, but shall not be eligible for  
50 the reducible allocation. The floor allocation for Category 2 sources shall be deducted  
51 from the new source set-aside.

1  
2 WEB sources that have received a retired source exemption [~~Subsection E~~] under  
3 Subsection D of 20.11.46.11 NMAC will be included in the allocation process in the same  
4 manner as WEB sources that are currently operating. However, sources that were  
5 permanently shut down prior to the program trigger date are not considered WEB  
6 sources under Subsection A of 20.11.46.11 NMAC and would therefore not be included  
7 in the allocation process.  
8

9 **~~{(e)}~~ 2. Floor allocation for all WEB sources in Albuquerque and Bernalillo County.**

- 10  
11 ~~• [Category 1 Sources: The floor allocation for Category 1 sources is listed in Table 6. If~~  
12 ~~any additional Category 1 sources are identified, the AQCB shall calculate a floor~~  
13 ~~allocation using the methodology outlined in the Annex and in subsequent reports~~  
14 ~~provided by the WRAP.~~

15  
16 Table 6: ~~Bernalillo County Floor Allocations for Category 1 Sources~~

17

State ID	County ID	Facility ID	Source Name	Floor Allocation
35	004		Rio Grande Portland Cement	1103
35	004		City Of Albuquerque Waste Water Treatment Plant	120]

18  
19 (i) For **non-utility** category 1 WEB sources, the floor allocation shall be as established in  
20 the E.H. Pechan Report, "Market Trading Forum Non-Utility Sector Allocation Final  
21 Report from the Allocations Working Group" (November 2002) (see Appendix 2007-B). If  
22 any additional category 1 sources are identified, the Department shall calculate a floor  
23 allocation using the methodology outlined in the E.H. Pechan Report.  
24

25 (ii) For **utility** category 1 WEB sources, the floor will be calculated by first assigning a  
26 "clean unit" emission rate to each unit. The clean unit emission rate will then be multiplied  
27 by an annual heat input (MMBtu) that represents a realistic upper bound for the unit.  
28

29 (Note: The floor level approach described above is designed to address equity  
30 issues regarding the allocation process for utilities. The Department is  
31 participating in ongoing discussions with the other participating states, tribes and  
32 regional stakeholders to ensure that all equity issues have been addressed. The  
33 Department will work with the other participating states and tribes to ensure that  
34 the floor allocation is calculated in a consistent manner for all participants. As  
35 outlined further in this allocation methodology, the floor for both utilities and non-  
36 utilities is limited by the utility/non-utility split in Table 7C. The floor allocation  
37 methodology will ensure that credits are available for early reductions and  
38 renewable energy allocations. In addition, the regional number of allowances  
39 allocated for each year cannot exceed the milestone for that year under any  
40 circumstances.)

41  
42 **Principles**

- 43  
44 • Each unit will have enough allowances to operate as a clean source and at an  
45 operating rate (capacity factor) that is a realistic upper bound for the unit.  
46



- There will not be significant winners and losers in this process.
- The focus is on a fair approach that is applied equally to all sources rather than on state and tribal budgets.
- The allocation process will use data that reflect current conditions, including current monitoring methodologies.

### Equity Issues

- Sources that are currently burning very low sulfur coal may see changes in their supply in the future. Historic actual emissions may not reflect future operations.
- Sources that are currently operating at a low utilization may not reach full capacity in the future. Assumptions about growth that are realistic on the regional level may provide a windfall to some sources, and not provide adequate allowances for other sources.
- There are some utility units in the region that are not BART-eligible and are operating at a low level of control for SO<sub>2</sub>. The relative responsibility of BART-eligible vs. non-BART-eligible is a consideration in the process.
- Sources that are operating at a high level of control are already bearing the cost of control and this affects their ability to compete in the market.
- Sources that have no SO<sub>2</sub> controls are facing a large expense that could affect their ability to continue to operate.
- Emission rate disparities exist throughout the region.

(iii) For Category 2 WEB sources the floor allocation shall be the lower of the permitted SO<sub>2</sub> annual emissions for the WEB source, or SO<sub>2</sub> annual emissions calculated based on a level of control equivalent to BACT and assuming 100% utilization of the WEB source.

~~3.~~ **3.** A list of certified early reductions, expressed as tons of SO<sub>2</sub>. Early reductions shall be calculated and certified as follows:

~~[Any WEB source that reduces permitted annual SO<sub>2</sub> emissions to a level that is below the floor level established for the source in accordance with Section F(1)(c) of this Implementation plan element may apply for an early reduction credit as outlined in Subsection E of 20.11.46.14 NMAC. The application must show that the source is monitoring SO<sub>2</sub> emissions in accordance with the monitoring requirements in of 20.11.46.16 NMAC, and that the floor allocation was calculated in a manner that is consistent with the monitoring requirements of 20.11.46.16 NMAC.]~~

(i) Any WEB source that installs control technology and accepts new permit emissions limits that are, for a non-utility source, below its floor as established in this section, or, for a utility source, below BACT, may apply for an early reduction credit as outlined in 20.11.46.14 NMAC. The credit will be available for reductions that occur between 2008

1 and the program trigger year. The application must show that the floor was calculated in  
2 a manner that is consistent with the monitoring requirements of Subsection A and C of  
3 20.11.46.16 NMAC and the new permit must contain monitoring requirements that are  
4 consistent with Subsection A and C of 20.11.46.16 NMAC. Emission units that are  
5 monitored using the less stringent monitoring requirements of Subsection B of  
6 20.11.46.16 NMAC are not eligible for early reduction credits. The credits accumulate  
7 from the time the new controls come on line until the program trigger date and will be  
8 allocated to the WEB source over a 10 year period. The use of early reduction credits in  
9 any control period is limited to no more than five percent, system wide, of the existing  
10 available allowances, as provided in paragraph C1.1(b)(5) of this plan.

11  
12 (ii) The Department shall review the application and shall certify early reductions for each  
13 full year between ~~[2003]~~ 2008 and the program trigger year that meet the requirements of  
14 Subsection ~~[F]~~ E of 20.11.46.14 NMAC and this Implementation Plan element.

15  
16 (iii) ~~[The]~~ A source's' certified early reductions shall be summed for all years to obtain the  
17 total certified early reductions for ~~[each]~~ that source.

18  
19 ~~[(e)]~~ 4. A list of all renewable energy ~~[resources]~~ plants and sources in Bernalillo County  
20 that began operation after ~~[October 1, 2000]~~ January 1, 2008, and the MW of installed  
21 nameplate capacity for each of these resources. Renewable energy credits will be  
22 granted at a rate of 2.5 tons per MW, and will accumulate from the beginning of the  
23 facility's operation. Their use in any control period is limited to no more than five percent,  
24 system wide, of the existing available allowances, as provided in Paragraph C1.1(b)(6) of  
25 this plan.

26  
27 ~~[(f)]~~ 5. Historical SO<sub>2</sub> emissions data for all Category 1 sources for the purposes of  
28 calculating the reducible allocation.

29  
30 (i) For utilities, the ~~[average of 1995 through 1999]~~ annual SO<sub>2</sub> emissions ~~[data, as~~  
31 ~~reported to EPA's acid rain database and shown in Table 7a, shall be used.]~~ for the year  
32 2006. Another time period may be used for individual emission units, if needed, to be  
33 representative of normal operating conditions

34  
35 (ii) For non-utilities, the ~~[average of]~~ annual SO<sub>2</sub> emissions ~~[reported in]~~ for the ~~[years~~  
36 1996 and 1998 shown in Table 7b shall be used. year 2006.

37  
38 ~~[(iii)]~~ For any Category 1 sources that are not listed in Table 7a or Table 7b, the  
39 Department shall determine a representative historical SO<sub>2</sub> emission average based on  
40 the most recent two years of operation unless it is determined that another period is more  
41 appropriate.]

42  
43 ~~[(g)]~~ 6. **Changes due to enforcement actions or settlement agreements as a result of**  
44 **enforcement actions.** The adjustment shall be determined in accordance with ~~[Section~~  
45 ~~6(c), bullet 3]~~ Paragraph A3.3(c) of this Implementation Plan. The difference between the  
46 WEB source's allocations prior to enforcement and after the enforcement action shall be  
47 removed from the allocation pool.

1  
2 **Table 7a: [Utility 1995 through 1999 SO<sub>2</sub> Emissions for the Purposes of Determining**  
3 **the Reducible Allocation.] RESERVED**  
4

[State/Tribe]	Plant Name	ORIS PL	Unit ID	1995 SO <sub>2</sub> (tons)	1996 SO <sub>2</sub> (tons)	1997 SO <sub>2</sub> (tons)		1998 SO <sub>2</sub> (tons)	1999 SO <sub>2</sub> (tons)	Average 1995 to 1999
New Mexico	Escalante		87	1	1456	1488	1586	1114.3	1,515	1432
New Mexico	Raton		2468	4	127	8	127	8	9	0
New Mexico	Raton*		2468	5	43	313	313	313	159	159
New Mexico	San Juan		2451	1	6467	7898	9164	7779.5	5,745	7411
New Mexico	San Juan		2451	2	5733	5872	6140	6471.6	5,023	5848
New Mexico	San Juan		2451	3	12834	12897	14393	11054.7	9,885	12213
New Mexico	San Juan		2451	4	10082	13303	13247	14654.6	8,772	12012

5  
6 \*Average emissions marked in yellow **blue** represent only one year of emissions where the  
7 other year was either marked as <100 or as 0.  
8

9 Note: There are no such sources within the jurisdiction of Bernalillo County. However, the  
10 sources within the State of New Mexico's jurisdiction are presented here for informational  
11 purposes.]

1 **Table 7b. [Non-utility 1996 and 1998 SO<sub>2</sub> Emissions for the Purposes of Determining**  
 2 **the Reducible Allocation.]RESERVED**  
 3

State	State ID	County ID	Facility ID	Facility Name	SO <sub>2</sub> tpy 1996	SO <sub>2</sub> tpy 1998	Average 1996 and 1998
[NM]	35	015	0024	Agave Energy/Yates Plant	962	962	962
[NM]	35	015	0002	ARCO Permian/Empire Abo Gas Plant	565	565	565
[NM]	35	025	0004	Maljamar Gas Plant	1,464	3,574	2,519
[NM]	35	045	0023	Giant Industries/Bloomfield Ref	772	920	846
[NM]	35	031	0008	Giant Refining/Ciniza Refinery	1,115	1,779	1,447
[NM]	35	025	0044	Versado Gas Producers LLC	1,933	1,933	1,933
[NM]	35	015	0011	Duke Energy/Artesia Gas Plant	1,516	1,516	1,516
[NM]	35	015	0006	GPM Gas/Indian Hills Amine Plant	450	450	450
[NM]	35	025	0046	GPM Gas/Lee Gas Plant †	0	818	818
[NM]	35	025	0035	GPM Gas/Linam Ranch Gas Plant	1,302	1,302	1,302
[NM]	35	025	0007	J.L. Davis Gas Process/Denton	890	891	891
[NM]	35	015	0008	Marathon Oil/Indian Bsn Gas Plant	852	1460	1,156
[NM]	35	015	0010	Navajo Refining/Artesia Refinery	1,552	969	1,261
[NM]	35	015	0138	Duke Energy/Burton Flats	196	196	196
[NM]	35	015	0285	Duke Energy/Dagger Draw	218	247	233
[NM]	35	017	0001	Phelps Dodge/Chino Mines	14,784	15,685	15,235
[NM]	35	023	0003	Phelps Dodge/Hidalgo Smelter	32,121	29,188	30,655
[NM]	35	025	0008	Sid Richardson Gasoline/JAL#3	540	540	540
[NM]	35	025	0055	Texaco/Buckeye Gasoline Plant	2,490	2,933	2,712
[NM]	35	025	0052	Texaco/Eunice North Gas Plant	1,076	1,346	1,211
[NM]	35	025	0051	Texaco/Eunice South Gas Plant	4,386	3,355	3,870
[NM]	35	015		Duke Energy/Huber Gas	231	231	231
[NM]	35	041	0001	Warren Petroleum/Bluitt Gas Plant	3,348	582	1,965
[NM]	35	025	0060	Eunice Gas Plant	2,388	2,388	2,388
[NM]	35	025	0061	Monument Plant	1,709	1,432	1,570
[NM]	35	025	0063	Saunders Plant	3,312	1,387	2,349
[NM]	35	025	0064	Warren Petroleum/Vada Gas Plant †	2,149	0	2,149
[NM]	35	045	0247	Western Gas Processors/San Juan [Rvr] River	980	980	980
[NM]	35	001		<b>Rio Grande Portland Cement</b>	<b>1,103</b>	<b>1,103</b>	<b>1,103</b>

4 †Average emissions marked in [yellow] **blue** represent only one year of emissions where the  
 5 other year was either marked as <100 or as 0.  
 6

7 Note: One such source, the Rio Grande Portland Cement plant, is within the jurisdiction of  
 8 the AQCB. All the other sources, however, are within the State of New Mexico's jurisdiction  
 9 and are presented here for informational purposes].  
 10

11 **[(h)] (b) Compiled Allocation Report [from Tracking System Administrator (TSA)]**  
 12

13 The Tracking System Administrator shall compile the information provided by all participating  
 14 states and tribes into a draft regional allocation report, and shall submit this draft regional  
 15 report to the Department and all participating states and tribes for review and comment 30  
 16 days after receiving the preliminary allocation reports. The draft regional allocation report

1 shall include a proposed budget for each state and tribe and the proposed allocation for each  
2 WEB source in Bernalillo County [calculated as follows (also see the sample calculation at  
3 the end of this section):]  
4

5 ~~1.~~ Calculate the regional milestones for the first five years of the program as described in  
6 Section [D(6)] ~~A3~~ of this Implementation plan.  
7

8 ~~2.~~ Subtract 20,000 tons from the regional milestones for the first five years of the program  
9 to account for the Tribal Set Aside.  
10

11 ~~3.~~ Calculate the new source set-aside for the first five years of the program as follows:  
12

13 ~~(i)~~ Subtract the new source set aside adjustment listed in Table 8 for all states and  
14 tribes that do not have a federally approved Implementation Plan under 40 CFR  
15 51.309 as of the program trigger date for the WEB trading program from the  
16 maximum possible set-aside for each of the first five years of the trading program.]  
17

18 The Department will work closely with the other participating states and tribes to  
19 ensure that the regional allocation is distributed consistently and fairly and to address  
20 any change in status that may affect this process.  
21

22 The following methodology distributes the allowances available under the milestone  
23 in the following order: tribal set-aside, new source set-aside, floor, early reduction  
24 credit, renewable energy credit, reducible allocation. The allocation process is limited  
25 by the number of allowances available under the milestone. It is not possible under  
26 this methodology to distribute more allowances than are available under the  
27 milestone. The Department expects that there will be allowances available for all of  
28 the categories listed above. However, if at any time in the process there are not  
29 enough allowances available to fully cover a particular category, then the sources  
30 eligible for that category will receive a pro-rated allowance, and the process will stop.  
31 For example, if the renewable energy allocation is greater than the remaining  
32 available allowances under the milestone, then each of the renewable energy  
33 sources would receive a reduced renewable energy allocation, and there would be no  
34 reducible allocation.  
35

36 (1) Table 7C shows the major categories that will be used to allocate allowances  
37 under the milestone. The methodology to calculate the available allocation for  
38 existing sources is described below. The milestone for the four-state region is the  
39 starting point.  
40

41 NOTE: If the milestone for a particular year is adjusted due to the smelter-specific  
42 set-aside provisions in Paragraph A1.2 of this Plan, then the milestone adjustment  
43 calculated in Paragraph A1.2 of this Plan will be allocated to that smelter, and will  
44 be in addition to the allocations determined from the base milestone as outlined in  
45 this subsection. References to the non-utility allocation throughout the remainder  
46 of this plan will not include the potential allocation due to the smelter-specific set-  
47 aside.  
48

1  
2

**Table 7C. Utility/Non-utility Split**

	<u>Milestone from Table 1</u>	<u>Tribal Set-Aside</u>	<u>New Source Set-aside</u>	<u>Remaining Allocation</u>	<u>Utility Portion</u>	<u>Non-utility portion</u>
2008	<u>378,398</u>	<u>8,500</u>	<u>17,000</u>	<u>352,898</u>	<u>276,263</u>	<u>76,635</u>
2009	<u>336,160</u>	<u>8,500</u>	<u>17,000</u>	<u>310,660</u>	<u>234,025</u>	<u>76,635</u>
2010	<u>293,921</u>	<u>8,500</u>	<u>17,000</u>	<u>268,421</u>	<u>191,786</u>	<u>76,635</u>
2011	<u>293,921</u>	<u>8,500</u>	<u>17,000</u>	<u>268,421</u>	<u>191,786</u>	<u>76,635</u>
2012	<u>293,921</u>	<u>8,500</u>	<u>17,000</u>	<u>268,421</u>	<u>191,786</u>	<u>76,635</u>
2013	<u>278,985</u>	<u>8,500</u>	<u>34,000</u>	<u>236,485</u>	<u>159,850</u>	<u>76,635</u>
2014	<u>264,050</u>	<u>8,500</u>	<u>34,000</u>	<u>221,550</u>	<u>144,915</u>	<u>76,635</u>
2015	<u>249,114</u>	<u>8,500</u>	<u>34,000</u>	<u>206,614</u>	<u>129,979</u>	<u>76,635</u>
2016	<u>249,114</u>	<u>8,500</u>	<u>34,000</u>	<u>206,614</u>	<u>129,979</u>	<u>76,635</u>
2017	<u>249,114</u>	<u>8,500</u>	<u>34,000</u>	<u>206,614</u>	<u>129,979</u>	<u>76,635</u>
2018	<u>234,624</u>	<u>8,500</u>	<u>34,000</u>	<u>192,124</u>	<u>116,189</u>	<u>76,635</u>

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(2) Subtract the floor allocation for all WEB sources in the region that were identified as Category 2 [sources in accordance with Sections F(1)(b), bullet 2] [of this Implementation plan element from the total established in F(1)(b), bullet 1] from the new source set-aside to determine [a total new source] the available allocation for [each of the first 5 years of the program.] new sources that begin operation after the program trigger date.

This allocation methodology treats all Category 2 sources as existing sources because these sources will be operating on the program trigger date. However, the allowances for all Category 2 sources are actually drawn from the new source set-aside. If new source growth exceeds the projections used to develop this plan, it is possible that the above calculation will result in a negative number. Therefore, to address this problem, Category 2 sources will be ranked based on the date the permit is issued for each source. Sources will then be removed from the list of Category 2 sources, starting with the most recent permit, until the new source set-aside is no longer depleted. The last source on the list will receive a partial allocation. The sources that were removed from the list will be considered new sources as described in Section C1.3 of this plan. These sources will need to purchase allowances to cover their emissions because the new source set-aside for sources that begin operation after the program trigger date would be calculated as zero until it is replenished in the next 5-year period. The allocation process for these new sources is described in Section C1.3 of this Plan.

**Table 8: [~~New Source Set-Aside Adjustment~~]RESERVED**

	<b>2003 – 2007</b>	<b>2008 – 2012</b>	<b>2013 – 2018</b>
<b>Maximum Possible Set-Aside</b>	<b>9,000</b>	<b>18,000</b>	<b>27,000</b>

State or Tribe	Adjustment (tons/yr SO <sub>2</sub> )		
1. Arizona	1,757	3,596	5,437
2. California	559	1,039	1,532
3. Colorado	1,480	2,945	4,364
4. Idaho	270	496	724
5. Nevada	302	618	1,011
<b>6. New Mexico</b>	<b>1,267</b>	<b>2,512</b>	<b>3,889</b>
7. Oregon	393	795	1,075
8. Utah	640	1,293	1,949
9. Wyoming	2,333	4,706	7,020
10. Tribes	No adjustment needed	No adjustment needed	No adjustment needed

~~4. Subtract the new source set aside calculated in F(1)(h), bullet 3 from the subtotal calculated in [F(1)(h), bullet 2]~~

(3) The remaining allocation shown in Table 7C is available for distribution to category 1 sources. The final two columns in Table 7C split this remaining allocation into a utility allocation and a non-utility allocation.

(4) Subtract the floor allocations for all [existing] category 1 utility and non-utility sources in the region from the [subtotal calculated in the bullet immediately above this one This is the new subtotal]. utility allocation or the non-utility allocation. In the unlikely event that the total floor allocation for either utility or non-utility sources submitted by the participating states and tribes exceeds the total allocation available for that category, the TSA will notify the participating states and tribes of the discrepancy. The Department commits to work with the participating states and tribes through a consensus process to ensure that the floor allocation has been calculated in a consistent manner for all participants and to ensure that the floor allocation does not exceed the total allocation available for that category. The total number of allowances distributed cannot exceed the milestone for any given year.

**5. Calculate the early reduction allocation.**

[by dividing ]

(i) Divide the number of certified early reduction credits for all WEB sources in the region by [ten] 10.

~~[(i) Compare the early reduction allocation to the new subtotal calculated (above). If the early reduction allocation is less than the subtotal, subtract it from the subtotal.~~

~~If the early reduction allocation is more than the subtotal, prorate the early reduction allocation for each WEB source so that the early reduction allocation equals subtotal and then skip Paragraphs (j) and (k) below because the remaining allocation has been reduced to zero.~~

1 ~~The early reduction allocation shall be calculated in a similar manner for the second five-~~  
2 ~~year allocation period under this program, and shall then be discontinued for any future~~  
3 ~~allocation periods.]~~

4  
5 (ii) Add the utility allocation for 2018 to the non-utility allocation for 2018 and then  
6 multiply this total by 0.05.

7  
8 (iii) If the product of Paragraph (i) is no more than the product of Paragraph (ii), the  
9 product of Paragraph (i) is the early reduction allocation, and each source is allocated 10  
10 percent of its early reduction credits.

11  
12 (iv) If the product of Paragraph (i) is more than the product of Paragraph (ii), the early  
13 reduction allocation for the region is the product of Paragraph (ii). To determine a  
14 source's allocation, divide the product of Paragraph (ii) by 0.10 times the total number of  
15 early reduction credits and apply that ratio to the early reduction credits claimed by the  
16 source.

17  
18 (v) Split the regional early reduction allocation based on the ratio of utility to non-utility  
19 allocations in 2018 and subtract the early reduction allocation from the utility and non-  
20 utility allocation totals.

21  
22 (vi) The early reduction allocation will be calculated in a similar manner for the second  
23 five-year allocation period under this program, and will then be discontinued for any  
24 future allocation periods.

25  
26 **~~[(j) Determine]~~ (6) Calculate the regional renewable energy allocation.**

27  
28 (i) [by adding] Add together the reported MW of installed nameplate capacity for renewable  
29 energy [resources] facilities reported by the participating states and tribes, and then  
30 [multiplying] multiply this number by 2.5. [Compare the regional renewable energy allocation  
31 to the subtotal calculated in (i)]

32  
33 ~~If the regional renewable energy allocation is less than the subtotal, subtract it from the~~  
34 ~~subtotal.~~

35  
36 ~~If the regional energy allocation is greater than the subtotal, prorate the renewable~~  
37 ~~energy allocation for each resource so that the renewable energy allocation equals the~~  
38 ~~subtotal, and then skip to Paragraph (k) because the remaining allocation has been~~  
39 ~~reduced to zero.]~~

40  
41 (ii) Add the utility allocation for 2018 to the non-utility allocation for 2018 and then multiply  
42 this total by 0.05.

43  
44 (iii) If the product of Paragraph (i) is no more than the product of Paragraph (ii), the product  
45 of Paragraph (i) is the renewable energy allocation.

46  
47 (iv) If the product of Paragraph (i) is greater than or equal to the product of Paragraph (ii),  
48 the renewable energy allocation for the region is the product of Paragraph (ii). To determine  
49 a source's allocation, divide the product of Paragraph (ii) by the total number of renewable  
50 energy credits and apply that ratio to the early reduction credits claimed by the source.

51



1 (v) Split the regional renewable energy allocation based on the ratio of utility to non-utility  
2 allocations in 2018 and subtract the renewable energy allocation from the utility and non-  
3 utility allocation totals.

4  
5 ~~[(k)].~~ (7). ~~[The subtotal calculated in Paragraph (j)]~~ Any remaining allowances in the utility  
6 allocation or the non-utility allocation after subtraction of the early reduction allocation and  
7 the renewable energy allocation is considered the reducible allocation and shall be assigned  
8 to Category 1 sources [based on each source's contribution to historical SO<sub>2</sub> emissions as  
9 follows:]

10  
11 (i) For non-utility sources, add together the historic SO<sub>2</sub> emissions in accordance with  
12 [Section F(1)(f)] Paragraph C1.1(a)(5) of this implementation plan for all Category 1 non-  
13 utility sources in the region to determine an historic emission total.

14  
15 Determine a percent contribution of SO<sub>2</sub> emissions for each WEB source to the historic  
16 emission total ~~[in accordance with F(1)(f)]~~

17  
18 Multiply the non-utility reducible allocation ~~[calculated in paragraph (k)]~~ by the percent  
19 contribution for each WEB source to determine a reducible allocation for each WEB  
20 source.

21  
22 (ii) For utility sources, the reducible allocation will be distributed to sources that emitted  
23 above their floor in the baseline period (2006) based on their percentage of total floor  
24 emissions for sources emitting above the floor times the number of reducible allowances  
25 available for the first five years of the WEB Trading Program. The number of allowances for  
26 any source receiving a reducible allocation will not exceed a recent historic emission rate  
27 times a heat input that represents a realistic upper bound for the unit.

28  
29 [Note: The approach for distributing the reducible utility allocation described above is  
30 designed to address equity issues regarding the allocation process for utilities. The  
31 Department is participating in ongoing discussions with the other participating states, tribes  
32 and regional stakeholders to ensure that all equity issues have been addressed. The  
33 principles and equity issues that are under discussion are listed in Paragraph C1.1(a)(2)(ii) of  
34 this plan.]

35  
36 ~~[(l)].~~ (8) Add together the floor allocation, early reduction allocation, renewable energy  
37 resource allocation, and reducible allocation for each WEB source and each renewable  
38 energy resource to determine the proposed allocation for the first five years of the WEB  
39 Trading Program.

40  
41 ~~[(m)].~~ (9) Add together the proposed allocation for all of the WEB sources in the jurisdiction  
42 of each participating state and tribe to determine a draft SO<sub>2</sub> allowance budget for each state  
43 and tribe.

1  
2 **Sample Calculation of the New Source Set-Aside.**

3 The example uses the following assumptions (refer to ~~[table on next page]~~ the  
4 table that follows):

5 ~~[(i)] Emissions exceed the milestones based on an average of the years [2003~~  
6 ~~2005] 2004-2006.~~

7 ~~[(ii)] The program trigger date is March 31, [2007] 2008.~~

8 ~~[(iii)] The first five years of the program are [2011–2015] 2012-2015.~~

9 ~~[(iii)] All States and Tribes are participating in the program except for the state~~  
10 ~~of California]~~

11 ~~[(iv)] New sources that commenced operation between January 1, [2003] 2008~~  
12 ~~and the program trigger date have a total floor allocation of [1,400] 600.~~

13  
14

<u>YEAR</u>	<del>[2011]</del> <u>2012</u>	<del>[2012]</del> <u>2013</u>	<del>[2013]</del> <u>2014</u>	<del>[2014]</del> <u>2015</u>	<del>[2015]</del> <u>2016</u>
<del>[Maximum Possible] New</del> Source Set-Aside	<del>[18,000]</del> <u>17,000</u>	<del>[18,000]</del> <u>34,000</u>	<del>[27,000]</del> <u>34,000</u>	<del>[27,000]</del> <u>34,000</u>	<del>[27,000]</del> <u>34,000</u>
<del>[California Adjustment]</del>	<del>-1,039</del>	<del>-1,039</del>	<del>-1,532</del>	<del>-1,532</del>	<del>-1,532</del>
Floor for Category 2 Sources	<del>- [1,400]</del> <u>600</u>	<del>- [1,400]</del> <u>600</u>	<del>- [1,400]</del> <u>600</u>	<del>-</del> <u>[1,400]</u> <u>600</u>	<del>- [1,400]</del> <u>600</u>
Remaining New Source Set-aside	<del>[15,561]</del> <u>16,400</u>	<del>[15,561]</del> <u>33,400</u>	<del>[24,068]</del> <u>33,400</u>	<del>[24,068]</del> <u>33,400</u>	<del>[24,068]</del> <u>33,400</u>

15  
16  
17 **~~[(n)]~~ (c) Public ~~[Notification]~~ Comment Period.**

18  
19 The Department ~~[will] shall~~ publish a notice of availability of the draft regional allocation  
20 report in a newspaper of general circulation in Bernalillo County. ~~[When appropriate, the~~  
21 ~~Albuquerque-Bernalillo County Air Quality Control Board (AQCB) will provide for the~~  
22 ~~discussion of the report and accept public comment during a public meeting.]~~

23 A 30-day public comment period shall be established, and a hearing will be held during the  
24 comment period. The Department shall consider the comments, and shall revise the draft  
25 report if the recommended changes are consistent with the allocation process outlined in this  
26 plan. The Department shall prepare a written response that explains why each comment has  
27 either been accepted or has been determined to be inconsistent with the allocation process  
28 outlined in this plan.

29  
30 **~~[(o)]~~ (d) Proposed Changes Submitted to Tracking System Administrator (TSA).**

31  
32 The Department shall submit a copy of all comments received the response to those  
33 comments and any proposed changes to the budget and source allocations to the TSA within  
34 60 days of receipt of the draft regional allocation report.

35  
36 **~~[(p)]~~ (e) Compilation of Changes.**

37  
38 The TSA shall compile the comments, responses and proposed changes to the report and  
39 shall submit a final draft regional allocation report that is consistent with the allocation  
40 methodology outlined in this plan to the ~~[participating states and tribes]~~ Executive Secretary

1 ~~[for approval]~~ within ~~[30 days of receipt of the recommended changes.]~~ 90 days of the receipt  
2 of the draft regional allocation report

3  
4 **~~(e)~~ (f) Final Regional Allocation Report.**

5  
6 The AQCB shall review the final regional allocation report and shall determine the budget for  
7 Bernalillo County and allocations for WEB sources within Bernalillo County in accordance  
8 with the ~~[provisions of]~~ allocation methodology outlined in this Implementation plan element  
9 within 30 days of receipt of the final draft allocation report. The ~~[AQCB]~~ Department shall  
10 submit the budget and allocations for all WEB sources in Bernalillo County to EPA, and shall  
11 notify the TSA that the WEB source allocations should be recorded in the allowance tracking  
12 system.

13  
14 **~~{(f)}~~ (g) Notification.**

15  
16 The ~~[AQCB]~~ Department shall notify all WEB sources within Bernalillo County of the number  
17 of allowances that have been recorded in their compliance account. The notice shall include  
18 a warning to the WEB sources that reported annual SO<sub>2</sub> emissions may change due to the  
19 implementation of new monitoring methodologies as required by 20.11.46.16 NMAC.

20  
21 Allocations for the first five years of the program shall not be adjusted to account for changes  
22 due to the new monitoring methodology. However, allocations during the next five-year  
23 distribution shall be adjusted as needed to account for paper changes in emissions due to  
24 changes in monitoring methodology.

25  
26 **~~{(2)}~~ C1.2 Distribution of Allowances for Future Control Periods.**

27  
28 By December 1 of the year, five years after the initial allocation, the ~~[AQCB]~~ Department shall  
29 follow the process outlined in Section ~~[F(1)]~~ C1.1 to distribute allowances for the next five-  
30 year period. This process shall continue every five years until allowances have been  
31 allocated through the year 2018. Under no circumstances shall allocations be made that  
32 would exceed the allocations available.

33  
34 **~~{(3)}~~ C1.3 Distribution of the New Source Allocation.**

35  
36 **(a)** The new source set-aside shall be available for two categories of sources.

37  
38 **1.** New WEB sources are eligible to receive ~~[allowances from the new source set-aside~~  
39 ~~in the amount of]~~ an annual floor allocation equal to the lower of the annual permitted  
40 SO<sub>2</sub> emissions for the source, or SO<sub>2</sub> annual emissions calculated based on a level of  
41 control equivalent to BACT and assuming 100% utilization of the WEB source beginning  
42 with the first full calendar year of operation and in accordance with the provisions of  
43 Subsection F of 20.11.46.14 NMAC.

44  
45 **2.** Existing sources that increase production are eligible to receive allowances from the  
46 new source set-aside ~~[for the annual permitted amount of SO<sub>2</sub> emissions that is~~  
47 ~~attributable to the increase in production over the permitted production level as of~~  
48 ~~January 1, 2003]~~ equal to:

49 (i) the permitted annual sulfur dioxide emission limit for a new unit;  
50 or

1 (ii) the permitted annual SO<sub>2</sub> emission increase for the WEB source  
2 due to the replacement of an existing unit with a new unit or the  
3 modification of an existing unit that increased the production capacity of  
4 the WEB source.

5  
6 Permitted emission increases due to fuel switching or other process  
7 changes that are not directly related to increased production capacity are  
8 not eligible for allocations from the new source set-aside. The allocation  
9 from the new source set-aside in the first year of operation shall be adjusted to  
10 account for the number of days that the source is operating in that first year.  
11

12 **EXAMPLE.** A new unit with a nameplate capacity of 400 MW is constructed at a  
13 power plant with two existing units with nameplate capacities of 400 MW and 300  
14 MW. The two existing units install SO<sub>2</sub> controls and reduce emissions to meet  
15 PSD requirements for the construction of the new unit. In this example, the source  
16 would continue to receive a floor and a reducible allocation for each of the existing  
17 units, and would also be eligible to receive an allocation from the new source set-  
18 aside for the new unit. Even though total SO<sub>2</sub> emissions will decrease at this plant  
19 due to the construction of the new unit, the allowances allocated to the source will  
20 increase to reflect the increase in production capacity of 400 MW of electricity. If  
21 the new unit comes on line on July 1 the allocation for the first year shall be  
22 reduced by 50 percent because the unit was operational for half of the year.  
23

24 **(b)** Allocations from the new source set-aside shall remain constant for the applicable WEB  
25 source and shall be made on an annual basis by March 31 of each year for the current  
26 control period. Under no circumstances shall allocations be made that would exceed the  
27 allocations available. When the next five-year allocation block is distributed as outlined in  
28 Section [F(2)] C1.2 of this Implementation plan element, all sources with an allocation under  
29 the new source set-aside shall receive a five-year allocation block from the new source set-  
30 aside, and shall continue to receive this allocation in future five-year allocation blocks.  
31

32 **(c)** Owners or operators of new sources or modified sources that meet the eligibility  
33 requirements of [F(3)(a)] C1.3(a) may apply for an allocation from the new source set-aside  
34 by submitting a written request to the Department as outlined in Subsection F of 20.11.46.14  
35 NMAC.  
36

37 **(d)** The Department shall review the application for an allocation from the new source set-  
38 aside for accuracy and completeness, and shall notify the source, of intent to distribute  
39 allocations from the regional new source set-aside pending verification that allowances are  
40 available in the new source set-aside account. Under no circumstances shall allocations be  
41 made that would exceed the allocations available. The [AQCB] Department shall then  
42 forward the request to the Tracking System Administrator (TSA).  
43

44 **(e)** The TSA shall document the date that the TSA receives the request. Requests for  
45 allocation of allowances from the new source set-aside shall be processed in the order  
46 received. Under no circumstances shall the TSA make allocations that would exceed the  
47 allocations available. The TSA shall deduct the number of allowances requested from the  
48 regional new source set-aside that was established by the participating states and tribes in  
49 accordance with Section [F(4)(h)] C1.1(b) of this Implementation plan, and shall then record  
50 an equal number of allowances in the source's compliance account for each remaining year

1 of the five-year period. The TSA shall then send written notification to the source and to the  
2 Department that the allowances have been recorded in the source's compliance account.

3  
4 (f) If the new source set-aside is depleted, the source shall ~~[need to]~~ purchase the  
5 allowances required to demonstrate compliance. Any eligible WEB source that does not  
6 receive an allocation from the new source set-aside because the set-aside was depleted  
7 shall be first in line to receive an allocation when the new source set-aside is increased in the  
8 next five-year period as outlined in Section ~~[F(1)(h)]~~ [C1.1\(b\)](#) of this Implementation Plan  
9 element.

10  
11 (g) A source that has received a retired source exemption and continues to receive an  
12 allocation as a retired WEB source shall not be eligible to receive an allocation from the new  
13 source set-aside.

14  
15 ~~[(4)]~~ **C1.4 Regional Tribal Set-aside.**

16  
17 (a) Each year after the program is triggered, for which allowances are allocated, ~~[20,000]~~  
18 8,500 allowances will exist as a tribal set-aside.

19  
20 (b) The tribal caucus of the WRAP has stated its intent to determine the means for  
21 distributing the allowances among the tribes by one year after the program trigger date. The  
22 AQCB understands that there will be a process that shall meet the tracking and data security  
23 requirements of the allowance tracking system by which a tribe shall move its set-aside  
24 allowances into the trading program for the purposes of trading.

25  
26 (c) The AQCB recognizes that the tribal set-aside allowances are bonus allowances for the  
27 tribes and as such, are separate and additional to any allowances included in a tribal budget  
28 or the new source set-aside as outlined in the allocation report in Section ~~[F(1)(k), bullet 5]~~  
29 [C1.1\(b\)\(9\)](#).

30  
31 ~~[(5)]~~ **C1.5 Opt-In Sources.**

32  
33 The WRAP Market Trading Forum has recommended ~~[including]~~ provisions be included in  
34 this Implementation plan element that would allow smaller sources to opt-in to the program.  
35 Opt-in sources may provide a more cost-effective way to reduce overall regional SO<sub>2</sub>  
36 emissions, and therefore may strengthen the market incentives of this program. While the  
37 benefits of allowing sources to opt-in to the program are important, the program must also  
38 provide safeguards to ensure that the integrity of the program is not affected. For example, it  
39 would be counterproductive to allow sources that were already planning to shut down to opt-  
40 in to the program and then sell allowances to an existing source. In this example, regional  
41 emissions could slowly creep upward in a manner that is not consistent with the goals of the  
42 SO<sub>2</sub> milestones.

43  
44 The ~~[AQCB]~~ Department is deferring inclusion of provisions for opt-in sources until a future  
45 SIP revision to allow time to thoroughly consider how to provide the flexibility and potential  
46 benefits to the market by expanding the program while also ensuring that the SO<sub>2</sub> emission  
47 reductions goals are maintained.

48  
49 ~~[(6)]~~ **C2 WEB Emissions and Allowance Tracking System (WEB [ATS] EATS).**

1 ~~[(a) 51 CFR 309(h)(4)(v) requires]~~ The Department ~~[to]~~ shall provide a centralized system for  
2 the tracking of allowances and emissions within the framework of the SIP. The centralized  
3 system will be referred to as the WEB Emissions and Allowance Tracking System (WEB ATS  
4 EATS). The WEB ~~[ATS]~~ EATS must ~~[provide]~~ ensure that all necessary information  
5 regarding emissions, allowances, and transactions is publicly available in a secure,  
6 centralized database. The ~~[ATS]~~ EATS must ensure that each allowance is uniquely  
7 identified, allow for frequent updates, and include enforceable procedures for recording data.

8  
9 The ~~[AQCB]~~ Department shall work cooperatively with other states and tribes participating in  
10 the WEB Trading Program to designate this system. The ~~[AQCB]~~ Department shall be  
11 responsible for ensuring that all the ~~[ATS]~~ EATS provisions are completed as described in  
12 this Implementation plan.

13  
14 ~~[(b)]~~ The ~~[ATS]~~ EATS will not exist unless the program is triggered. Prior to the  
15 implementation of the WEB Trading Program, a separate emissions tracking database will be  
16 employed to track the ongoing emissions of sources emitting SO<sub>2</sub> at amounts equal to or  
17 greater than 100 tons per year. The emissions tracking database, used to track and  
18 measure SO<sub>2</sub> emissions against the milestones, will still exist once the WEB Trading  
19 Program is triggered. If the program is triggered, either the emissions tracking database will  
20 be incorporated into the SO<sub>2</sub> Emissions and Allowance Tracking System ([ATS] EATS), or a  
21 similar, parallel one, more suitable for enforcement and program specific purposes will be  
22 developed and incorporated into the SO<sub>2</sub> Emissions and Allowance Tracking System. Both  
23 the emissions tracking database and the ~~[ATS]~~ EATS shall be centralized systems with data  
24 posted in a format, including an electronic, Web-based program, and available to anyone.

25  
26 ~~[(c)]~~ The states and tribes shall contract with a common TSA to service and maintain the  
27 WEB ~~[ATS]~~ EATS. It is envisioned that the ~~[ATS]~~ EATS will require the use of a contracted  
28 consultant or database design engineer to create a secure, efficient and transparent tracking  
29 system. Because the ~~[ATS]~~ EATS shall be utilized by all states and tribes participating in the  
30 program, the design will require a uniform approach and level of security that will satisfy  
31 regional needs and concerns as well as meet the electronic, Web-based, access needs and  
32 security provisions. Due to the dynamic needs of the marketplace, the ~~[ATS]~~ EATS will  
33 require a database that will reflect the current status of allowances and allowance  
34 transactions. The ~~[ATS]~~ EATS shall be operational within one year after the program trigger  
35 date.

36  
37 Specifications of the WEB ~~[ATS]~~ EATS such as emissions tracking, the recording of  
38 allowance transactions, account management, system integrity and transparency are  
39 outlined in a report prepared for the WRAP, entitled *Western Emissions Backstop (WEB*  
40 *Emissions and Allowance Tracking System (EATS) Analysis* (July, 2003). A copy of this  
41 report is provided in Appendix K-SIP of this implementation plan. Appendix K-SIP and  
42 related sections of 20.11.46 NMAC detail how a WEB source will register for the ~~[ATS]~~ EATS  
43 and how the source will, through an account representative, establish accounts, transfer  
44 allowances, and track unused allowances from a previous year.

45  
46 Neither the AQCB nor the TSA shall adjudicate any dispute concerning the authorization of  
47 any Account Representative with regard to any representation, action, inaction, or  
48 submission of the Account Representative.

49  
50 ~~[(d)]~~ As an example of how the WEB ~~[ATS]~~ EATS will generally function, once the WEB  
51 Trading Program is triggered, a WEB source will have its allowance allocation determined.

1 On a parallel track, the WEB source's account representative will register for the [ATS] EATS  
2 under 20.11.46.13 NMAC, and a compliance account will be established under 20.11.46.15  
3 NMAC. Each allowance will be assigned a serial number. The WEB [ATS] EATS will use  
4 the allowance serial number to track allowance allocations, transfers (20.11.46.17 NMAC),  
5 deductions, and account for any unused allowances from a previous year (20.11.46.18  
6 NMAC). The serial number will also be assigned each allowance recorded in a general  
7 account, an account for allowances that are not held to meet program compliance  
8 requirements. Furthermore, the [ATS] EATS will track tribal allowance set-asides and new  
9 source allowance set-asides not yet assigned to either a compliance or general account.

10  
11 It is important to note that while an effort has been made in this Implementation plan element  
12 to provide a design for and an operational understanding of the [ATS] EATS, the components  
13 of the [ATS] EATS will need to be examined and possibly altered upon each required SIP  
14 revision.

15  
16 **~~[(7)]~~ C3 Allowance Transfers.**

17  
18 ~~[(a) 40 CFR 51.309(h)(4)(viii) requires the Implementation Plan to include provisions for~~  
19 ~~detailing the process for transferring allowances between parties].~~ Allowance transfers are  
20 defined as the conveyance from one account to another account (compliance account or  
21 general account) of one or more allowances by whatever means, including but not limited to  
22 purchase, trade, or gift in accordance with the procedures established in 20.11.46.17 NMAC.  
23 This includes transfer of allowances for the purpose of retirement. Once an allowance is  
24 retired, it is no longer available for transfer to or from any account. Any party may purchase  
25 allowances for the purpose of retirement.

26  
27 The Tracking System Administrator (TSA) shall have specific recording requirements  
28 involving transfers. These required procedures will be detailed in the service contract but are  
29 outlined here as well.

30  
31 **~~[(b)]~~ C3.1 Recording of Allowance Transfers.**

32  
33 Within five business days of receiving an allowance transfer, except when the transfer does  
34 not meet the requirements of this Section, the TSA shall record an allowance transfer by  
35 moving each allowance from the transferor account to the transferee account as specified by  
36 the request, provided that:

- 37  
38 **(a)** The transfer is correctly submitted; and  
39 **(b)** The transferor account includes each allowance identified in the transfer.

40  
41 Any allowance transfer that is submitted for recording following the allowance transfer  
42 deadline and that includes any allowances allocated for a control period prior to or the same  
43 as the control period to which the allowance transfer deadline applies, shall not be recorded  
44 until after completion of the compliance account reconciliation.

45  
46 Where an allowance transfer submitted for allowance transfer recording fails to meet the  
47 requirements of this Section, the TSA shall not record such transfer.

48  
49 **~~[(8)]~~ C3.2 Notification of the Recording of Allowance Transfers.**

1 The TSA has specific responsibilities involving the notification of the recording of any  
2 transferred allowances, including the failure to record any transfer of allowances. Again,  
3 these required procedures will be outlined in the service contract, but will include what is  
4 outlined here.

5  
6 **(a)** Within five business days of the recording of an allowance transfer, the TSA shall notify  
7 the Account Representatives of both the transferor and transferee accounts, and make the  
8 transfer information publicly available on the Internet.

9  
10 **(b)** Within five business days of receipt of an allowance transfer that fails to meet the  
11 requirements of 20.11.46.17 NMAC, the TSA shall notify the Account Representatives of  
12 both accounts of the decision not to record the transfer, and the reasons for not recording the  
13 transfer.

14  
15 **~~[(9)]~~ C4 Use of Allowances from a Previous Year.**

16  
17 **~~[(a)]~~ C4.1 Background**

18  
19 ~~[51 CFR 309(h)(4)(ix) allows states to include in the Implementation Plan element provisions~~  
20 ~~for the accounting of unused allowances from a previous year. The Implementation plan~~  
21 ~~must state that the] Unused allowances may be kept for use in future years in accordance~~  
22 ~~with 20.11.46.18 NMAC, [and describe the restrictions on the use of the allowances in~~  
23 ~~accordance with that Section.~~

24  
25 ~~The federal rule requires that] Allowances kept for use in future years may be used in~~  
26 ~~calendar year 2018 only to the extent that this Implementation Plan element guarantees that~~  
27 ~~such allowances will not interfere with the achievement of the 2018 milestone [as outlined in~~  
28 ~~Table 3: Base Sulfur Dioxide Emissions Milestones]. Subsection D of 20.11.46.18 NMAC~~  
29 ~~addresses this requirement by prohibiting the use, after the year 2017, of allowances~~  
30 ~~allocated for the years 2003 - 2017. This provision ensures that actual emissions will be less~~  
31 ~~than the 2018 milestone because only allowances allocated for the year 2018 could be used~~  
32 ~~to show compliance in that year. The provision also maintains flexibility by resetting the~~  
33 ~~baseline to the year 2018 and then allowing sources to once again use extra allowances to~~  
34 ~~show compliance in any future year. This flexibility is important for sources that have~~  
35 ~~variable operations because the source may build up a reserve of unused allowances for use~~  
36 ~~in a high production year.~~

37  
38 The Annex explains the benefits of allowing the WEB source to tap the previous year's  
39 unused allowances, including increased flexibility and early reduction stimulus. The risk in  
40 allowing the use of allowances carried from a ~~[previous]~~ previous year could be an increase  
41 in emissions in later years as the unused allowances are withdrawn for compliance.

42  
43 Because the regional haze SIP is based on reasonable progress requirements related to the  
44 remedying or prevention of any future visibility impairment, it is important to assure the use of  
45 these allowances will not interfere with attainment or maintenance of any reasonable  
46 progress goals. The safeguard employed here to mitigate this type of risk is termed, "flow  
47 control."

48  
49 **~~[(b)]~~ C4.2 Flow Control Provisions.**



1 At the end of each control period, WEB sources may transfer allowances in and out of their  
2 compliance account for a period of 60 days to ensure that the account will contain enough  
3 allowances to cover sulfur dioxide emissions during the previous year. At the end of the 60-  
4 day transfer period, allowances shall be deducted from the compliance account of each of  
5 the WEB sources in an amount equal to the sulfur dioxide emissions of that source during  
6 the control period.

7  
8 After the deductions have been completed, the Tracking System Administrator (TSA) shall  
9 perform the following calculations and prepare a report according to Section ~~H(3)(b)~~  
10 C7.1(b):

11  
12 **(a)** Determine the total number of allowances remaining in the allowance tracking system  
13 that were allocated for the just completed control period and all previous control periods.

14  
15 **(b)** If the number calculated in (a) above exceeds 10 percent of the milestone for the next  
16 control period, then the flow control procedures in Subsection C of 20.11.46.18 NMAC shall  
17 be triggered for that next control period. These flow control provisions will discourage the  
18 excessive use of allowances that were allocated for an earlier control period without  
19 establishing an absolute limit on their use. WEB sources will maintain the option to use  
20 allowances allocated for an earlier control period, but will be required to use two allowances  
21 for each ton of SO<sub>2</sub> emissions. Flow control operates as follows:

22  
23 **(1)** The flow control ratio shall be calculated by multiplying one tenth multiplied by the  
24 milestone for the next control period divided by the total number of unused  
25 allowances remaining in the system.

26  
27 **(2)** To calculate the number of prior-year allowances that can be used without  
28 restriction by a source for the next control period, the TSA shall multiply them by the  
29 flow control ratio. The resulting number of allowances may be used on a one-to-one  
30 ratio to show compliance with the source's allowance limitation as outlined in Section  
31 20.11.46.19 NMAC.

32  
33 **(3)** The remaining prior-year allowances may be used on a two-to-one ratio to show  
34 compliance. Thus, WEB sources will maintain the option to use allowances allocated  
35 for an earlier control period, but will be required to use two of those allowances for  
36 each ton of SO<sub>2</sub> emissions.

**Example:**

On March 1, 2010 (the compliance transfer deadline for the 2009 control period) the TSA deducts allowances from the compliance account for each WEB source to cover 2009 SO<sub>2</sub> emissions from that source. After completing these deductions, the TSA reports the following information:

Total number of allowances still in the system for the years 2003 – 2009	=	<del>[75,000]</del> 40,000
2010 milestone <del>[(5 state, no smelter)]</del>	=	<del>[508,223]</del> 293,921
Percent of milestone	=	<del>[44.75]</del> 13.61 %

Because the number of allowances not used in previous control periods is greater than 10% of the milestone, flow control procedures are triggered. In the annual report required in ~~H(3)(b)~~ C7.1(b) the TSA will then calculate the flow control ratio for 2010:

$$\frac{[2010 \text{ Flow Control Ratio} = 0.1 * 508,223 \div 75,000 = 0.67]}{0.1 \times 2010 \text{ Milestone} \div \text{prior year allowances} = \text{flow control ratio}}$$


---


$$\frac{\del{[0.1 \times 508,223 \div 75,000 = 0.67]}}{0.1 \times 293,921 \div 40,000 = 0.73}$$

On March 1, 2011 (the compliance transfer deadline for the 2010 control period) the TSA will apply the 2010 flow control ratio before deducting allowances from each WEB source's compliance account ~~[(continued on the next page)]~~.

WEB Source A	2010 Allowances	=	1,000
Remaining <del>[2009]</del> <u>Prior Year</u> Allowances		=	<del>[500]</del> 600
	2010 Emissions	=	<del>[1,400]</del> 1580

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24

In this example, the TSA would multiply the ~~[2009]~~ prior year allowances by ~~[0.67]~~ 0.73 to determine the number of ~~[2009]~~ prior year allowances that could be used without restriction at a one-to-one ratio. This would equal ~~[335]~~ 438. The remaining ~~[2009]~~ prior year allowances would then be used at a 2:1 ratio. ~~[130]~~ 284 allowances would be needed to cover the remaining ~~[65]~~ 142 tons of SO<sub>2</sub> emissions. The TSA would therefore deduct a total of ~~[1,465]~~ 1722 allowances (1,000 + ~~[335]~~ 284 + ~~[130]~~ 284) to cover ~~[1,400]~~ 1580 tons of SO<sub>2</sub> emissions.

~~[(G)]~~ C5 Monitoring & Recordkeeping:

~~[(1)]~~ Quality Assurance.

C5.1 For WEB sources subject to 40 CFR Part 75, the EPA Administrator shall quality assure and finalize the data for submission to the Tracking System Administrator (TSA). For WEB sources subject to Sections 21 and 22 of 20.11.46 NMAC, the Department shall quality assure and finalize the data in accordance with these provisions for submission to the TSA.

~~[(2)]~~ Reporting Timeframe.

C5.2 The EPA Administrator and the ~~[Albuquerque-Bernalillo County Air Quality Control Board (AQCB)]~~ Department, as applicable, shall verify and submit data to the emissions tracking database as soon as reasonably feasible after annual emissions are reported by the

1 WEB sources. Note: these timelines will be modified, as necessary, according to the  
2 monitoring protocols.

3  
4 ~~[(3) Security.]~~

5 ~~[The emissions tracking database shall be a secure and transparent system, as verified by~~  
6 ~~double entry accounting and periodic audits by the states and tribes.]~~

7  
8 **C5.3 Special Reserve Compliance Accounts.** The WEB Trading Program requires most  
9 WEB sources to install continuous emission monitoring systems (CEMS) that meet the  
10 monitoring, recordkeeping and reporting requirements of 40 CFR Part 75. However, there  
11 are some emission units that are not physically able to install CEMS and there are also  
12 emission units that do not emit enough sulfur dioxide to justify the expense of installing these  
13 systems (see Subsection B of 20.11.46 NMAC). The WEB Trading Program allows these  
14 emission units to continue to use their pre-trigger monitoring methodology, but does not allow  
15 the WEB source to transfer any allowances that were allocated to that unit for use by another  
16 WEB source. The restriction on transferring these allowances is needed to ensure that an  
17 emission reduction of sulfur dioxide and the corresponding increase in sulfur dioxide from are  
18 equal. The allowances associated with emission units that continue to use their pre-trigger  
19 monitoring methodology are placed in a special reserve compliance account, while  
20 allowances for other emission units are placed in a regular compliance account. Allowances  
21 may not be traded out of a special reserve compliance account, even for use by emission  
22 units with CEMS at the same WEB source. However, the WEB source may use allowances  
23 in the compliance account to demonstrate compliance with the WEB source's allowance  
24 limitation.

25  
26 Subsection B of 20.11.46.16 NMAC allows WEB sources with any of the following emission  
27 units to apply to establish a special reserve compliance account:

28  
29 (a) any smelting operation where all of the emissions from the operation are not  
30 ducted to a stack; or

31  
32 (b) any flare, except to the extent such flares are used as a fuel gas combustion  
33 device at a petroleum refinery; or

34  
35 (c) any other type of unit without add-on sulfur dioxide control equipment, if the unit  
36 belongs to one of the following source categories: cement kilns, pulp and paper  
37 recovery furnaces, lime kilns, or glass manufacturing.

38  
39 The emission units described in (a) and (b) cannot physically be monitored using a CEM.  
40 The emission units described in (c) do not typically have add-on controls for sulfur dioxide.  
41 These units, addressed in Subsection B of 20.11.46.16 NMAC, are expected to operate  
42 within their floor-level allocation and therefore will not be affected by the market, unless they  
43 make a process change and wish to sell allowances on the market. Other sources that are  
44 meeting the more rigorous monitoring requirements of Subsection A of 20.11.46.16 NMAC,  
45 and emit sulfur dioxide above their expected allocation will either need to purchase  
46 allowances or install sulfur dioxide controls. Therefore it is important that all emission units  
47 that participate in emissions trading, have an accurate monitoring methodology that is  
48 comparable to other sources in the program, to insure that a ton of reductions is the same,  
49 regardless of where the reductions originate.

1 The Department shall review the application to monitor under Subsection B of 20.11.46.16  
2 NMAC. If the emission units meet the criteria in Subsection B of 20.11.46.16 NMAC, the  
3 Department shall determine the portion of the WEB source's allocation that is associated with  
4 the emission units that will be monitored under Subsection B of 20.11.46.16 NMAC and will  
5 require the TSA to record that portion of the WEB source's allocation in the special reserve  
6 compliance account. The Department shall use the methodology for determining allocations  
7 described in Section C1.1 of this Implementation Plan to determine the portion of the  
8 allocation that is associated with emission units monitored under Subsection B of  
9 20.11.46.16 NMAC. The Department shall notify the WEB source that the application has  
10 either been accepted or rejected, including a notification of the allowances that are to be  
11 recorded in the WEB source's regular compliance account and the special reserve  
12 compliance account.

13  
14 If an emission unit that is monitored under Subsection B of 20.11.46.16 NMAC is  
15 permanently retired, the TSA will transfer the portion of allowances that were associated with  
16 that emission unit from the WEB source's special reserve compliance account to the source's  
17 compliance account. These allowances will then be available for use or sale by the WEB  
18 source. The allowances will be transferred after the compliance deduction has taken place  
19 for the last control period that the unit was in operation

## 20 21 ~~[(H)]~~ **C6 Compliance and Penalties:**

### 22 23 ~~[(1)]~~ **C6.1 Compliance, Excess Emissions & Penalties.**

24  
25 When a WEB source exceeds its allowance limitation stipulated ~~by~~ **by** Section 20.11.46.19  
26 ~~NMAC, the [Albuquerque-Bernalillo County Air Quality Control Board AQCB] Department~~  
27 ~~shall require the Tracking System Administrator (TSA) to deduct allowances from the~~  
28 ~~following year's allocation in an amount equal to [two] **three** times the WEB source's~~  
29 ~~emissions of SO<sub>2</sub> in excess of its allowance limitation. This deduction shall be made from the~~  
30 ~~WEB source's compliance account after deductions for compliance under 20.11.46.19~~  
31 ~~NMAC. If sufficient allowances do not exist in the compliance account for the next control~~  
32 ~~period to cover this amount, the [AQCB] Department shall require the TSA to deduct the~~  
33 ~~required number of allowances, regardless of the control period for which they were~~  
34 ~~allocated, whenever the allowances are recorded in the account.~~

### 35 36 ~~[(2)]~~ **C6.2 Penalties.**

37  
38 ~~The amount of the penalty shall be evaluated at each five year SIP review, and adjusted to~~  
39 ~~ensure that penalties per ton substantially exceeds the expected cost of allowances to~~  
40 ~~ensure that this remains a stringent penalty. The Annex establishes a penalty of \$5000 per~~  
41 ~~ton for each ton of emissions above the source's allowance limitation. In addition, two~~  
42 ~~allowances from the next year's allocation will be deducted from the account for each ton of~~  
43 ~~exceedance.] Under the [Annex] rule, sources [are] **may** also **be** liable for penalties for each~~  
44 ~~day of violations of the program's other requirements. [More detail on liabilities for different~~  
45 ~~provisions can be found in the provisions of 20.11.46 NMAC Sulfur Dioxide Emissions~~  
46 ~~Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program.]~~

### 47 48 ~~[(3)]~~ **C7 Periodic Evaluation of the Trading Program.**

#### 49 50 ~~[(a)]~~ **C7.1 Annual Report.**

1 **(a)** One year after compliance with the trading program is required; the ~~[state]~~ Department  
2 shall obtain from the TSA an annual report that contains the following information:

- 3  
4 **1.** The level of compliance program-wide;  
5 **2.** A summary of the use and transfer of allowances, both geographically and temporally;  
6 **3.** A source-by-source accounting of allocations compared to emissions;  
7 **4.** A report on the use of unused allowances (in order to determine whether these  
8 emissions have or have not contributed to emissions in excess of the cap.)  
9 **5.** The total number of WEB sources participating in the trading program and any  
10 changes to eligible sources, such as opt-in or retired sources, or sources that emit more  
11 than 100 tons of SO<sub>2</sub> after the program trigger date.

12  
13 **(b)** Within 10 months after the allowance transfer deadline for each control period when  
14 compliance with the trading program is required, the TSA shall prepare a draft report that  
15 lists:

- 16  
17 **1.** The total number of allowances deducted for the control period,  
18 **2.** The total number of allowances remaining in the Allowance Tracking System allocated  
19 for that control period and any earlier control period,  
20 **3.** Proposed determination that flow control procedures have either been triggered or  
21 have not been triggered for the next control period, and  
22 **4.** If flow control procedures have been triggered, a draft flow control ratio ~~[that equals~~  
23 ~~0.1 multiplied by the milestone for the next control period divided by the total number of~~  
24 ~~unused allowances]~~ calculated according to C4.2 of this Implementation Plan.

25  
26 **(c)** The ~~[AQCB]~~ Department shall evaluate the draft report, and shall propose a  
27 determination that flow control procedures have been either been triggered or have not been  
28 triggered for the next control period.

29  
30 **(d)** The Department ~~[will]~~ shall publish a notice of availability of the draft report in a  
31 newspaper of general circulation. When appropriate, the ~~[Albuquerque-Bernalillo County Air~~  
32 ~~Quality Control Board]~~ AQCB will provide for the discussion of the report and accept public  
33 comment during a public meeting.

34  
35 **(e)** The ~~[AQCB]~~ Department shall make a final determination that the flow control procedures  
36 have either been triggered or have not been triggered for the next control period.

37  
38 **~~[(f)]~~ C7.2 Five-year Evaluation.**

39  
40 **(a)** States and tribes shall conduct an audit of the WEB Trading Program no later than three  
41 years following the first full year of the trading program, and at least every five years  
42 thereafter. This evaluation does not supplant the Implementation Plan assessments in 2008,  
43 2013, and 2018 as required by the regional haze regulations. The evaluation should be  
44 conducted by an independent third party and include an analysis of:

- 45  
46 **1.** Whether the total actual emissions could exceed the values in Table 3 of this  
47 Implementation Plan element of the WEB Trading Program even though sources comply  
48 with their allowances;  
49  
50 **2.** Whether the program achieved the overall emission milestone it was intended to  
51 reach;

- 1  
2 **3.** The effectiveness of the compliance, enforcement and penalty provisions;  
3  
4 **4.** A discussion of whether states and tribes have enough resources to implement the  
5 WEB Trading Program;  
6  
7 **5.** Whether the trading program resulted in any unexpected beneficial effects, or any  
8 unintended detrimental effects;  
9  
10 **6.** Whether the actions taken to reduce sulfur dioxide have led to any unintended  
11 increases in other pollutants;  
12  
13 **7.** Whether there are any changes needed in emissions monitoring and reporting  
14 protocols, or in the administrative procedures for program administration and tracking;  
15 and,  
16  
17 **8.** The effectiveness of the provisions for interstate trading, and whether there are any  
18 procedural changes needed to make the interstate nature of the program more effective.  
19  
20 **9.** The integrity of the emissions and allowance tracking system, including whether the  
21 procedures for recording transactions are adequate, whether the procedures are being  
22 followed and in a timely manner, whether the information on sources' emissions is  
23 accurately recorded, whether the emissions and allowance tracking system has  
24 procedures in place to ensure that the transactions are valid, whether back-up systems  
25 are in place to account for problems with loss of data.

26  
27 ~~[(g)]~~ **(b)** The public shall have an opportunity to participate in this trading program  
28 evaluation.

29  
30 ~~[(h)]~~ **(c)** In the event that any audit results in recommendations for program revisions, the  
31 ~~[Albuquerque-Bernalillo County Air Quality Control Board]~~ AQCB, in consultation with the  
32 WRAP, will make appropriate modifications to this Implementation plan. The AQCB will  
33 revise this Implementation plan if the program is not meeting its emission reduction goals.  
34

35 ~~[(i)]~~ **(d)** The ~~[AQCB]~~ Department shall submit a copy of the report to the EPA regional office.  
36

37 ~~[(j)]~~ **C8 Retired Source Exemption:**  
38

39 Subsection ~~[E]~~ D of 20.11.46.11 NMAC outlines the procedure that a WEB source must  
40 follow to receive a retired source exemption. The exemption would allow the source to  
41 continue to receive an allocation, but would exempt the source from monitoring and record  
42 keeping requirements that would serve no useful function for a source that has ceased  
43 operations. The ~~[Albuquerque-Bernalillo County Air Quality Control Board-AQCB]~~  
44 Department shall notify the source of its obligation to apply for a retired source exemption  
45 upon the cancellation or relinquishment of a permit.  
46

47 In order to receive a retired source exemption, the source must submit a request for the  
48 exemption to the ~~[AQCB]~~ Department. The ~~[AQCB]~~ Department shall review this request,  
49 and within ~~[sixty]~~ 60 days of receipt of the request shall notify the source that the retired  
50 source exemption has been granted or has been rejected. If the exemption has been  
51 rejected, the notification shall contain an explanation of the reasons for rejecting the request.

1  
2 The Tracking System Administrator (TSA) shall record an allocation to a WEB source that  
3 has received a retired source exemption. However, the allowances shall be recorded in a  
4 general account rather than a compliance account for the source. The TSA will transfer any  
5 existing allowances in the retired source's compliance account or special reserve compliance  
6 account into the general account for the retired source, and will close the compliance  
7 accounts.

8  
9 A WEB source that is permanently retired and that does not request a retired source  
10 exemption shall forfeit all abandoned allowances in that source's compliance account, as  
11 outlined in ~~[Subsection E of 20.11.46.11 NMAC]~~ Section 20.11.46.17 NMAC. The forfeited  
12 allowances shall not be redistributed to other sources, and shall be permanently retired from  
13 the Allowance Tracking System, as outlined in Subsection E of 20.11.46.11 NMAC. During  
14 the next five-year allowance distribution period the retired source shall not receive an  
15 allocation, and the allowances that would have been distributed to that source shall ~~in effect~~  
16 ~~increase the reducible allocation that is available for other sources in the region~~ be added to  
17 the new source set-aside

### 18 19 **C9 Integration into Federally Enforceable Permits**

20  
21 It is expected that all WEB sources will at least initially be required to obtain a permit under  
22 the Department's Title V delegated permitting program. Under 20.11.42 NMAC, the  
23 Department's delegated Title V permitting program, the pre- and post- trigger requirements of  
24 the market trading program fall under the definition of "applicable requirements", and will be  
25 incorporated into each source's Title V permit. 20.11.46 NMAC requires that any source that  
26 for any reason and at any time, is not required to have a permit under 20.11.42 NMAC must  
27 obtain a New Source Review permit pursuant to 20.11.40 NMAC, 20.11.60 NMAC, or  
28 20.11.61 NMAC, that incorporates the same requirements, and that the source must at all  
29 times possess a permit containing the program's requirements. Additionally, in order for a  
30 source permitted under Title V to become a synthetic minor source, and thus not need a Title  
31 V permit, a source must first obtain federally enforceable permit limits through a New Source  
32 Review permit, and thus there will be no gap between the effective Title V permit and the  
33 new NSR permit which contains the same market trading program requirements. Both types  
34 of permits are enforceable both federally and by citizens pursuant to this Implementation  
35 Plan.

### 36 37 38 **[[J]] PART D - 2013 SIP Revision; Backstop for Beginning of Second Planning Period:**

#### 39 40 **[[4]] D1 Requirements of 2013 SIP Revision.**

41  
42 In addition to the requirements of 40 CFR 51.309(d)(10), the 2013 SIP shall contain:

43  
44 **[[a)] 1.** Source specific allocations for all WEB sources under the jurisdiction of the  
45 Albuquerque - Bernalillo County Air Quality Control Board (AQCB) for the year 2018; and

46  
47 **[[b)] 2.** Either the provisions of a program designed to achieve reasonable progress for  
48 stationary sources of SO<sub>2</sub> beyond 2018 or a commitment to submit a SIP/TIP revision  
49 containing the provisions of such a program no later than December 31, 2016. The program  
50 will ensure that, the requirements of 40 CFR 51.309 for the first planning period are

1 achieved, including requirements that cannot be measured until after 2018, such as the  
2 determination of compliance with the 2018 milestone.

3  
4 **[2)] D2 Adjustments in Allocation Calculations.**

5  
6 This 2013 SIP revision will provide certainty to sources regarding their potential liability under  
7 the special penalty provisions for the year 2018 outlined in Section A5 of this Implementation  
8 plan. The calculation of these allocations is delayed until 2013 to provide certainty about the  
9 number of sources that would qualify as WEB sources at that time; the allocations needed for  
10 new sources in the region; and the magnitude of renewable energy development and early  
11 reductions that would need to be included in the allocation process. It is difficult to estimate  
12 the impact of these factors [~~in 2003~~] today because many things [~~may~~] will change during the  
13 next 10 years.

14  
15 If the 2018 milestone is not met, the starting point for the next planning period shall be the  
16 2018 milestones, not actual emissions in 2018.

17  
18 **[3)] Achievement of 13 Percent SO<sub>2</sub> Emission Reduction.**

19  
20 Pursuant to 40 CFR 51.309(d)(4)(ii), the [~~AQCB~~] Department has determined that a 13  
21 percent reduction in actual stationary source SO<sub>2</sub> emissions [~~has~~] occurred between [~~the~~  
22 ~~years~~] 1990 and 2000. Table 9 below provides a state-by-state comparison of these  
23 emissions, and shows that there has been a 25 percent reduction from 1990 to 2000 for all  
24 states (from 828,775 tons to 621,838 tons). Further information on the emission inventories  
25 used for this calculation is described in Appendix K-SIP of this implementation plan.



**Table 9: State-by-State Comparison of SO<sub>2</sub> Emission Reductions, 1990-2000  
(In tons per year)**

<b>States</b>	<b>1990</b>	<b>2000</b>
Arizona	185,398	99,133
California	52,832	38,501
Colorado	95,534	99,161
Idaho	24,652	27,763
Nevada	52,775	53,943
<b>New Mexico</b>	<b>177,994</b>	<b>117,344</b>
Oregon	17,705	23,362
Utah	85,567	38,521
Wyoming	136,318	124,110
<b>Totals</b>	<b>828,775</b>	<b>621,838</b>

**[K] Assessment of Need for NO<sub>x</sub> and PM Milestones:**

Pursuant to 40 CFR 51.309(d)(4)(v), the AQCB has evaluated the need for NO<sub>x</sub> and PM emission control strategies, the degree of visibility improvement expected, and whether such milestones are needed to avoid any net increase in these pollutants. The WRAP Market Trading Forum conducted this evaluation for all transport region states and produced the report *Stationary Source NO<sub>x</sub> and PM Emissions in the WRAP Region: An Initial Assessment of Emissions, Controls and Air Quality Impacts (see Appendix H-O)*. This report identifies the need for control strategies for stationary sources of NO<sub>x</sub> and PM, the degree of visibility improvement that would result, and whether milestones similar to the SO<sub>2</sub> milestones should be adopted.

The WRAP used current air quality modeling capabilities to estimate the visibility impact of across the board increases and decreases in stationary source NO<sub>x</sub> and PM emissions. The report includes an assessment of current and forthcoming pollution control technologies and practices. It also contains a conceptual model of regional haze in the West and how stationary sources of NO<sub>x</sub> and PM “fit in”. This model frames the issue more broadly, thereby providing a reference for future analyses that must address NO<sub>x</sub> and PM BART requirements for the SIP revision due in 2008.

Based on current analysis, several conclusions are presented in the report:

- the vast majority of Class I Areas throughout the WRAP region stationary source NO<sub>x</sub> and PM emissions are not a major contributor to visibility impairment
- Reasonably Attributable Visibility Impairment (RAVI) remedies are available in cases where particular stationary sources may impact particular Class I Areas
- The need for stationary source NO<sub>x</sub> and PM milestones is not supported at this time with current state of analyses and knowledge, but the need for milestones should be readdressed based on more complete and accurate analyses prior to submittal of the 2007/2008 SIP revisions, and

- ~~▪ The absolute need for milestones to support potential market based programs is not yet established.~~

The complete report is found in Appendix H-O of this Implementation plan.

~~Based on current information, the AQCB has determined that NOx and PM strategies are not needed. The AQCB will review the need for long term strategies for stationary sources of PM and NOx during the SIP revision updates due in 2008, 2013 and 2018.]~~

### **D3 Provisions for Stationary Source NOx and PM.**

Pursuant to 40 CFR 51.309(d)(4)(v), the Department has included in this SIP, a report which assesses emissions control strategies for stationary source NOx and PM, and the degree of visibility improvement that would result from implementation of the identified strategies. The report, *Stationary Source NOx and PM Emissions in the WRAP Region: An Initial Assessment of Emissions, Controls, and Air Quality Impacts*, was prepared by the WRAP and is included in Appendix H-O. This report represents the initial assessment of stationary source NOx and PM strategies for regional haze, and as such, should be considered a starting point for a more extensive process and analysis aimed at supporting the commitment by the Department to a SIP revision by 2013. This report concludes the following:

“Analysis of current and future emissions, ambient monitoring data, and very limited modeling results does not show stationary source NOx and PM emissions to be a major contributor to regional haze (typically about two percent on average) in the vast majority of western Class I areas. These findings may change as emission projections are updated and as ambient monitoring data from new sites is collected and analyzed, and especially as modeling capabilities are improved and as modeled and monitored data become available for the best and worst visibility days instead of seasonal and annual averages. Furthermore, when considering NOx and PM milestones, attention should be given to the reasonable progress goals in the regional haze rule, which generally entail steady and continuing emission reductions and no degradation on the best visibility days. Finally, the remedy embodied in reasonably attributable visibility impairment requirements under the regional haze rule is still available where BART-eligible sources of NOx and PM are found to have direct impact on specific mandatory federal Class I areas. Where stationary source NOx emission reductions are appropriate, substantial reduction may be feasible with commercially-available technologies for about \$300 to \$1,200 per ton.”

Additional findings from this report are described in Appendix H-O of this implementation plan.

The Department commits to a SIP revision containing any necessary long-term strategies and BART requirements (if applicable), for stationary source NOx and PM (including enforceable limitations, compliance schedules, and other measures) by no later than December 31, 2013.

## **[VII. MOBILE SOURCES**

### **A) Introduction & Rule Revisions:**

1 ~~As published on July 1, 1999, the final Regional Haze Rule (RHR) required states to address~~  
2 ~~the contribution of mobile sources to visibility impairment in the 16 Colorado Plateau Class I~~  
3 ~~Areas, and establish an emissions budget if the mobile source contribution to visibility~~  
4 ~~impairment was found to be significant.~~

5  
6 ~~However, at the request of the Western Regional Air Partnership (WRAP), EPA revised the~~  
7 ~~mobile source provisions in 51.309 and published a final rule on July 3, 2003 (see Appendix~~  
8 ~~J-O). This is because, since the Grand Canyon Visibility Transport Commission (GCVTC)~~  
9 ~~made its recommendations, new developments have caused a major change in the mobile~~  
10 ~~source emissions projections.~~

11  
12 ~~Results of modeling that the WRAP, conducted, project a significant decline in mobile source~~  
13 ~~emissions throughout the region during the 2003-2018 period covered by the 309 plans.~~  
14 ~~Except for sulfur dioxide (SO<sub>2</sub>), Mobile source emissions for all pollutants are expected to~~  
15 ~~decline continuously over the course of the first regional haze planning period (2003-2018).~~  
16 ~~The states no longer have to determine if mobile source emissions are a significant~~  
17 ~~contributor to haze in their states.~~

## 18 19 **B) Actual and Projected Statewide Inventory for Mobile Source Emissions.**

20  
21 ~~Pursuant to requirements in the revised 40 CFR 51.309(d)(5)(i), and with the assistance of~~  
22 ~~the WRAP, the AQCB has compiled an of baseline and future year mobile source emissions~~  
23 ~~for the years 2003 to 2018. Such statewide inventories must demonstrate a continuous~~  
24 ~~decline in mobile source emissions over the 2003-2018 planning period. If mobile source~~  
25 ~~emissions do not decline as expected, states will have to revise their SIPs to include any~~  
26 ~~additional feasible strategies to control mobile source emissions.~~

27  
28 ~~Table 10 on the following page shows that mobile source emissions of SO<sub>2</sub> in New Mexico~~  
29 ~~begin to rise after the year 2008 and continue to rise until 2018. Because of this, the AQCB~~  
30 ~~shall complete a SIP revision by no later than December 31, 2008 containing any necessary~~  
31 ~~long term strategies to achieve a continuous decline in total mobile sources emissions,~~  
32 ~~including SO<sub>2</sub>, to the extent practicable, considering economic and technological~~  
33 ~~reasonableness and Federal preemption of vehicle standards and fuel standards under Title~~  
34 ~~II of the Clean Air Act. In addition, the AQCB shall complete a SIP revision by no later than~~  
35 ~~December 31, 2008 containing any necessary long term strategies needed to reduce~~  
36 ~~emissions of SO<sub>2</sub> from non-road mobile sources, consistent with the goal of reasonable~~  
37 ~~progress. In assessing the need for such long term strategies, the AQCB may consider~~  
38 ~~emissions reductions achieved or anticipated from any new Federal standards for sulfur in~~  
39 ~~non-road diesel fuel.~~

40  
41 ~~It is worth noting that Bernalillo County contains the largest metropolitan area in the State of~~  
42 ~~New Mexico and, therefore, a substantial portion of motor vehicle emissions at the statewide~~  
43 ~~level are attributable to Bernalillo County.]~~

## 44 45 **SECTION D. MOBILE SOURCES**

### 46 47 **1. Regulatory History and Requirements**

48  
49 ~~In its June 1996 Report, the GCVTC recommended EPA move forward on new national~~  
50 ~~vehicle emission and fuel standards to reduce emissions from mobile sources. The GCVTC~~  
51 ~~also recommended other regional and local strategies be considered to manage mobile~~

1 source emissions. One of the local strategies was to establish emission budgets for those  
2 pollutants in urban areas shown to significantly contribute to visibility impairment in any of the  
3 16 GCVTC Class I areas. The budget caps were to be set at the 2005 emission levels.

4  
5 When EPA finalized the Regional Haze Rule in July 1999, the rule acknowledged that the  
6 GCVTC recommendations related to national vehicle emission and fuel standards. EPA  
7 included a status of planned actions on those recommendations as of July 1999 (Preamble  
8 to the Regional Haze Rule, 64 FR 35753). EPA noted these new measures were over and  
9 above those included in the Regional Haze Rule for mobile sources that simply required a  
10 cap on emissions in significantly contributing urban areas at the 2005 level. EPA also  
11 indicated that emission reductions resulting from new standards adopted after the Regional  
12 Haze Rule was approved would be creditable toward reasonable progress. EPA also  
13 committed to work with the states if new national standards impacted the efficacy of regional  
14 or local strategies.

15  
16 After the Regional Haze Rule was finalized, EPA established new standards for on-road  
17 vehicle emission and fuel standards (65 FR 6698) as well as standards for diesel vehicles  
18 and diesel fuel (66 FR 5002). As a result, current mobile source emission projections  
19 developed by WRAP for the GCVTC Transport Region indicate overall mobile source  
20 emissions will decline continuously from 2003 through the end of the SIP planning period in  
21 2018, which is more than the level of emission reductions that EPA approved to meet  
22 reasonable progress by holding mobile source emissions constant from their 2005 level. In  
23 addition, new standards for off-road vehicles were proposed by EPA on April 15, 2003, and  
24 are expected to be finalized, which will further reduce overall mobile source emissions.

25  
26 At the April 2003 WRAP Board meeting, the WRAP approved a recommendation for EPA to  
27 modify the Regional Haze Rule eliminating the current requirements related to mobile source  
28 emission significance determination and budgets for urban areas (40 CFR 309(d)(5)), and  
29 replacing those requirements with a new requirement focused on tracking mobile source  
30 emission reductions resulting from national standards to assure reasonable progress. This  
31 action was based on the finding that emissions of all pollutants from on-road and off-road  
32 mobile sources are expected to decline significantly through 2018 except for sulfur dioxide  
33 from non-road sources. If EPA adopts new low-sulfur standards for off-road mobile sources  
34 then off-road mobile source sulfur dioxide emissions will also decline continuously through  
35 2018. The WRAP Board deliberations did not define criteria for mobile source significance,  
36 leaving the determination of significance under the current rule (40 CFR 51.309(d)(5)(ii)) to  
37 the states and tribes.

38  
39 On July 3, 2003, EPA proposed a direct final rule (68 FR 39842) to amend the mobile  
40 sources provision of the Regional Haze Rule consistent with the recommendations of the  
41 WRAP. The rule was promulgated on December 22, 2003 (68 FR 71009). The revisions  
42 amended 40 CFR 51.309(d)(5)(i) and eliminated the requirements under 40 CFR  
43 51.309(d)(5)(ii) and (iii) for setting mobile sources emissions budgets using the lowest  
44 projected level as a planning objective and performance indicator for each area. Instead, the  
45 new Section 51.309(d)(5)(i) requires statewide inventories to demonstrate a continuous  
46 decline in emissions of each pollutant of concern over the planning period. Should mobile  
47 source emission not decline as expected, the Department will review control options for  
48 mobile sources and determine if additional controls are needed, consistent with the criteria  
49 for reasonable progress. If the Department determines that additional controls are needed,  
50 the Department will prepare a revision to the implementation plan.

51

1 In addition to the revisions to Section 51.309(d)(5)(i) and the elimination of Sections  
2 51.309(d)(5)(ii) and (iii), a backstop provision as outlined by the WRAP was added. The new  
3 Section 51.309(d)(5)(i)(B) requires the Department to assess the need for any long-term  
4 strategies to address SO<sub>2</sub> from non-road mobile sources by no later than December 31, 2008  
5 2013. States may determine if a SIP revision is necessary to address SO<sub>2</sub> from mobile  
6 sources by considering whether the emission reductions anticipated or achieved by any  
7 Federal standards in place addressing fuel sulfur content for non-road engines are sufficient  
8 to meet reasonable progress. The direct final rule also renumbered the requirement to  
9 review other GCVTC mobile source strategies from (d)(5)(iv) to (d)(5)(ii).

10  
11 **(a) Actual and Projected Statewide Inventory for Mobile Source Emissions.**

12  
13 Pursuant to requirements in 40 CFR 51.309(d)(5)(i), a statewide inventory of baseline and  
14 future year mobile source emissions has been compiled for the years 2003 to 2018, with  
15 assistance from the WRAP. Tables 10, 10.1, 10.2 & 10.3 below summarize these emissions  
16 as well as estimates for the Albuquerque Urban Area, and indicate that the year mobile  
17 source emissions are projected to be at their lowest level within the state and within the City  
18 of Albuquerque, will be at the end of the SIP planning period in 2018, instead of 2005 as  
19 anticipated by the GCVTC. The substantial reduction of projected mobile source emissions  
20 from 2003 to 2018, is primarily due to the adoption of new on-road vehicle emission and fuel  
21 standards by the EPA.

**Table 10: On-Road and Non-Road Mobile Source Emission Inventories for New Mexico: 1996 Baseline and 2018 (emissions in tons per YEAR)**

Year	VOC	NOx	SO <sub>2</sub>	PM 2.5*
1996	194	208	5.7	6.6
2003	137	179	7.6	6.7
2008	95	132	<b>0.8</b>	6.3
2013	70	87	0.9	4.3
2018	<b>59</b>	<b>60</b>	1.0	<b>3.3</b>
<b>Lowest Year</b>	<b>[59]</b>	<b>[60]</b>	<b>[0.8]</b>	<b>[3.3]</b>
	<b>2018</b>	<b>2018</b>	<b>2008</b>	<b>2018</b>

\*PM2.5 includes Elemental Carbon (EC) and Organic Carbon (OC).

**Table 10.1. On-Road Mobile Source Emission Inventories for Albuquerque Urban Area: 1996 Baseline and 2018 (emissions in tons per DAY) (Environ, 2004, p. 8, Appendix 2007-C)**

Year	VOC	NOx	SO <sub>2</sub>	PM 10
<u>1996</u>	<u>68</u>	<u>64</u>	<u>2</u>	<u>2</u>
<u>2003</u>	<u>49</u>	<u>55</u>	<u>2</u>	<u>2</u>
<u>2008</u>	<u>34</u>	<u>41</u>	<u>0</u>	<u>2</u>
<u>2013</u>	<u>24</u>	<u>27</u>	<u>0</u>	<u>2</u>
<u>2018</u>	<u>20</u>	<u>18</u>	<u>0</u>	<u>2</u>
<b>Lowest Year</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>

**Table 10.2. Off-Road Mobile Source Emission Inventories for Albuquerque Urban Area: 1996 Baseline and 2018 (emissions in tons per DAY) (Environ, 2004, p. 9, Appendix 2007-C)**

Year	VOC	NOx	SO <sub>2</sub>	PM 10
<u>1996</u>	<u>15</u>	<u>20</u>	<u>5</u>	<u>3</u>
<u>2003</u>	<u>11</u>	<u>17</u>	<u>5</u>	<u>2</u>
<u>2008</u>	<u>8</u>	<u>14</u>	<u>6</u>	<u>2</u>
<u>2013</u>	<u>7</u>	<u>13</u>	<u>6</u>	<u>2</u>
<u>2018</u>	<u>7</u>	<u>12</u>	<u>6</u>	<u>2</u>
<b>Lowest Year</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>

**Table 10.3. TOTAL On-road and Non-road Mobile Source Emission Inventories for Albuquerque Urban Area: 1996 Baseline and 2018 (emissions in tons per DAY) (Environ, 2004, p. 7, Appendix 2007-C)**

Year	VOC	NOx	SO <sub>2</sub>	PM 10
<u>1996</u>	<u>83</u>	<u>84</u>	<u>7</u>	<u>5</u>

<u>2003</u>	<u>60</u>	<u>72</u>	<u>8</u>	<u>5</u>
<u>2008</u>	<u>42</u>	<u>55</u>	<u>6</u>	<u>4</u>
<u>2013</u>	<u>31</u>	<u>40</u>	<u>6</u>	<u>4</u>
<u>2018</u>	<u>27</u>	<u>31</u>	<u>6</u>	<u>4</u>
<b>Lowest Year</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>	<b>2018</b>

**(b) Program to assure continuous decline in mobile source emissions.**

Pursuant to 40 CFR 51.309(d)(5)(i)(A), the Department commits to monitoring the emissions from mobile sources to assure a continuous decline in emissions as defined in 40 CFR 51.309(b)(6). If the Department determines that a continuous decline in emissions is not being achieved, additional control measures will be reviewed to determine if they are needed to make reasonable progress. If the Department determines such measures are needed, it will submit an implementation plan revision to address the identified control measures.

**(c) Backstop provision to address potential increase in non-road emissions in the event Federal standards are not finalized.**

Pursuant to 40 CFR 51.309(d)(5)(i)(B), the Department commits to provide for a SIP revision no later than December 31, ~~2008~~ 2013, containing long-term strategies necessary to reduce emission of SO<sub>2</sub> from non-road mobile sources consistent with the goal of reasonable progress. The need for a SIP revision will be determined by a consideration of the emission reductions achieved or anticipated to be achieved by Federal standards should those standards addressing fuel sulfur content for non-raid engines not be in place.

**2. Other GCVTC Strategies for Mobile Sources**

Pursuant to 40 CFR 51.309(d)(5)(ii), the Department has reviewed the other mobile source recommendations contained in the GCVTC report. Based on the evaluation made by the Department, no additional measures have been identified as being practicable or necessary to demonstrate reasonable progress. However, there is already an Inspection & Maintenance program in place in Bernalillo County that is an effective local emission reduction strategy for mobile sources.

**[C] 2003] 3. 2007 Interim Progress Report:**

In the 1996 Grand Canyon Visibility Transport Commission (GCVTC) report [includes] there is a discussion of recommended regional and local emissions reductions strategies for mobile sources.

The regional strategies are to:

- Establish Clean Fuel Demonstration Zones
- Analyze Pricing and Incentive Approaches
- Explore an Inspection Program for Heavy-Duty Vehicles, and
- Promote Vehicle Maintenance.

The local strategies are to:

- Promote Incentives for Innovative and Effective Approaches
- Encourage Better Integration of Transportation, Land Use and Air Quality Planning

- 1       ▪ Establish Mobile Source Emissions Budgets for Selected Major Urban Areas
- 2       ▪ Suggest Retiring High-Emitting Vehicles (see below).

3  
4 The ~~[Albuquerque-Bernalillo County Air Quality Control Board (AQCB)]~~ Department has  
5 implemented ~~[some of these recommendations. For instance,]~~ a Vehicle Inspection &  
6 Maintenance Program (“I & M”), ~~[which promotes vehicle maintenance, operates]~~ in Bernalillo  
7 County, pursuant to 20.11.100 NMAC. The most recent strategies to reduce emissions that  
8 are included in this testing program became effective on May 1, 2004, and include: phase-in  
9 of BAR 97 OBDII analyzers certified to meet program specifications with all testing to be  
10 done using said analyzers by July 1, 2004; the incorporation of a pressurized gas cap test to  
11 reduce hydrocarbon emissions; the reduction of cutpoints (maximum allowable levels of  
12 hydrocarbon emissions); diesel vehicles are required to be tested at change of ownership;  
13 vehicles defined as “gross polluters” are required to be repaired to reduce emissions below  
14 that threshold prior to being granted a waiver or time extension; time extension for repair has  
15 been limited to one year and one time per vehicle; vehicles in model years with inspection  
16 failure rates exceeding 25% (i.e. 1975-1985) are required to be tested annually or at each  
17 registration renewal; requirement that vehicles defined as “marginal passes” be issued a  
18 certificate valid only for a one-year registration. Testing heavy-duty vehicles and retiring  
19 high-emitting vehicles has also been considered. Therefore, progress has been made in that  
20 some of the GCVTC mobile source recommendations have been implemented. ~~[Some~~  
21 ~~recommendations have been considered and others have not as of this time.]~~

22  
23 **~~[D) Backstop Provision for Mobile Sources:~~**

24  
25 ~~As indicated in Section B above, The AQCB will complete a SIP revision to evaluate the~~  
26 ~~need for any long-term strategies that address sulfur dioxide (SO<sub>2</sub>) from non-road mobile~~  
27 ~~sources and address increases in SO<sub>2</sub> that occur between 2008 and 2018 by no later than~~  
28 ~~December 31, 2008,. In determining whether or not to revise their SIPs to address SO<sub>2</sub> from~~  
29 ~~non-road sources, states may consider emissions reductions achieved or anticipated by~~  
30 ~~Federal standards that address the fuel sulfur content for non-road engines. This~~  
31 ~~assessment is not included in the 2003 SIP submittal presented here.]~~

32  
33  
34 **~~[VIII. FIRE PROGRAMS]~~ SECTION E. PROGRAMS RELATED TO FIRE**

35  
36 **~~[A) Introduction:]~~**

37  
38 Page 35753 in the Preamble to the Regional Haze Rule (RHR) discusses the requirements  
39 for fire sources. The States are required to: 1) document that the smoke management  
40 program and any other programs for prescribed fire have a mechanism in place for  
41 evaluating and addressing the degree of visibility impairment in the 16 Class I Areas, 2)  
42 adopt a statewide process for gathering the essential post-burn activity information to support  
43 emissions inventory and tracking systems for the five major pollutant types emitted from all  
44 fire sources, 3) adopt a process for identifying feasibly removable administrative barriers to  
45 the use of non-burning alternatives, 4) adopt an Enhanced Smoke Management Program  
46 (ESMP) for all fire sources in the State, and 5) adopt a process to establish annual emission  
47 goals for all fire sources except wildfire.

48  
49 Regarding administrative barriers to the use of non-burning alternatives, States may elect to  
50 establish a long-term collaborative process with key public and private entities, such as state  
51 departments of agriculture and forestry, and farming and forestry associations. One way to



1 establish such a process would be for a state to sign a voluntary letter of agreement between  
2 these entities. If administrative barriers are found, the Albuquerque-Bernalillo County Air  
3 Quality Control Board (AQCB) will collaborate with the necessary entities to address them.  
4

5 **{B} (a) Definitions [of Fire]:**  
6

7 Note: The definitions in this section apply only to this Implementation plan and correspond to  
8 the regulation 20.11.21 NMAC, Open Burning.  
9

10 “**Agricultural Burning**” means the burning of crop residues for field preparation or that is  
11 otherwise used for the production of a crop.  
12

13 “**Alternative To Burning**” means a treatment employing manual, mechanical, chemical, or  
14 biological methods to manage vegetation and/or fuel loads, or land management practices  
15 that treat vegetation (fuel) without using fire. A treatment or practice may only be considered  
16 an alternative if it has successfully been used to take the place of fire for at least three  
17 consecutive years. Suggested alternatives to burning are listed in Section 20.11.21.18  
18 NMAC  
19

20 “**Environmentally Non-Essential Burning**” means the open burning of any unwanted  
21 combustible material which could otherwise reasonably be altered, destroyed, reduced or  
22 removed to a suitable disposal site without the potential to cause environmental harm or  
23 damage.  
24

25 “**Environmentally Poor Burning Substances**” include but are not limited to: refuse, paper,  
26 rubbish, books, magazines, fiberboard, packaging, rags, fabrics, animal waste, waste oil,  
27 liquid or gelatinous hydrocarbons, tar, paints and solvents, chemically treated wood, plastic  
28 or rubber, office records, sensitive or classified wastes, hazardous or toxic substances,  
29 interiors of wrecked vehicle bodies or other materials which are difficult to burn without  
30 producing significant amounts of noxious and/or toxic fumes or dense smoke.  
31

32 “**Fire**” means [40 CFR 51.309(b)(4) of the RHR defines fire as] “wildfire, wildland fire  
33 (including prescribed natural fire), prescribed fire, and agricultural burning conducted and  
34 occurring on Federal, State, and private wildlands and farmlands” [40 CFR 51.309(b)(4)].  
35 Prescribed natural fire has been functionally replaced by wildland fire managed for resource  
36 benefit or “Wildland Fire Use” (WFU) under the National Fire Plan. Except where “prescribed  
37 fire” is noted, the term “fire” shall apply to the sources identified herein.  
38

39 “**No-burn Period**” means a period of time, declared by the Director, during which no person  
40 with authority or power to control the operation of a solid fuel heating device shall allow the  
41 operation of a solid fuel heating device to continue, following a burn down period, within the  
42 wood smoke impacted area, unless the device is a wood heater that has been emission  
43 certified by the EPA. Exemptions may be granted by the Director per 20.11.22.2 NMAC.  
44 No-burn periods may be declared any time from October 1 through February 28. The  
45 Director shall declare a no-burn period after reviewing available meteorological data, air  
46 pollution monitoring data, and other relevant information and determining that expected  
47 atmospheric conditions will not adequately disperse wood smoke.  
48

49 “**Open Burning**” means the combustion of any substance which is not confined in a device  
50 having controllable fuel/air mixture capable of achieving nearly complete combustion, and

1 from which combustion products are discharged into the open air without passing through a  
2 stack, duct, chimney, or vent.

3  
4 “PB-I” or “Level I Prescribed Burn” means a smoke management burn project that emits  
5 less than one ton of PM10 emissions per day or burns less than 5,000 cubic feet pile volume  
6 of vegetative material per day.

7  
8 “PB-II” or “Level II Prescribed Burn” means a smoke management burn project that emits  
9 one ton or more of PM<sub>10</sub> emissions per day or burns 5,000 cubic feet or more pile volume of  
10 vegetative material per day.

11  
12 “Prescribed Fire” Or “Prescribed Burn” or “PB” means any fire ignited by any person to  
13 meet specific land management objectives. For the purposes of 20.11.21 NMAC, wildland  
14 fire use is considered a prescribed fire.

15  
16 “Ventilation Index” means a technical rating used to establish the potential for smoke or  
17 other pollutants to ventilate away from its source.

18  
19 “Ventilation Index Category” means a category in the ventilation index that is determined  
20 as provided in Section 20.11.21.17 NMAC and is rated as excellent, very good, good, fair, or  
21 poor.

22  
23 “Wildfire” means an unplanned and/or unwanted fire that burns vegetative material in a  
24 natural or modified state.

25  
26 “Wildland” means an area in which there is minimal development, except for roads,  
27 railroads, power lines, and similar utilities and transportation facilities. Structures, if any, are  
28 widely scattered.

29  
30 “Wildland Fire Use” means the management of wildfire within a wildland that is ignited by  
31 natural forces, such as by lightning or volcanic eruption, following a decision to allow the  
32 wildfire to burn to accomplish specific pre-stated resource objectives in predefined  
33 geographic areas, also known as fire use, wildfire use, prescribed natural fire, and fire for  
34 resource benefit.

35  
36 “Winter pollution Advisory Season” Or “No-Burn Season” means the period from  
37 October 1st through February 28th each year when no-burn calls are made. The no-burn  
38 call is a control strategy designed to protect the air quality in Bernalillo County. This strategy  
39 helps mitigate particulate matter and carbon monoxide build up during the colder months of  
40 the year when temperature inversions trap pollutants closer to ground level.

41  
42 “Wood Smoke Impacted Area” means that portion of Bernalillo County that is the most  
43 adversely affected by the burning of wood during atmospheric conditions that the Director  
44 concludes may not adequately disperse wood smoke. The wood smoke impacted area is  
45 bounded on the north and south by the Bernalillo county line, on the west by the universal  
46 transverse meridian (UTM) line 337000mE and on the east by the UTM line 367000mE,  
47 Zone 13.

48  
49 **[C] (b) Prescribed Fire Program Evaluation:**

50

1 Pursuant to 40 CFR 51.309(d)(6)(i), the ~~[AQCB]~~ Department has evaluated its smoke  
2 management program and all Federal, State, and private prescribed fire smoke management  
3 programs in Bernalillo County based on the potential to contribute to visibility impairment in  
4 the 16 Class I Areas of the Colorado Plateau, and how visibility protection from smoke is  
5 addressed in planning and operation.

6  
7 The ~~[AQCB]~~ Department has also evaluated whether its smoke management program and  
8 these prescribed fire smoke management programs contain the following elements: actions  
9 to minimize emissions; evaluation of smoke dispersion; alternatives to fire; public notification;  
10 air quality monitoring; surveillance and enforcement; and program evaluation. ~~[Table]~~ Tables  
11 11 and 12 ~~[describes]~~ describe the results of these evaluations in detail.

12  
13 ~~[Table 11 on the following page lists the prescribed fire programs that impact Bernalillo~~  
14 ~~County:]~~  
15

1 **Table 11: Prescribed Fire Programs that Impact Bernalillo County**

2

<b>Types of Prescribed Fire Programs</b>			
<i>Federal</i>	<i>State</i>	<i>Local (Bernalillo County)</i>	<i>Private</i>
U.S. Forest Service- Cibola National Forest	State of New Mexico Open Burning Rule, 20.2.60 NMAC & [Proposed] Smoke Mgmt. Rule, 20.2.65 NMAC	Albuquerque-Bernalillo County <u>Open Burning</u> Regulation, 20.11.21 NMAC	None known at this time.

3  
4 The [~~currently effective Open Burning~~] regulation, Open Burning, 20.11.21 NMAC, is the  
5 foundation of the Open Burning Program, which the Department administers and enforces.  
6 Per 20.11.21.12 NMAC, unless otherwise exempted, open burning by any person is  
7 prohibited in Bernalillo County. The goal of this regulation is to eliminate environmentally  
8 non-essential burning.

9  
10 20.11.21.13 NMAC conditionally allows open burning for certain activities with a permit [(see  
11 Appendix C-NT).] Permits are issued for either a single event or multiple events. Most of the  
12 multiple event open burning permits are for detonations for research and development  
13 purposes. For timber and forest management, a single event open burning permit is required  
14 for burns of ¼ acre or more. In recent years, the [~~U.S.~~] U.S.D.A. Forest Service has obtained  
15 a multiple-event open burning permit for the Cibola National Forest. For each burn, the  
16 permittee must specify where the burn will occur and provide a 48-hour notice to the  
17 Department. The permittee must also [~~be sure~~] verify that a No-Burn Alert has not been  
18 called by the Department, prior to engaging in any burning activities.

1  
2  
3  
4  
5

**Table 12: Comparison of [~~Existing & Amended~~] the AQCB *Open Burning* Regulation, *Open Burning*, 20.11.21 NMAC, before and after incorporating the [~~with~~] Regional Haze Rule (RHR) Requirements**

RHR Requirement / ESMP Recommendation	<del>[Current]</del> <u>Previous</u> <i>Open Burning</i> Regulation, 20.11.21 NMAC, <u>(Before 2003 Regional Haze amendments)</u>	Amended <i>Open Burning</i> Regulation (Effective 12/31/03)
<b>Actions to minimize emissions</b>	Restrictions on what can be burned and when	For burns over 1 ton PM-10 emissions per day, requires use of at least one ERT*
<b>Evaluation of smoke dispersion</b>	None.	“ <b>PBII</b> ”: For burns [ <del>over</del> ] <u>exceeding</u> 1 ton PM <sub>10</sub> emissions per day, requires visual monitoring; The Department may decide to conduct instrument monitoring. Burns can only be conducted if ventilation category is "Good" or better. “ <b>PBI</b> ”: For burns less than 1-ton PM <sub>10</sub> emissions per day, requires 300-foot setback from occupied structure or place where people congregate and burn only during certain hours; or burner may choose to follow visual monitoring and ventilation category requirements under ‘PBII’.
<b>Alternatives to fire</b>	Permit requires burner to state: “What alternatives to burning have been considered and why they were not chosen instead of burning” {20.11.21.13.B(3)(d) NMAC}.	For burns [ <del>over</del> ] <u>exceeding</u> 1 ton PM <sub>10</sub> emissions per day, requires documentation of alternatives analysis.
<b>Public notification</b>	None	“PBI” & “PBII”. Requires notification of Bernalillo County Fire Department along with local fire authority; as well as public notification.
<b>Air quality monitoring</b>	None	“PBII”. For burns [ <del>over</del> ] <u>exceeding</u> 1 ton PM <sub>10</sub> emissions per day, requires visual monitoring; The Department may decide to conduct instrument monitoring on burns close to populations.
<b>Surveillance and enforcement</b>	Regulatory requirements, if not met, are subject to enforcement	All prescribed burning is subject to inspection. The Department may revoke permits and take any other enforcement action authorized under state or federal statutes, rules and regulations

RHR Requirement / ESMP Recommendation	<del>[Current]</del> <u>Previous</u> <i>Open Burning</i> Regulation, 20.11.21 NMAC, <u>(Before 2003 Regional Haze amendments)</u>	<i>Amended Open Burning Regulation</i> (Effective 12/31/03)
<b>Program evaluation</b>	None	Annual program evaluation and meeting with burners and other stakeholders.
<b>Regional coordination</b>	None	The Department will use notifications to predict air shed capacity; The Department will work with the WRAP and the State of New Mexico on inter-jurisdictional coordination.
<b>Tracking/emission inventory</b>	Filed permits	All burners are required to submit tracking forms; The Department will use this information to calculate emissions.
<b>Burn authorization</b>	Permits issued by the Department to federal or state burners.	"Permit-by-rule" – burners are required to register in advance of burns, submit notification one day in advance for burns greater than 1-ton PM <sub>10</sub> emission per day; The Department determines air shed capacity and may require burners to modify or postpone burns.

1  
2  
3 The AQCB ~~[is making]~~ made changes to elements of the smoke management program (as  
4 listed above) to bring the ~~[current]~~ previous *Open Burning* regulation, 20.11.21 NMAC, into  
5 alignment with the Regional Haze Rule. These changes are reflected as amendments to the  
6 *Open Burning* regulation. These ~~[changes]~~ amendments were adopted by the ~~[Albuquerque-~~  
7 ~~Bernalillo County Air Quality Control Board]~~ AQCB on ~~[insert date]~~ 11/12/03 and ~~[will~~  
8 ~~become]~~ became effective within Bernalillo County ~~[no later than January 1, 2004]~~ on  
9 12/31/03.

10  
11 **~~[D)]~~ (c) Emissions Inventory and Tracking System.**

12  
13 **~~[(1) General Information.]~~**

14  
15 Pursuant to 40 CFR 51.309(d)(6)(ii), a system has been established ~~[which will allow for]~~ to  
16 develop a tracking system and an emissions inventory for the following pollutants: VOC,  
17 NOx, elemental carbon (EC), organic carbon (OC) and PM2.5 (fine particulate) for fire  
18 sources within Bernalillo County. The Department will implement an emissions tracking  
19 system that follows the WRAP ~~[policy report *Fire Tracking Systems*]~~ Fire Tracking System  
20 Policy (see Appendix K-O), which identifies a process for gathering the essential post-burn  
21 activity information necessary to consistently calculate emissions and uniformly assess fire  
22 impact on regional haze on an annual basis. The fire tracking system described in this policy  
23 consists of seven components: (1) date of burn, (2) burn location, (3) area of burn, (4) fuel  
24 type, (5) pre-burn fuel loading, (6) type of burn, and (7) "anthropogenic" or "natural"  
25 classification ~~[of]~~ or information to support this classification. This policy serves as the basis  
26 for creating a fire emissions inventory within Bernalillo County.  
27

1 Appendix K-SIP of this implementation plan contains information on the emissions inventory  
2 and tracking system that the WRAP developed for fire emissions. Note that existing  
3 emissions inventories prepared by the Fire Emissions Joint Forum (FEJF) satisfy the  
4 requirement for a statewide inventory and emissions tracking system for VOC, NOx,  
5 elemental carbon (EC), organic carbon (OC) and PM 2.5.

6  
7 **~~[(2) Specific Information.]~~**

8  
9 All sources of fire in Bernalillo County are required to submit tracking information following  
10 completion of burns. Burners are required to submit information on acreage or pile-volume  
11 of burns and emission reduction techniques utilized. This tracking information will be used to  
12 develop an emissions inventory for emissions from all sources of fire in Bernalillo County.  
13 Emission factors will be applied to each burn to develop emissions estimates. The New  
14 Mexico Environment Department (NMED) is expected to follow this same procedure. See  
15 Appendix L-O for guidance on how to calculate emissions using emission factors and how to  
16 estimate fuel loading.

17  
18 ~~[The Department will collect the WRAP identified post burn activity information and utilize the~~  
19 ~~WRAP's regional emission and tracking initiative. In addition, fire emission inventory updates~~  
20 ~~will be provided in future progress reports as part of the periodic implementation plan~~  
21 ~~revisions pursuant to 40 CFR 51.309(d)(10).~~

22  
23 **~~[(3) Tracking & Inventory Process.]~~**

24  
25 The following ~~[provides the basic process that]~~ processes will be used by the AQCB and the  
26 Department for tracking emissions from fire sources:

27  
28 **~~[(a)]~~**

- 29 ➤ For "PBI" and "PBII" prescribed burns, including those involving timber or agricultural  
30 lands, the Burner will notify the Department of its plan to conduct a burn prior to  
31 initiating the burn. Initial estimates are made by the Burner on the quantity of material  
32 or acres to be burned.

33  
34 **~~[(b)]~~**

- 35 ➤ 20.11.21.15 NMAC requires the Burner to submit to the Department quantitative  
36 information regarding the fuel types, fuel consumption, and type of burn once the  
37 prescribed burn has been completed.

38  
39 **~~[(c)]~~**

- 40 ➤ The Department ~~[will]~~ shall use the quantitative information submitted by the Burner  
41 to calculate the emissions estimates for VOCs, NOX, EC, OC, and PM 2.5 for each  
42 regulated burn. Each year the Department will complete an emissions inventory for  
43 these pollutants and submit a report to the AQCB, the State of New Mexico  
44 Environment Department, and any participating tribes in New Mexico. The AQCB  
45 may solicit public comment regarding the annual report. The report will discuss the  
46 overall level of fire emissions in Bernalillo County and compare these results to the  
47 annual emissions goals for Bernalillo County. In addition, the Department will submit  
48 emissions inventory reports to the WRAP upon completion.

49  
50 **~~[(d)]~~**

- 1       ➤ The Department ~~[will]~~ shall maintain all records pertaining to prescribed burns  
2 regulated pursuant to 20.11.21 NMAC. In addition, the Department ~~[will]~~ shall archive  
3 all emission inventory reports. All prescribed burn records and the completed annual  
4 emissions inventory reports will be made available to the public, upon request. It is  
5 also expected that the WRAP summaries of fire emissions for the Western states will  
6 be available to the public on the WRAP website.

7  
8 ~~[(e)]~~

- 9       ➤ The Department ~~[will]~~ shall work collaboratively with the New Mexico Environment  
10 Department and participating tribes to compile statewide emission inventories and  
11 track the emissions in a temporal and spatial manner. Statewide inventories and  
12 tracking information will be made available to the public upon request.

13  
14 ~~[(E)]~~ **(d) Strategy for Use of Non-Burning Alternatives.**

15  
16 ~~[(1)]~~ **Process for Removal of Administrative Barriers.**

17  
18 ~~The Albuquerque-Bernalillo County Air Quality Control Board (AQCB)]~~ The Department [will]  
19 shall develop a process [in which] to coordinate with key public and private entities, (such as  
20 the state departments of agriculture and forestry, farming and forestry associations), are  
21 coordinated with to identify and remove administrative barriers to the use of non-burning  
22 alternatives to prescribed fire on federal, state, and private lands in a manner consistent with  
23 40 CFR 51.309(d)(6)(iii). [It is anticipated that administrative barriers will be identified on a  
24 case-by-case basis.] The process will be collaborative and provide for continuing  
25 identification and removal of administrative barriers, and will consider economic, safety,  
26 technical and environmental feasibility criteria and land management objectives. In  
27 developing this process, the Department will rely on two documents: (1) *Non-burning*  
28 *Alternatives for Vegetation and Fuel Management*, and (2) *Burning Management Alternatives*  
29 *on Agricultural Lands in the Western United States*, prepared by the WRAP, that describe a  
30 variety of non-burning alternatives and methods of assessing their potential applicability (see  
31 Appendix 2007-E). The WRAP Fire Emissions Forum recommends that these documents be  
32 used as reference guides in state and land manager decision-making processes for  
33 evaluating non-burning alternatives. The Forum also recommends that states identify in their  
34 309 SIPs the administrative barriers they know to exist in their state, and the steps or  
35 process they will follow to remove them where it is feasible to do so.

36  
37 ~~[(a)]~~ **Identification of existing administrative barriers.**

38  
39 ~~The Department will review current air quality regulations for Bernalillo County to identify~~  
40 ~~administrative barriers that prevent utilization of a non-burning alternatives. This review will~~  
41 ~~be performed by December 2004 and annually thereafter as part of the work to prepare the~~  
42 ~~annual emissions inventories report.]~~

43  
44 During the development of the required smoke management revisions to the ~~*Open-Burning*~~  
45 regulation, *Open Burning*, 20.11.21 NMAC, the Department identified administrative barriers  
46 to the use of a Non-Burning alternative, namely the use of air curtain incinerators (ACI).  
47 Subsection B of 20.11.68.200 NMAC of the AQCB regulation *Incinerators and Crematories,*  
48 is entitled, *Construction/Operation*, and states that: “The construction, use or operation of an  
49 incinerator, even if an ‘affected facility’ pursuant to 40 CFR 60, Subpart Ea as amended, on  
50 any property is prohibited, except for certain crematories as allowed by this part”. In addition,  
51 it is possible that 20.11.41 NMAC, *Authority to Construct*, may become an impediment to the



1 use of air curtain incinerators if a permit is required. ~~[Because these regulations are~~  
2 ~~considered potential administrative barriers to the use of ACIs, the Department will make a~~  
3 ~~recommendation to the AQCB by December 2004 regarding whether regulatory amendments~~  
4 ~~are needed to remove these barriers.]~~ There have not been any requests for a variance from  
5 the requirements of 20.11.68 NMAC submitted to the Department by burners in order to  
6 operate an ACI. Therefore no amendments have been proposed. If in the future, the  
7 Department receives a request for a variance to allow the operation of an ACI, then, the  
8 AQCB may direct the Department to take actions necessary to propose revisions to the  
9 regulation(s) and hold the necessary public hearings to modify the regulation(s) in order to  
10 remove the barriers.

11  
12 ~~[(b) An ongoing method]~~ The Department's ongoing efforts to identify administrative barriers  
13 ~~[will] shall [involve]~~ include the periodic review of registration forms and permits submitted by  
14 burners. In the registration form required for burns conducted under Prescribed Burn II  
15 (PBII), or under a permit, burners are required to identify why alternatives to burning have not  
16 been used. The Department ~~[will] shall~~ collect this data and analyze it to determine whether  
17 administrative barriers to the use of alternatives exist. Should it determine that a specific  
18 administrative barrier exists, the Department ~~[will] shall~~ meet with the appropriate agency(ies)  
19 to discuss how any barriers might be removed and will work collaboratively with the  
20 agency(ies) and the burners to remove the barrier.

21  
22 **~~[(F)] (e) Enhanced Smoke Management Program (ESMP).~~**

23  
24 **~~[(1) Current Smoke Management Efforts.]~~**

25  
26 Pursuant to CFR 51.309(d)(6)(iv), all smoke management programs that operate within  
27 Bernalillo County shall be consistent with the ~~[WRAP policy report]~~ WRAP's Enhanced  
28 Smoke Management Programs~~[(ESMP)]~~ for Visibility Policy (see Appendix M-O). This  
29 ~~[report] policy~~ calls for programs to be based on the criteria of efficiency, economics, law,  
30 emission reduction opportunities, land management objectives and reduction of visibility  
31 impacts. The WRAP policy report lists the previously identified elements under 40 CFR  
32 51.309(d)(6)(i) as well as adding "burn authorization" and "regional coordination" elements to  
33 ensure visibility protection and meet the designation of "enhanced".

34  
35 Table 12 contains a more detailed assessment of specific elements of the AQCB's current  
36 smoke management ~~[efforts]~~ program which are embodied in the ~~[existing]~~ previous  
37 (September 2003) *Open Burning* regulation and compares this ~~[existing]~~ previous  
38 regulation to the ~~[proposed]~~ amended regulation. Table 12 demonstrates that the ~~[proposed]~~  
39 amended regulation meets the Enhanced Smoke Management Program (ESMP) policy and the  
40 Regional Haze Rule (RHR) requirements. The amended regulation ~~[will be acted upon]~~ was  
41 adopted by the AQCB ~~[before December 31, 2003]~~ on 11/12/03, and, ~~[if adopted, will~~  
42 become] became effective ~~[no later than January 1, 2004]~~ on 12/31/03.

43  
44 **~~[(2) The Open Burning Regulation.]~~**

45  
46 The amended *Open Burning* regulation, 20.11.21 NMAC, ~~[to be]~~ which became effective ~~[no~~  
47 ~~later than January 1, 2004]~~ on December 31, 2003 specifically addresses sources of fire over  
48 10 acres in size or greater than 1,000 cubic feet in pile-volume. The amended *Open Burning*  
49 regulation requires the use of at least one emission reduction technique for all burns with  
50 emissions of PM<sub>10</sub> greater than one ton per day. These burns must also only be conducted  
51 ~~[during]~~ under dispersion conditions rated 'good' or better. All burners with burns greater

1 than 10 acres per day or 1000 cubic feet pile-volume per day are required to register the  
2 burn project prior to burn and follow up after the burn with tracking, including documentation  
3 of the use of emission reduction techniques. For burns with emissions of greater than one  
4 ton of PM<sub>10</sub> emissions per day, burners are required to provide an explanation on the  
5 registration form why they did not utilize alternatives to burning.

6  
7 **~~[G]~~ (f) Annual Emission Goals (AEGs)**

8  
9 **~~[(1) AEGs and Emission Reduction Techniques (ERTs).]~~**

10  
11 Pursuant to 40 CFR 51.309(d)(6)(v), efforts will be made ~~[by the Albuquerque-Bernalillo~~  
12 ~~County Air Quality Control Board (AQCB)]~~ within Bernalillo County to minimize emission  
13 increases from fire, excluding wildfire, to the maximum extent feasible, through the  
14 establishment of annual emission goals, ~~[To support the establishment of AEGs, the~~  
15 ~~Department will use the WRAP report]~~ in accordance with the WRAP's Annual Emission  
16 Goals for Fire Policy ~~[for guidance]~~ (see Appendix N-O). This policy recognizes that  
17 Emission Reduction Techniques (ERTs) can be used to minimize emissions from fire. The  
18 AQCB Department will establish a collaborative mechanism for setting annual emission  
19 goals and ~~[develop]~~ developing a process for tracking their attainment on ~~[an annual]~~ a yearly  
20 basis.

21  
22 The projection and tracking of ERT use is a minimum element of the quantifiable annual  
23 emission goal. The ~~[Annual Emissions Goal]~~ AEG ~~[utilizes]~~ should utilize the projection of  
24 total emissions inventory for prescribed fire and agricultural burning such that the effect of  
25 projected ~~[emission reduction techniques]~~ ERTs or percent-use of ERTs are shown in  
26 relation to projected total emissions. Should projected annual emissions not be available,  
27 the Department must develop such an inventory and submit a timeline for developing the  
28 inventory. This timeline will coincide with the capacity of the ~~[WRAP Emission Data System]~~  
29 WRAP's Emissions Data Management System (EDMS) and/or WRAP's Fire Emissions  
30 Tracking System (FETS), to provide such an inventory, or prior to the first SIP revision  
31 period. Where ERT's or other emission reduction methods cannot be quantified with  
32 confidence due to the current state of the science, such as for agricultural burning, states  
33 should say so and support efforts toward further refinements in emission reduction (or  
34 emissions averted) calculation methodologies.

35  
36 The Department intends to use this policy and quantify the ERTs that are being used within  
37 Bernalillo County on a project-specific basis to reduce the total amount of emissions being  
38 generated from areas where prescribed fire is being used. The use of ERTs to meet this rule  
39 requirement is subject to economic, safety, technical and environmental feasibility, and land  
40 management objectives.

41  
42 **~~[(2) Process for Establishing AEGs.]~~**

43  
44 The AQCB and the Department ~~[will]~~ shall work to establish AEGs in a cooperative process  
45 with stakeholders, ~~[which will]~~ who shall include the State of New Mexico Environment  
46 Department, participating tribes, ~~[relevant]~~ affected federal land management agencies  
47 including a representative from the Cibola National Forest and ~~[appropriate]~~ affected private  
48 entities. ~~[To support the establishment of]~~ In developing the AEGs, the Department ~~[will]~~  
49 shall review the registration data provided by burners for the upcoming burn year, the  
50 tracking data submitted by burners for the previous year, and evaluate the use of emission  
51 reduction techniques (both those tracked for the previous year and those planned for the

1 upcoming year). These data will permit the evaluation of the potential (for the upcoming  
2 year) and actual (from the previous year) emissions from fire in the absence of the use of  
3 ERTs and to determine the amount of emissions that were averted by the use of ERTs. The  
4 amended Open Burning regulation requires the use of at least one ERT for all prescribed  
5 fires with emissions ~~[of over]~~ exceeding one ton of PM<sub>10</sub> per day.

6  
7 The Department ~~[will]~~ shall review the gathered data with stakeholders on an annual basis.  
8 This data ~~[will]~~ shall be used to establish the ~~[annual emission goals]~~ AEGs for the upcoming  
9 year. After the Department has completed the technical evaluations regarding the  
10 establishment of the AEGs, the Department ~~[will]~~ shall ~~[recommend]~~ submit the proposed  
11 AEGs to the AQCB. The first set of AEGs ~~[will]~~ shall be established by the AQCB by  
12 resolution no later than April 30, ~~[2006]~~ 2009 and the public will be given an opportunity to  
13 review the proposed AEGs and submit comments to the AQCB. The AEGs ~~[will]~~ shall be  
14 reviewed annually and updated as appropriate following the same process. The AEGs ~~[will]~~  
15 shall be made available to the public upon request. The AQCB ~~[will]~~ shall also review the  
16 emissions inventory data and other information related to fire emissions to evaluate whether  
17 the AEGs have been met or exceeded.

## 18 19 ~~[IX.]~~ SECTION F. PAVED & UNPAVED ROAD DUST

### 20 21 ~~[A]~~ Introduction & Requirements:

22  
23 The Regional Haze Rule (RHR) ~~[requires]~~ required states to assess the impact of dust  
24 emissions on regional haze in the 16 Class I Areas on the Colorado Plateau in the first  
25 implementation plan ~~[due]~~ submitted in December of 2003, and was to include a projection of  
26 visibility conditions through 2018 for the least and most impaired days. Page 35753 of the  
27 Preamble to the RHR discusses the requirements for paved and unpaved road dust.

28  
29 If dust emissions ~~[are]~~ were determined to be a significant contributor to visibility impairment,  
30 the state ~~[must]~~ would have been required to implement emissions management strategies to  
31 address their impact. The road dust assessment ~~[is]~~ was limited to the 16 Class I Areas on  
32 the Colorado Plateau.

### 33 34 ~~[B]~~ (a) Impact of Paved and Unpaved Road Dust Emissions:

35  
36 Pursuant to 40 CFR 51.309(d)(7), the Western Regional Air Partnership (WRAP) assessed  
37 the impact of dust emissions from paved and unpaved roads from transport region states on  
38 the 16 Class I Areas of the Colorado Plateau.

### 39 40 ~~[C]~~ (b) Contribution to Visibility Impairment Finding:

#### 41 42 ~~[(1)]~~ Finding of No Impairment.

43  
44 Pursuant to 40 CFR 51.309(d)(7), ~~[Based on]~~ the results of the aforementioned assessment  
45 ~~[on]~~ of the impact of dust emissions from paved and unpaved roads from transport region  
46 states on the 16 Class I Areas of the Colorado Plateau performed by the WRAP (described  
47 below) ~~[using the analytical tools available at this time,]~~ the ~~[Albuquerque Bernalillo County~~  
48 Air Quality Control Board (AQCB)] Department has determined that regional scale dust  
49 emissions for the purpose of the RHR are not a significant contributor to visibility impairment  
50 within the 16 Colorado Plateau ~~[16]~~ Class I Areas. Based on these findings, no specific  
51 emission management strategies have been identified for inclusion in this SIP submittal.

1  
2 The [AQCB] Department will continue to work with EPA and other entities to research the  
3 effects of road dust on visibility impairment, and will re-evaluate whether or not additional  
4 dust control strategies should be developed to address regional haze.

5  
6 **[(2)] WRAP Modeling Results.**

7  
8 Road dust emission inventories were developed for WRAP states and the significance of  
9 road dust was then tested using the regional air quality model. Across WRAP states, paved  
10 road dust emissions are predicted to increase by about 3% per year from 1996 to 2018, ~~[per]~~  
11 concurrent with the forecasted increase in vehicle miles traveled. Unpaved road dust  
12 emissions are projected to decrease between 1996 and 2018, by about 0.75 % per year,  
13 because of reductions in unpaved road mileage over time as more roads are paved. As a  
14 result, unpaved road dust emissions are about 80% of road dust PM<sub>10</sub> emissions in 1996,  
15 and are estimated to be about 65% of road dust PM<sub>10</sub> emissions in 2018. Overall, projected  
16 road dust PM<sub>10</sub> emissions increase by about 6% from 1996 to 2018.

17  
18 The modeled regional impact of road dust emissions at the 16 Colorado Plateau Class I  
19 Areas ranged from 0.31 deciviews (3.1% of natural conditions to be reached by 2064) at the  
20 Black Canyon of the Gunnison National Park to 0.08 deciviews (0.8% of natural conditions to  
21 be reached by 2064) at the Weminuche Wilderness. From these preliminary results, the  
22 WRAP has determined that the regional impacts of road dust emissions are not significant at  
23 the 16 Colorado Plateau Class I Areas at this time. However, based upon the WRAP's most  
24 recent analysis and a recognition that the modeling will improve, the [AQCB] Department has  
25 determined that further research will be needed. Unpaved road dust will be reevaluated as  
26 part of the SIP revision due in ~~[2008]~~ 2013.

27  
28 **~~[(D)]~~ (c) Tracking of Road Dust Emissions:**

29  
30 ~~[If road dust emissions are determined to be significant, the AQCB]~~ The Department shall  
31 track road dust emissions with the assistance of the WRAP, consistent with provisions of the  
32 RHR and other relevant EPA and WRAP guidance. The [AQCB] Department shall provide  
33 an update on paved and unpaved road dust emission trends, including any modeling or  
34 monitoring information regarding the impact of these emissions on visibility in the 16  
35 Colorado Plateau ~~[46]~~ Class I Areas. These updates shall include a re-evaluation of whether  
36 road dust is a significant contributor to visibility impairment. These updates shall be part of  
37 the periodic implementation plan revisions pursuant to 40 CFR 51.309(d)(10).

38  
39 **Current Efforts to Control Paved and Unpaved Road Dust Emissions**

40  
41 The AQCB has taken a proactive approach towards reducing PM10 emissions to keep  
42 Bernalillo County in attainment status and protect the health of the community. On January  
43 14, 2004, the AQCB repealed the regulation, *Airborne Particulate Matter*, and replaced it with  
44 a more rigorous regulation, *Fugitive Dust Control*, 20.11.20 NMAC, which became effective  
45 on 3/1/04 (see Appendix 2007-G). The intent of the regulation is to control fugitive dust  
46 generated by human impact on the environment. Reducing fugitive dust reduces the  
47 adverse health effects of PM10 and PM2.5 and it improves the quality of life for all residents.  
48 Preventing fugitive dust is also important for safety and general welfare of the community.

49  
50 The new regulation requires that persons must use reasonably available control measures  
51 (RACMs) to reduce fugitive dust and keep dust on the site where it is generated. Active

1 operations are prohibited from causing fugitive dust that adversely affects health, public  
2 welfare, and safety, impairs visibility or the reasonable use of property. Also, visible fugitive  
3 dust caused by active operations cannot cross a property line for more than 15 minutes in  
4 one hour. Inactive disturbed areas must be stabilized to prevent fugitive dust.

5  
6 With some exceptions, a person who plans to disturb ¾ of an acre or more is required to  
7 obtain a permit and pay fees. A new form of permit called a Programmatic Permit is issued  
8 to public agencies on an annual basis for routine maintenance activities. The new regulation  
9 places restrictions on the construction of new unpaved roadways longer than ¼ mile in  
10 length, unpaved short-cuts, and unpaved parking areas. New unpaved areas will need to be  
11 stabilized to limit fugitive dust.

12  
13 For the first time, the fugitive dust regulation includes a wide range of reasonably available  
14 control measures in the regulation itself. (i.e. Silt fencing around construction sites, re-  
15 vegetation of a new roadway project, seed specifications, access control to unpaved  
16 roadways, early construction of walls around housing projects, use of water trucks,  
17 installation of paving and curbing, use of millings on shoulders, an access controlled  
18 maintenance road, and a swale with revegetation, etc.).

19  
20 ~~[X.]~~ **SECTION G. POLLUTION PREVENTION (P2)**

21  
22 **[A) Introduction & Requirements:]**

23  
24 The Regional Haze Rule (RHR) requires a detailed assessment of Pollution Prevention (P2)  
25 programs and activities in each state, and an estimate of emission reductions and visibility  
26 improvements that could result from these programs and activities. This requirement is for  
27 an assessment only; a state does not have to adopt any specific energy-related strategies or  
28 regulations. Page 35754 in the Preamble to the RHR discusses the P2 requirements for  
29 regional haze.

30  
31 A state's 309 SIP must include the following: 1) a summary of all P2 programs currently in  
32 place, 2) total energy generation capacity and production in the state and the percentage that  
33 is renewable, 3) any incentive programs that reward efforts that go beyond compliance, 4)  
34 any programs that preserve and expand energy conservation efforts, 5) any specific areas  
35 where there is the potential for renewable energy to supply power in a cost-effective manner,  
36 6) projections of the short and long-term emissions reductions, visibility improvements, cost  
37 savings and secondary benefits associated with renewable energy goals and energy  
38 efficiency and pollution prevention activities, and 7) the state's anticipated contribution  
39 toward the renewable energy goals for 2005 and 2015.

40  
41 **[B]) (a) Summary of P2 Programs in the State.**

42  
43 Pursuant to 40 CFR 51.309(d)(8)(i), Tables 13 through 17 ~~[on the following pages]~~ below  
44 summarize all P2 programs ~~[currently]~~ in place in New Mexico (as of 2003) that could affect  
45 Bernalillo County. Table 18 summarizes all renewable energy generation capacity and  
46 production in use or planned as of 2002 in Bernalillo County. The renewable energy  
47 generation capacity and production in use or planned for the State of New Mexico as of 2002  
48 is presented in Appendix O-O for comparison. Table 19 summarizes the total energy  
49 generation capacity and production in Bernalillo County, and the percent of the total that is  
50 renewable. Total energy generation capacity and production in the State of New Mexico,  
51 and the percent of the total that is renewable, is presented in Appendix O-O for comparison.

1  
2

**Table 13: Policy Mechanisms to Promote Renewable Energy**

Program Title	Program Description
Renewable Portfolio Standard	<p>Eligible Technologies: Solar, Thermal, Electric, Photovoltaic, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells</p> <p>Standard: 5% in 2006, rising to 10% in 2011</p> <p>Technology Minimum: No</p> <p>Credit Trading: Yes</p> <p>Date Enacted: 12/17/02 Effective Date: 7/1/2003</p> <p>Website: <a href="http://www.nmprc.state.nm.us/utility.htm">http://www.nmprc.state.nm.us/utility.htm</a></p> <p>Authority 1: <u>NM PRC Case No. 3619</u> Authority 2: <u>17.9.572 NMAC</u></p> <p>Summary:</p> <p>This rule requires public utility companies to produce 5% of all energy they generate for New Mexico customers from solar, wind, hydropower, biomass, or geothermal sources by 2006. Generation from renewables must increase by at least 1% per year until the portfolio standard (RPS) of 10% is attained in the year 2011.</p> <p>Utilities document compliance with the RPS with Renewable Energy Certificates (REC), which represent kilowatt hours (kWH) of renewable energy produced.</p> <p>One kWH of electricity generated by wind or hydroelectric technologies is worth one kWH toward compliance with the RPS; One kWH of biomass, geothermal, landfill gas, or fuel cell power is worth two kWH REC; and One kWH of solar power is worth three kWH REC</p> <p>Investor owned utilities and electric cooperatives are required to offer a voluntary renewable energy tariff (green pricing program) for those customers who want the option to purchase additional renewable energy. El Paso Electric has filed an appeal with the state Supreme Court, taking issue with the rule. That case is currently pending with the court.</p> <p>John Curl NM Public Regulation Commission 224 East Palace Ave., Marian Hall Santa Fe, NM 87501 Phone: (505) 827-6960 E-Mail: <a href="mailto:john.curl@state.nm.us">john.curl@state.nm.us</a> Web site: <a href="http://www.nmprc.state.nm.us/">http://www.nmprc.state.nm.us/</a></p>

Program Title	Program Description
Mandatory Utility Green Power Option	<p>Incentive Type: Mandatory Utility Green Power Option</p> <p>Eligible Technologies: Photovoltaic, Landfill Gas, Wind, Biomass, Hydro, Geothermal Electric, Fuel Cells</p> <p>Applicable Sectors: Utilities</p> <p>Date Enacted: 12/17/02</p> <p>Authority 1: <u>17.9.572.10D NMAC</u>            Authority 2: NMPRC Case No. 3619</p> <p>Summary:</p> <p>The New Mexico Public Regulation Commission (NMPRC) has approved a renewable energy rule that requires investor owned utilities and electric cooperatives to offer a voluntary renewable energy tariff (green pricing program) for those customers who want the option to purchase additional renewable energy. These utilities must also develop an educational program on its voluntary renewable energy program. The renewable energy tariffs must be filed with the NMPRC by the end of September 1, 2003.</p> <p>The rule also requires public utility companies to produce 5% of all energy they generate for New Mexico customers from solar, wind, hydropower, biomass, or geothermal sources by 2006. Generation from renewables must increase by at least 1% per year until the renewable portfolio standard (RPS) of 10% is attained in the year 2011.</p> <p>Contact:</p> <p>John Curl            New Mexico Public Regulation Commission            224 East Palace Ave.            Marian Hall            Santa Fe, NM 87501            Phone: (505) 827-6960            E-Mail: <a href="mailto:john.curl@state.nm.us">john.curl@state.nm.us</a>            Web site: <a href="http://www.nmprc.state.nm.us/">http://www.nmprc.state.nm.us/</a></p>

Program Title	Program Description
Net Metering	<p>Incentive Type: Net Metering Rules</p> <p>Applicable Sectors: Commercial, Industrial, Residential</p> <p>Limit on System Size: 10 kW</p> <p>Limit on Overall Enrollment: None</p> <p>Treatment of Net Excess: Avoided cost or credited to the following month</p> <p>Utilities Involved: All utilities</p> <p>Interconnection Stds. for Net Metering? Yes</p> <p>Date Enacted: 1998, amended 1999  Effective Date: 12/31/98  Expiration Date: none</p> <p>Authority 1: <u>17 NMAC 10.571</u>  Authority 2: <u>1998 NM PUC Order 2847</u></p> <p>Summary:</p> <p>The New Mexico Public Regulation Commission (PRC) has issued a rule requiring all utilities regulated by the PRC to offer net metering for cogeneration facilities and small power producers with systems of 10 kW or less. Municipal utilities are exempt because they are not regulated by the PRC. There is no statewide cap on the number of systems eligible for net metering.</p> <p>Net excess electricity generated by a qualifying system must be credited to the customer on the next bill by either (1) crediting or paying the customer for the net energy supplied to the utility at the utility's "energy rate"; or (2) crediting the customer for the net kilowatt-hours of energy supplied to the utility. Unused credits shall be carried forward from month to month. In this case, if a customer leaves the system, utilities must pay the customer for any unused credits at the utility's "energy rate".</p> <p>This rule amended New Mexico's November 30, 1998, net metering ruling, PSC Final Order Case #2847. Under this rule, net excess generation was credited to the customer's next monthly bill with any unused credited granted to the utility at the end of the year.</p> <p>Contact:</p> <p>John Curl  New Mexico Public Regulation Commission  224 East Palace Ave. / Marian Hall  Santa Fe, NM 87501  Phone: (505) 827-6960 E-Mail: <a href="mailto:john.curl@state.nm.us">john.curl@state.nm.us</a>  Web site: <a href="http://www.nmprc.state.nm.us/">http://www.nmprc.state.nm.us/</a></p>



Program Title	Program Description
System Benefits Charge	<p>The <i>Electric Utility Industry Re-structuring Act of 1999</i> [Sections 62-3A-1 to -23, NMSA 1978]</p> <p>Under this Act, retail competition for electricity supplies was scheduled to begin in New Mexico on January 1, 2002.</p> <p>A "System Benefits Charge" of three-hundredths of one cent (\$0.0003) per kilowatt-hour (kWh) of electricity sold is imposed by the Act. The charge rises to six-hundredths of a cent (\$0.0006) per kWh beginning in 2007. Money resulting from this charge on all customers' electric bills will be deposited in a newly established "System Benefits Fund." Currently, this collection began on January 1, 2002. The New Mexico Environment Department (NMED) is to disburse money from the Fund for PRC public education programs (\$500,000 annually); low-income energy assistance (no less than \$500,000 annually); renewable energy for cities, counties and school districts (no more than \$4 million annually); and for renewable energy and transmission lines in low-income areas with little or no electrical service (no more than \$4 million annually). The money in this fund will be used in New Mexico for several "public benefit" purposes:</p> <ol style="list-style-type: none"> <li>1. Consumer education</li> <li>2. Weatherization projects</li> <li>3. Initiation, development, &amp; evaluation of renewable energy projects</li> <li>4. Electric service to unserved and underserved areas</li> </ol> <p><u><a href="http://www.emnrd.state.nm.us/Mining/resrpt/00/5Second.pdf">www.emnrd.state.nm.us/Mining/resrpt/00/5Second.pdf</a></u></p>

Program Title	Program Description
Line Extension	<p>Incentive Type: Line Extension Analysis</p> <p>Eligible Technologies: Photovoltaic</p> <p>Applicable Sectors: Commercial, Residential, Utilities</p> <p>Availability: none</p> <p>Requirements: none</p> <p>Service: Information provided by utility</p> <p>Expiration Date: none</p> <p>Authority 1: NMPUC Case Number 2476</p> <p>Summary:</p> <p>Due to New Mexico Public Utility Commission Case Number 2476, electric utilities in the state are required to provide information on alternative energy systems to remote customers with less than a 25-kW load who request line extensions. This requirement applies when the cost of the requested line extension is greater than 15 times the estimated annual revenue from the line extension. In such cases, utilities must provide customers with information on suppliers of alternative energy systems.</p> <p>Contact:</p> <p>John Curl  New Mexico Public Regulation Commission  224 East Palace Ave.  Marian Hall  Santa Fe, NM 87501  Phone: (505) 827-6960  E-Mail: <a href="mailto:john.curl@state.nm.us">john.curl@state.nm.us</a>  Web site: <a href="http://www.nmprc.state.nm.us/">http://www.nmprc.state.nm.us/</a></p>

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**Table 14: Financial Incentives to Promote Renewable Energy**

Program Title	Program Description
<p>New Mexico Renewable Energy Production Tax Credit</p>	<p>Incentive Type: Corporate Tax Credit</p> <p>Eligible Technologies: Solar; Thermal, Electric, Photovoltaic, Wind, Biomass</p> <p>Applicable Sectors: Commercial, Industrial</p> <p>Amount: 1 cent/kWh</p> <p>Max. Limit: First 400,000 MWh</p> <p>Terms: Eligible for 10 consecutive years</p> <p>Date Enacted: 3/4/02 Effective Date: 7/1/02</p> <p>Website: <a href="http://www.state.nm.us/tax/forms/year02/rpd41227.pdf">http://www.state.nm.us/tax/forms/year02/rpd41227.pdf</a></p> <p>Authority 1: New Mexico Statutes Annotated, Section 7-2A-19. Authority 2: 3.13.19 NMAC</p> <p>Summary: This tax incentive was enacted into law during the 2002 New Mexico Legislative Session. It originally provided a tax incentive in the amount of one cent (\$0.01) per kilowatt-hour for each kilowatt-hour of electricity generated from solar or wind energy resources. The credit is applied against a company's state income tax liability. Qualifying facilities had to be at least 20 megawatts in size, with the credit available up to a maximum of 400,000 megawatt-hours per year per company or 800,000 megawatt-hours per year in the aggregate for all companies. The statute was amended in 2003 to include biomass as a qualifying form of source material. Other amendments included lowering the minimum megawatt limit for qualifying projects from 20MW to 10MW to allow smaller wind, solar and biomass projects to qualify; and increasing the total amount of the credit available each year from 800,000 megawatt-hours to 2,000,000 megawatt-hours.</p> <p>Contact: Harold Trujillo NM Energy, Minerals &amp; Natural Resources Dept Energy Conservation and Management Division P.O. Box 1948 / 1220 South Saint Francis Drive Santa Fe, NM 87504 Phone: (505) 827-7804 Fax: (505) 827-3903 E-Mail: <a href="mailto:hjtrujillo@state.nm.us">hjtrujillo@state.nm.us</a> Web site: <a href="http://www.emnrd.state.nm.us/ecmd">http://www.emnrd.state.nm.us/ecmd</a></p>

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Industrial Revenue Bond (IRB) Financing	Statutory/Regulatory Citation: New Mexico Statutes Annotated: NM Industrial Revenue Bond Act (Section 3-32-1 <i>et seq.</i> ); and County Industrial Revenue Bond Act (Section 4-59-1 <i>et seq.</i> ) [ <a href="http://www.legis.state.nm.us">http://www.legis.state.nm.us</a> ]	Description: The cited laws provide that any county or municipality may issue Industrial Revenue Bonds (IRBs) for the purpose of financing electric generating plants, including those fueled by renewable resources. The significance of IRB financing is the associated tax advantages.
Gross Receipts Tax Exemption for Wind Equipment	Statutory/Regulatory Citation: New Mexico Statutes Annotated, Section 7-9-54.3 [ <a href="http://www.legis.state.nm.us">http://www.legis.state.nm.us</a> ];	Description: This law provides wind developers an exemption from the gross receipts tax for certain wind equipment, including nacelles and rotors, <i>provided</i> the project is financed with Industrial Revenue Bonds (Section 7-9-54.3 NMSA 1978).

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**Table 15: Programs to Promote Renewable Energy**

Policy Program Title	Program Description
State Energy Program	<p><b>State Energy Program</b></p> <p>The State Energy Office administers the U.S. DOE State Energy Program grant and implements program goals to encourage energy efficiency and renewable-energy usage, provide energy education and community outreach, offer policy advise to the Executive and Legislative branches, and help New Mexico citizens reduce their utility bills and improve their comfort and safety.</p> <p>The Energy Office is funded through a combination of federal funds and Petroleum Violation Escrow funds.</p> <p>Director: Chris Wentz (505) 476-3312 <a href="http://www.emnrd.state.nm.us">http://www.emnrd.state.nm.us</a></p> <p><b>Special Projects</b></p> <p>The State Energy Office administers the State Energy Program – Special Project Grants. Each year states submit proposals in response to a DOE solicitation identifying how specific technologies could be implemented in their region of the country. DOE then selects the projects that best meet national energy goals. The Energy Office publicizes grant availability, helps prepare grant applications, selects partners for project implementation and administers grants.</p>

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Policy Program Title	Program Description
Solar Development and Use	<p><b>New Mexico Million Solar Roofs Partnership</b></p> <p>Incentive Type: Outreach Program</p> <p>Eligible Technologies: Solar Water Heat, Active Solar Space Heat, Photovoltaic, Solar Pool Heating Systems</p> <p>Applicable Sectors: Commercial, Industrial, Residential, General Public, Nonprofit, Schools, Local Government, Utilities, State Government, Tribal Government</p> <p>Goal: Install 600 solar systems in New Mexico, and one million nationwide by the year 2010</p> <p>Date Enacted: 1997</p> <p>Website: <a href="http://www.emnrd.state.nm.us/ecmd/html/solar.htm">http://www.emnrd.state.nm.us/ecmd/html/solar.htm</a></p> <p>Summary:</p> <p>The Energy Conservation and Management Division of the New Mexico Energy, Minerals and Natural Resources Department lead the New Mexico Million Solar Roofs Initiative (MSRI). The U.S. DOE, through its Regional Offices, focuses its efforts on national, state and local partnerships. These partnerships are made up of the building industry, other federal agencies, local and state governments, utilities, energy service providers, the solar energy industry, financial institutions, and non-governmental organizations. The goal is to remove market barriers to solar energy use, develop, and strengthen local demand for solar energy products and applications.</p> <p>Contact:</p> <p>Michael McDiarmid, P.E.  NM Energy, Minerals &amp; Natural Resources Dept  Energy Conservation and Management Division  1220 South Saint Francis Drive  Santa Fe, NM 87505  Phone: (505) 476-3319 Fax: (505) 476-3322  E-Mail: <a href="mailto:mmcdiarmid@state.nm.us">mmcdiarmid@state.nm.us</a></p> <p><b>Schools with Sol Solar Demonstration</b></p> <p>The Schools with Sol program is managed by ECMD to implement one of Governor Richardson's conservation agenda goals, which is to provide solar power to 10 schools each year. Solar energy systems will be installed at New Mexico schools, competitively selected, to be used as demonstrations in renewable energy education for K-12 students, as well as reduce energy consumption. Both photovoltaic and solar domestic water heating systems will be used. A teacher at each participating school will "champion" their system</p>

Policy Program Title	Program Description
	<p>through educational activities in renewable energy. System installers will be selected from statewide price agreements. ECMD is using \$100,000 in federal funds to implement the current FY2004 cycle of 10 school installations, with an additional \$18,000 provided by Public Service Company of New Mexico and in-kind contributions provided by participating schools.</p> <p><b>Solar Rights Act of 1978</b>  Incentive Type: Solar Access Law/Guideline</p> <p>Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Active Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics</p> <p>Applicable Sectors: Commercial, Industrial, Residential</p> <p>Easement: Yes</p> <p>Covenant: No</p> <p>Zoning/Development: Yes</p> <p>Date Enacted: 1/1/78  Expiration Date: none</p> <p>Authority 1: New Mexico Code 47-3-1 -- 47-3-11</p> <p>Summary:  New Mexico's Solar Rights Act of 1978 allows property owners to create solar easements for the purpose of protecting and maintaining proper access to sunlight. The New Mexico Energy Conservation and Management Division reports that three to five solar easements are granted each year. The Solar Rights Act also includes provisions allowing local governments to create their own ordinances or zoning rules pertaining to the protection of solar rights.</p> <p>Contact:  Harold Trujillo  New Mexico Energy, Minerals and Natural Resources Department  Energy Conservation and Management Division  P.O. Box 1948  1220 South Saint Francis Drive  Santa Fe, NM 87504  Phone: (505) 827-7804  Fax: (505) 827-3903  E-Mail: <a href="mailto:hjtrujillo@state.nm.us">hjtrujillo@state.nm.us</a>  Web site: <a href="http://www.emnrd.state.nm.us/ecmd">http://www.emnrd.state.nm.us/ecmd</a></p>

Policy Program Title	Program Description
	<p><b>Solar Recordation Act</b>  Authority 1: New Mexico Code 47-3-6 to -12 [<a href="http://www.legis.state.nm.us">http://www.legis.state.nm.us</a>]</p> <p>Description:  The Solar Recordation Act declares that solar energy is a viable energy source in New Mexico and, as such, its development should be encouraged. The purpose of the Act is to accomplish such encouragement through the protection of solar rights necessary for small-scale installations. A solar right is considered an “easement appurtenant” and may be claimed by an owner of real property upon which a solar collector has been placed. The solar right is claimed and recorded by filing a declaration with the county clerk of the applicable county where the property is located; a sample declaration is included in the statute as are provisions for notification of affected property owners. The statute also provides for the transfer of solar rights when a property changes ownership.</p> <p><b>Solar Energy Development Act</b>  Authority 1: New Mexico Code 71-6-1 to -3 [<a href="http://www.legis.state.nm.us">http://www.legis.state.nm.us</a>]</p> <p>Description:  The purpose of Solar Energy Development Act is to promote development and use of solar energy in New Mexico, by both industry and government, for the benefit of New Mexico and United States citizens. It is proposed to accomplish this purpose through active measures to encourage the location within New Mexico of research to discover practical and feasible methods to harness solar energy, as well as development of a vigorous and productive solar energy industrial complex. The New Mexico Economic Development Department is charged with various responsibilities under the Act, including establishment and operation of a program to encourage investment in the research and application of solar energy within New Mexico; development of necessary promotional material to be used in the process of attracting new investment capital within the solar energy field; employing sufficient staff to carry out the purpose of this law; and cooperation with private firms and all agencies of the state and federal government in furthering research and investment in solar energy use in New Mexico.</p> <p><b>Solar Collector Standards Act</b>  Authority 1: New Mexico Code 71-6-4 to -10 [<a href="http://www.legis.state.nm.us">http://www.legis.state.nm.us</a>]</p> <p>Description:  <a href="#">The purpose of the Solar Collector Standards Act is</a> To develop and implement a program to promote solar industry and stimulate a demand for high quality solar components and systems. The New Mexico Energy, Minerals and Natural Resources (EMNRD) is charged with the responsibility under the Act to promulgate regulations to define minimum standards for the durability and reliability of solar collectors; and to establish criteria for testing the durability, reliability and thermal efficiency of solar collectors. The Department is also authorized to develop and implement a solar collector certification program. EMNRD promulgated appropriate regulations and implemented the specified</p>



Policy Program Title	Program Description
	certification program in the mid-1980s until the expiration of federal and state solar tax credits.

Program Title	Program Description
<p>Biomass Development and Use Program</p>	<p><b>Western Regional Biomass Program</b></p> <p>Biomass Industry Development Working Group</p> <p>The Energy, Minerals and Natural Resources Department is serving as the convener of a Biomass Industry Development Work Group in New Mexico. The purpose of this group is to develop a coordination process to encourage and assist in the development of a viable biomass industry in New Mexico, resulting in improved forest health and increased use of domestic biomass resources to stimulate economic development. This process will include assessing opportunities, current projects, end products (biofuels, biopower and bioproducts), supply, technologies, incentives, barriers, funding and economics.</p>
<p>Wind Development and Use Program</p>	<p><b>Wind Powering America Program</b></p> <p>NM Wind Energy Working Group</p> <p>The New Mexico Wind Energy Working Group was established in December 2000. It is an informal organization of representatives from both the public and private sectors, including wind developers, related businesses, federal/state/tribal/local governments, national laboratories, electric utilities, universities, and renewable energy advocates. Approximately 80 individuals are now included on the NM Wind Working Group e-mail address list. The Energy Conservation and Management Division of the New Mexico Energy, Minerals and Natural Resources Department coordinates the group, with assistance from Sandia National Laboratories-Albuquerque and the U.S. DOE's <i>Wind Powering America</i> program.</p> <p>A primary role of the Working Group is to function as a stakeholder organization that can act and speak collectively on behalf of geothermal interests operating in New Mexico. Key tasks and activities of the NM Wind Energy Working Group are: serve as a forum for networking, communications and coordination among wind stakeholders; acquisition and dissemination of information about existing wind resources, their development and use in electric generation; identification and delineation of the issues that impede expansion of wind applications; and removal of barriers to geothermal advancement.</p> <p><b>New Mexico Wind Energy Center</b></p> <p>PNM and FPL Energy in October 2002 announced an agreement to develop the New Mexico Wind Energy Center, to be built in eastern New Mexico. Power produced at the energy center in eastern New Mexico will flow onto the PNM-owned electric grid. PNM has introduced a "green tariff," subject to approval by state regulators <del>that</del> <u>which</u> would allow customers to sign up for and support energy from this renewable project through payment of a small monthly premium. To the extent customers subscribe to the program, PNM will direct that amount of energy toward meeting local (jurisdictional) needs. PNM will seek to sell the remainder of</p>

the power on the wholesale market, either within or outside of New Mexico. PNM's involvement with the New Mexico Wind Energy Center represents the largest private-sector investment in renewable energy in New Mexico history. PNM hopes to use residential and business participation in the voluntary green tariff program as a way to gauge support for these kinds of projects. PNM will use this information to guide any renewable projects it may undertake in the future. Three factors — improvements in wind technology, the scale of this project and the existence of both federal and state tax credits — make power from the New Mexico Wind Energy Center more cost-effective than power from other renewable energy sources currently available. The addition of energy from the New Mexico Wind Energy Center will change PNM's generation portfolio. Wind will comprise 8 % of PNM's overall generation capacity, which is the portfolio's peak potential output. However, because of the intermittent nature of wind, the facility is expected to comprise about 4 % of the energy actually produced by or for PNM over the course of a given year. (From "New Mexico Wind Energy Center" prepared by Public Service Company of New Mexico <http://www.pnm.com/systems/nmwec.htm> )

**ConservationSmart from Xcel EnergySM - Windsource®**

Incentive Type: Green Pricing Program

Eligible Technologies: Wind

Applicable Sectors: Commercial, Industrial, Residential, Xcel Energy electric customers

Premium: \$3.00 per block per month, 1 block = 100 kWh

Commitment: 1 year residential; 3 years commercial

Effective Date: 1999

Website: [http://www.xcelenergy.com/XLWEB/CDA/0,2795,1-1-2\\_735\\_777-221-2\\_68\\_132-0,00.html](http://www.xcelenergy.com/XLWEB/CDA/0,2795,1-1-2_735_777-221-2_68_132-0,00.html)

**Summary:**

Conservation Smart from Xcel EnergySM supports the Windsource® program in Colorado, Minnesota and New Mexico. All residential, commercial and industrial electric customers are invited to participate in this program, which supports grid-connected wind turbines. Residential customers can sign up for one year periods and buy wind energy at \$3.00/month for 100 kWh blocks; commercial customers can sign up for three year periods and either choose the "Leader" plan, buying all their energy from renewable resources, or the "Supporter" plan, buying in blocks similar to residential customers. Xcel Energy has used bill inserts and media events to market Windsource® and is working with environmental groups to further promote the program.

To sign up for Windsource®, call 1-800-824-1688 or download, print

	<p>and mail in the sign-up form from the <u>Windsorce®</u> website.</p> <p>Contact:          Andy Sulkko          Xcel Energy -Marketing Division          1225 17th Street, Suite 1100          Denver, CO 80202-5533          Phone: (303) 294-2554          E-Mail: <a href="mailto:andy.sulkko@xcelenergy.com">andy.sulkko@xcelenergy.com</a>          Web site: <a href="http://www.xcelenergy.com/XLWEB/CDA/">http://www.xcelenergy.com/XLWEB/CDA/</a></p>
<p>Hydrogen Development and Use Program</p>	<p><b>Hydrogen Technology Partnership (HyTep)</b></p> <p>The Energy Conservation and Management Division is administering the U.S. DOE Industries of the Future (IOF) program in New Mexico. The Industries of the Future program seeks to bring together industry, academia, and state agencies to address industrial energy efficiency and pollution prevention. These public-private coalitions facilitate industry solutions locally and enhance economic development. New Mexico is currently focusing on the mining and forest products industry because of their high energy use, opportunities for pollution prevention and important role in New Mexico's economic development</p>

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**Table 16: Policy Mechanisms to Promote Energy Efficiency/Energy Conservation**

Policy Program Title	Program Description
Governor's Executive Order: Resource Efficiency in State Government	<p>Since 1992 New Mexico State Government has been directed through Executive orders to reduce energy consumption and costs in state buildings. To accomplish the directive the State Energy Office has provided technical assistance, financial assistance grants, and worked with state agencies to develop and implement energy plans. New Executive Order currently being developed.</p>
Public Facility Energy Efficiency and Water Conservation Act	<p>New Mexico Statutes Annotated, Sections 6-23-1 to-10 [<a href="http://www.legis.state.nm.us">http://www.legis.state.nm.us</a>]</p> <p>This legislation allows state agencies, school districts, and universities to enter into 'Performance contracts' whereby private sector energy service companies provide the up-front costs of energy saving measures (such as installation of more efficient lighting, motors, and heating systems) and guarantee energy savings to recoup their investment through the utility cost savings over the period of up to 10 years. By statute, the State Energy Office is responsible for review of the proposed contracts to ensure that savings estimates are accurate and reasonable prior to agencies entering into performance contracts.</p>
Green Purchasing: Energy Star Partnership	<p>New Mexico is working with the U.S. DOE and the Environmental Protection Agency to become a partner in the Energy Star Program to promote the benefits of energy efficient homes, buildings, and products. According to <i>Energy Star</i> Program if all available opportunities for energy efficiency improvements were taken advantage of more than \$229 million would be saved annually and 2.5 billion pounds of CO<sub>2</sub>, 6 million pounds of NO<sub>x</sub>, and 5.7 million pounds of SO<sub>2</sub> would be prevented each year in New Mexico.</p>

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**Table 17: Programs to Promote Energy Efficiency/Energy Conservation**

Policy Program Title	Program Description
State Government Energy Management Program	<p><b>Electric/Gas Utility Database</b>            Professional engineering staff with the State Energy Office maintains a utility database that tracks utility usage by state agencies. 30 utility companies provide the data across the state. The database is the sole centralized repository for information on the State’s \$13 million building energy expenditures.            Energy Performance Contracting</p>
Public Schools Energy Efficiency Program	<p><b>Construction Plan Review</b>            Professional energy engineers within the State Energy office continue to work with school districts throughout New Mexico in an effort to improve their facilities’ energy efficiency. Under an agreement with the State Department of Education the construction plans are reviewed to ensure compliance with applicable building energy codes.            Energy Performance Contracting            New Mexico school districts utilize “performance contracts” to implement energy efficiency projects in school buildings that are paid from guaranteed energy savings. Private-sector energy service companies provide the up-front investment and installation of the energy efficient measures</p>
Public Schools Energy Efficiency Program	<p><b>Construction Plan Review</b>            Professional energy engineers within the State Energy office continue to work with school districts throughout New Mexico in an effort to improve their facilities’ energy efficiency. Under an agreement with the State Department of Education the construction plans are reviewed to ensure compliance with applicable building energy codes.            Energy Performance Contracting            New Mexico school districts utilize “performance contracts” to implement energy efficiency projects in school buildings that are paid from guaranteed energy savings. Private-sector energy service companies provide the up-front investment and installation of the energy efficient measures</p>
Commercial and Industrial Sector Energy Efficiency Program	<p><b>Building America Program</b>  <b>Building Energy Codes/Standards</b>            The State Energy office has participated in several code technical advisory group meetings, provided graphical comparisons between old and new code requirements, and has been working with the Construction Industries Commission (CIC) to upgrade New Mexico’s residential and commercial building energy codes. Currently Energy Office efforts on codes are being concentrated in the areas of 1) codes adoption, and 2) training provided to the building industry designed to help insure that structures designed to code will be more energy efficient            Current Residential Energy Code: 1992 MEC with state amendments, mandatory statewide.            Current Commercial Energy Code: ASHRAE 90A-1980 and 90B-1975, mandatory statewide; ASHRAE/IESNA 90.1-1989 mandatory for state-</p>

Policy Program Title	Program Description
	<p>funded buildings. Code Change: Most recent code update effective 10/1/1994. (<a href="http://www.bcap-energy.org/backissues.html">http://www.bcap-energy.org/backissues.html</a> )</p> <p><b>Green Zia Environmental Excellence Program</b> The Green Zia Environmental Excellence program is a voluntary program designed to support and assist all New Mexico businesses to achieve environmental excellence through continuous improvement and effective energy management. The program encourages integration of environmental excellence into business operations and management practices through establishment of a prevention-based environmental management system. The Governor of New Mexico recognizes and presents awards annually to organizations that successfully participate in the program.</p> <p><b>Rebuild America/Rebuild NM Program</b> Lead Organization: Rebuild New Mexico/NM Energy, Minerals and Natural Resources Department (NM EMNRD) The City of Albuquerque joined Rebuild America in 1998. By 1999, this partnership had morphed into the larger Rebuild Central New Mexico. IRS designated Rebuild Central N.M. with 501(c)3 status in 2002. Rebuild NM supports reducing energy costs, water consumption and pollution to save energy, boost the economy and support national security. Partners include businesses, local governments, schools, and community and professional organizations Rebuild Central New Mexico received two DOE grants for FY 2002: 1. Promote updated Codes and Standards to the construction industry, including architectural surety and energy efficiency; 2. Provide broad educational programs, partner development and workshops on energy efficiency. Administration's energy goals include: generation of 10% of the State's energy from renewables, becoming one of the top three wind producing states by the end of 2006, expanding net metering, achieving increased energy savings in state buildings and putting clean, fuel efficient vehicles on the roads. Albuquerque Public Schools—saved 489,617 KWh and \$36,971 compared to the 2000-01 school year due to behavior changes in the use of energy by students, teachers and staff. In the 1st quarter of 2002-2003, 31 participating schools have saved 1,096,126 KWh and \$82,594 compared to 2000-2001. The City of Albuquerque's recently enacted 1% of the Capital Program for Energy Conservation Projects, and is a national milestone. Albuquerque Housing Authority is implementing Performance Contracting as a financing option to save energy and costs long term. Rebuild NM received Rebuild America's Energy Champion Award for Commercial Buildings in 2002 for its audit work. Efforts are currently underway to follow up these audits with implementation plans and strategies, which will provide more insight regarding retrofit and cost savings. ( <a href="http://www.rebuild.org/news/newsdetail.asp?NewsID=1583">http://www.rebuild.org/news/newsdetail.asp?NewsID=1583</a> )</p>

Policy Program Title	Program Description
	<p>Julie Stephens, Coordinator Partnership Main Contact Rebuild Central New Mexico 1801 Fourth Street NW - Bldg. B Albuquerque, NM 87102 Phone: (505) 768-5346 Fax: 505 768-5317 E-Mail: <a href="mailto:info@rebuildnewmexico.org">info@rebuildnewmexico.org</a>; <a href="mailto:rebuildnmjulie@aol.com">rebuildnmjulie@aol.com</a></p> <p><a href="http://www.rebuild.org/sectors/communitylocal_state.asp?OrganizationID=83">http://www.rebuild.org/sectors/communitylocal_state.asp?OrganizationID=83</a></p> <p><b>Industries of the Future Program</b> The US DOE Program seeks to broaden the impact of investments in advanced industrial technologies and practices for energy efficiency and waste reduction through implementation of nationally developed IOF vision and technology roadmaps. New Mexico is currently conducting inventories of energy use and pollution prevention within the mining and forest industries in the state and will be working on a sustainability plan.</p>
Residential Sector Energy Efficiency Program	<p><b>Weatherization Assistance Program</b> The New Mexico Mortgage Finance Authority through an Agreement with the State of New Mexico administers New Mexico's Weatherization Assistance Program (federal and private funds), low-income, weatherization program The primary mission of this program is to reduce the energy required for space heating and cooling for income eligible households applying for assistance through the process sub-grantees, statewide. This program receives its primary funding from the U.S. DOE and the U.S. Department of Health and Human Services. The program also leverages additional funds through partnership with utilities, and other federal and state housing programs. Many aspects of the Residential Training and Technical Assistance Programs are now incorporated into the training of Weatherization sub-grantees, which assures that savings are maximized.</p> <p><b>Low-Income Home Energy Assistance Program (LIHEAP )</b> LIHEAP is a Federally-funded program that helps low-income households with their home energy bills. LIHEAP assists low-income households in meeting the costs of heating and cooling their homes. States, Tribes and Insular areas, which assist low-income households with high-energy burdens and vulnerable members may apply for LIHEAP block grant funds. LIHEAP benefits include heating or cooling assistance; energy crisis interventions to cope with weather-related and supply-shortage home energy emergencies; low-cost residential weatherization and other energy-related home repairs to assist in safely increasing the efficiency of home energy consumption. The Office of Community Services administers this program. Hub activities are limited to referral services and general information dissemination activities regarding grant opportunities</p>



Policy Program Title	Program Description
	<p>and announcements  Lori Williams, LIHEAP Program Mgr  Income Support Division  Community Development &amp; Commodities Bureau  New Mexico Human Services Department  5301 Central NE, Suite 1520  Albuquerque, New Mexico 87108  TEL: (505) 841-6535 (Albuquerque area) or 1-800-283-4465 (statewide)  FAX: (505) 841-6522  E-MAIL: <a href="mailto:Loretta.Williams@state.nm.us">Loretta.Williams@state.nm.us</a>  <a href="http://www.state.nm.us/hsd/isd.html">www.state.nm.us/hsd/isd.html</a></p> <p><b>Paisano-Weatherization Program</b>  6729 4<sup>th</sup> St. NW  Albuquerque, NM  Phone (505) 344-7211  Weatherization program for low-income residents of Bernalillo, Sandoval, Torrance and Valencia Counties.</p> <p><b>High-Efficiency Washing Machine Program</b>  Sponsor: City of Albuquerque  Energy Star Platform: No  Service Territory: 480,000 residents of Albuquerque and Bernalillo County, New Mexico  Goals &amp; Objectives: To encourage utility customers to buy high-efficiency machines and to help bring down the cost of the machines by increasing the volume of sales. The program goal for 2002 is to provide 1,100 credits.  Program Description: The City of Albuquerque provides a credit on the water bills of customers who purchase a CEE-qualified washer.  Incentives: Clothes Washers: \$100 credit on water bills for CEE-qualified clothes washers.  Field Support: City of Albuquerque provides rebate information and forms to participating retailers.  Marketing: bill inserts, and newspaper articles.  Budget: FY2002 \$110,000</p> <p>Further Information: Jean Witherspoon 505-768-3633 <a href="mailto:jasw@cabq.gov">jasw@cabq.gov</a>  <a href="http://www.cee1.org/resid/seha/02seha-progsum.pdf">www.cee1.org/resid/seha/02seha-progsum.pdf</a></p>

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**Table 18: Summary of Renewable Energy Generation Capacity and Production in Use or Planned as of 2002 in Bernalillo County**

Categories	Year 2002 (kW)	Existing & Planned as of 2002 (kW)	Total kWh in 2002
Solar	6.6	6.6	6.6
BioGas	2200	2200	2200
<b>TOTAL</b>	<b>2206.6</b>	<b>2206.6</b>	<b>2206.6</b>

(From *Custom Report: Plant Name, Utility, City, Year Operational, Operational Status, Unit Number, and Capacity (kW) by State, Technology, and Fuel*, prepared by Renewable Electric Plant Information System (REPIS), Office of Energy Efficiency & Renewable Energy, U.S. Department of Energy. [http://analysis.nrel.gov/repis/online\\_reports.asp](http://analysis.nrel.gov/repis/online_reports.asp) and *Operating Facilities by Technology in the State of New Mexico*, prepared by the Energy Efficiency and Renewable Energy program of DOE [http://www.eere.energy.gov/state\\_energy/opfacbytech.cfm?state=NM](http://www.eere.energy.gov/state_energy/opfacbytech.cfm?state=NM))

**Table 19: Total Energy Generation Capacity and Production in Bernalillo County.**

Operator	Plant Name	Fuel	MW	Percent Of Total That Is Renewable
<b>PNM</b>	Reeves Station	Natural gas	154	0
<b>Delta Power LLC</b>	Delta-Person Generating Station	Natural gas	132	0
<b>TOTAL</b>			<b>286 MW</b>	<b>0</b>

After "Power Plants" prepared by Public Service Company of New Mexico (PNM). <http://www.pnm.com/systems/plants.htm>

**[C] (b) Summary of the Anticipated Contribution Toward the Renewable Energy Goals for 2005 and 2015.**

Pursuant to 40 CFR 51.309(d)(8)(i), Appendix O-O summarizes the State's anticipated contribution toward meeting the GCVTC renewable energy goals for 2005 and 2015. See also Section H of this chapter. Bernalillo County's anticipated contribution toward meeting the GCVTC renewable energy goals for 2005 and 2015 is negligible.

**D) (c) Incentive Programs:**

Pursuant to 40 CFR 51.309(d)(8)(ii), Table 19 [below] identifies incentive programs in the State of New Mexico that reward efforts to go beyond compliance and/or achieve early compliance with air pollution related requirements and subsequently affect Albuquerque/ Bernalillo County.

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2  
3

**Table 20: Summary of New Mexico’s Incentive Programs that Affect Bernalillo County**

Program Title	Program Description
<p><b>Green Zia Environmental Excellence Program</b></p>	<p>The Green Zia Environmental Excellence Program is a voluntary program designed to support and assist all New Mexico businesses to achieve environmental excellence through continuous improvement and effective energy management. The program encourages integration of environmental excellence into business operations and management practices through the establishment of a prevention-based environmental management system. The Governor of New Mexico makes recognitions and awards annually to organizations that successfully participate in the program.</p> <p>The Six Core Values of the Green Zia Environmental Excellence Program are:</p> <ul style="list-style-type: none"> <li>•Leadership Commitment</li> <li>•Efficient Product, Service and Process Design</li> <li>•Continuous Improvement and Organizational and Personal Learning</li> <li>•Valuing Employees and Partners</li> <li>•Management by Fact</li> <li>•Sustainability</li> </ul> <p>New Mexico Environment Department Office of the Secretary Dave Wunker PO Box 26110 1190 St. Francis Drive Santa Fe, NM 87502 (505) 827-0677 (505) 827-2836 <a href="mailto:davewunker@nmenv.state.nm.us">davewunker@nmenv.state.nm.us</a></p>

4

Program Title	Program Description
<p><b>Industry and Government Partnership Pollution Prevention (P<sup>2</sup>) Awards</b></p>	<p>In 1997, the Albuquerque Environmental Health Department's Air Quality Division and New Mexico Facility Managers' Network (NMFMN) initiated the Industry and Government Partnership Pollution Prevention (P<sup>2</sup>) Awards to recognize industrial pollution prevention efforts. The goals of this partnership are to promote P<sup>2</sup>, encourage the exchange of technical and managerial methods, and to facilitate innovative solutions to environmental impacts to air, water and land pollution.</p> <p>Joint Industry and Government Pollution Prevention Award Year 2001 Innovative Air P<sup>2</sup> Awarded to: Coronado Center-Randy Sanchez. Coronado Center supports local efforts to minimize air pollution in the community by providing park and ride programs for the New Mexico State Fair, International Balloon Fiesta and other events to significantly reduce the amount of pollution from motor vehicles. During the winter holiday season, Coronado Center initiates the "Carpool Corral" by</p>

	<p>reserving 40 parking spaces for multi- occupant vehicles. The seasonal pollution reduction for the six week winter holiday season in calendar year 2000 was approximately 1.14 tons of carbon monoxide. These initiatives help to sustain air quality during the Winter Pollution Advisory Season, conserve energy and support the local economy.</p> <p>Joint Industry and Government Pollution Prevention Award Year 2001 Large Business Air Quality P<sup>2</sup> Award presented to: DOE Sandia National Laboratories / NM Michael duMond</p> <p>In 1997, The DOE / Sandia National Laboratories (SNL) initiated a study to improve operation of the Steam Plant that provides steam to energy services for Technical Area One and East Kirtland Air Force Base. The goal of the project was three-fold: maximize combustion efficiency, and reduce fuel usage and nitrogen oxides (NOx) emissions. The 2001 construction phase involved, retrofit of flue gas recirculation on boilers to complete the Steam Plant Optimization and Emission Reduction Project. The direct result of the initiatives is an increase in 1.5 percent efficiency and a total NOx reduction of 2.3 tons per year, with an additional 39.8 tons per year NOx reduction from the flue gas recirculation. The program also sustains a cost savings for natural gas consumption of over \$46,000 per year.</p> <p>Joint Industry and Government Pollution Prevention Award Year 2001 Small-Medium Business Air P<sup>2</sup> Award presented to: Rust Tractor T.J. Carr</p> <p>Rust Tractor is a local supplier of heavy equipment, including gas and diesel powered generators and boilers. Air Quality Division staff nominated Rust Tractor because of their long-term commitment to Bernalillo County air quality. In 1994, Rust Tractor's engineering staff initiated a policy to provide air quality registration documentation with all applicable equipment. This policy may not directly reduce carbon monoxide emissions, but educates their customers on the appropriate operation of generators or boilers. The service provides a streamlined purchase and registration process, saving time and money for the customer and assisting local air quality representatives in efficient permit processing</p> <p><a href="http://www.nmfmn.com/Pages/Prc/Awards/2001_awards.htm#Top">http://www.nmfmn.com/Pages/Prc/Awards/2001_awards.htm#Top</a></p>
<p><b>Supplemental Environmental Project (SEP) Authority</b></p>	<p>The Albuquerque Bernalillo County Air Quality Control Board through the Department can utilize supplemental environmental projects in enforcement cases for pollution prevention projects.</p>

1

1 ~~[E]~~ **(d) Programs that Preserve and Expand Energy Conservation Efforts:**

2  
3 Pursuant to 40 CFR 51.309(d)(8)(iii), Tables ~~[42-46]~~ 13 through 17 identify programs in New  
4 Mexico that preserve and expand energy conservation efforts which have a direct effect on  
5 Bernalillo County.

6  
7 ~~[F]~~ **(e) Potential for Renewable Energy:**

8  
9 Pursuant to 40 CFR 51.309(d)(8)(iv), the State of New Mexico has made an assessment of  
10 areas where there is the potential for renewable energy to supply power in a cost-effective  
11 manner. This assessment is described in Appendix O-O.

12  
13 ~~[G]~~ **(f) Projections of Renewable Energy Goals, Energy Efficiency and Pollution  
14 Prevention Activities:**

15  
16 Pursuant to 40 CFR 51.309(d)(8)(v), the WRAP has made regional projections ~~[have been  
17 made by the WRAP]~~ of the short and long term emissions reductions, visibility improvements,  
18 cost savings, and secondary benefits associated with “renewable energy goals, energy  
19 efficiency and pollution prevention activities”. A complete description of these projections is  
20 provided in Appendix O-O of this Implementation Plan. Projections of visibility improvements  
21 for the 16 Class I Areas on the Colorado Plateau are provided in Table 2a and Table 2b ~~[(see  
22 Chapter 4).]~~

23  
24 These projections include the combined effects of all measures in this SIP, including air  
25 pollution prevention programs. Although emission reductions and visibility improvements  
26 from air pollution prevention programs are expected at some level, they were not explicitly  
27 calculated because the resolution of the regional air quality modeling system is not currently  
28 sufficient to show any significant visibility changes resulting from the marginal nitrogen oxide  
29 emission reductions described above for air pollution prevention programs.

30  
31 ~~[H]~~ **(g) Demonstration of Progress in Achieving the GCVTC Renewable Energy Goal:**

32  
33 Pursuant to 40 CFR 51.309(d)(8)(vi), Appendix O-O and Tables 13 through 17 of this  
34 Implementation plan list the programs relied upon by the State of New Mexico to  
35 demonstrate progress in achieving the renewable energy goal of the GCVTC—that  
36 renewable energy comprise 10 percent of the regional power needs by 2005 and 20 percent  
37 by 2015. Appendix O-O provides additional information on how these programs are meeting  
38 the 10/20 goals, and a discussion of a regional modeling analysis showing progress in  
39 meeting these goals. Appendix O-O includes documentation of the potential for renewable  
40 energy resources, the percentage of renewable energy associated with new power  
41 generation projects implemented or planned, and the renewable energy generation capacity  
42 and production in use and planned in the state. Note that Bernalillo County is included in this  
43 documentation.

44  
45 ~~[I]~~ **(h) Future Progress Reports:**

46  
47 Pursuant to 40 CFR 51.309(d)(8)(vi), the ~~[AQCB]~~ Department shall submit progress reports  
48 in ~~[2008,]~~ 2013, and 2018, describing ~~[their]~~ Bernalillo County's share of New Mexico's  
49 contribution toward meeting the GCVTC renewable energy goals. This description shall be  
50 consistent with Section ~~[H]~~ (g) above. To the extent that it is not feasible for Bernalillo  
51 County to meet its contribution to these goals, the ~~[AQCB]~~ Department shall identify what

1 measures were implemented to achieve its contribution, and explain why meeting [its]  
2 Bernalillo County's contribution was not feasible.

3  
4  
5 **[XI.] SECTION H. IMPLEMENTATION OF ADDITIONAL RECOMMENDATIONS**

6 **[A) Introduction & Requirements:]**

7  
8  
9 Section 51.309(d)(9) of the Regional Haze Rule (RHR) requires states to evaluate the  
10 additional Grand Canyon Visibility Transport Commission (GCVTC) recommendations,  
11 ~~[States must]~~ and determine if any of these recommendations, which were not originally  
12 included in Section 309, are practical in their particular states and therefore should still be  
13 addressed. Page 35755 of the Preamble to the Regional Haze Rule (RHR) discusses the  
14 requirements for implementation of additional recommendations. The RHR does not require  
15 adoption of any control measures unless the state determines they are appropriate. Any  
16 measures adopted would need to be enforceable like the other Section 309 required  
17 measures.

18  
19 Note that neither the RHR regulatory language nor the RHR Preamble identifies these  
20 additional recommendations. Therefore, states will need to review the GCVTC's report  
21 *Recommendations for Improving Western Vistas* (June 10, 1996). States must identify those  
22 recommendations not incorporated into Section 309 as the "additional" recommendations.  
23 By not specifically identifying these recommendations in the final RHR, EPA has left it up to  
24 each state to decide which additional recommendations it needs to address in its SIP.

25  
26 **[B] (a) Evaluation of Additional Grand Canyon Visibility Transport Commission**  
27 **(GCVTC) Recommendations**

28  
29 Pursuant to 40 CFR 51.309(d)(9), the ~~[Albuquerque-Bernalillo County Air Quality Control~~  
30 ~~Board-AQCB]~~ Department has evaluated the GCVTC's "additional" recommendations to  
31 determine if any of these recommendations can be practicably included in this  
32 Implementation plan. At this time, the AQCB has elected not to adopt any of the report's  
33 additional recommendations, which is permissible under the 309 SIP option.

34  
35 To make this determination, the ~~[AQCB]~~ Department has reviewed the GCVTC  
36 Commission's 1996 report *Recommendations for Improving Western Vistas* to identify those  
37 recommendations that were not incorporated into Section 309 of the Regional Haze Rule.  
38 The ~~[AQCB]~~ Department identified several recommendations in this report that were not  
39 incorporated into Section 309 of the RHR. The results of this evaluation are presented in  
40 detail below.

41  
42 Listed by report section, the following GCVTC recommendations are not included in the final  
43 RHR:

44  
45 **(1) Pollution Prevention**

- 46     ▪ Encourage zero and near-zero emitting technologies
- 47     ▪ Consider charging emission fees
- 48     ▪ Promote education and public outreach efforts on preventing pollution
- 49     ▪ Introduce product labeling
- 50     ▪ Promote the use of clean fuels

1 **(2) Stationary Sources**

- 2     ▪ Implement existing Clean Air Act (CAA) requirements through the year 2000
- 3     ▪ The ultimate SO2 emissions target, for the year 2040, locks in the 50-70% reduction
- 4     in SO2 emissions
- 5     ▪ By 1997, facility owners and operators should notify states of pollution control or
- 6     prevention measures
- 7     ▪ Progress in complying with emissions target(s) will be assessed in the year 2000 and
- 8     at 5-year intervals thereafter.
- 9     ▪ The GCVTC encourages EPA to complete the study at the Mohave Power Project.

10

11 **(3) Mobile Sources**

- 12     ▪ Establish a regional emissions budget
- 13
- 14     ▪ The GCVTC promotes the following strategies on a *national* level:
- 15         -adopt LEV standards (49 states)
- 16         -support development of heavy-duty vehicle standards
- 17         -adopt off-road vehicle standards
- 18         -promote broader application of cleaner fuels
- 19         -pursue control strategies for diesel locomotives, boats, airplanes and
- 20                 federal vehicles
- 21         -support improved control of evaporative emissions
- 22
- 23     ▪ The GCVTC promotes the following strategies on a *regional* level:
- 24         -establish clean fuel demonstration zones
- 25         -analyze pricing and incentive approaches
- 26         -explore an inspection program for heavy-duty vehicles
- 27         -promote vehicle maintenance
- 28
- 29     ▪ The GCVTC promotes the following initiatives on a *local* level:
- 30         -promote incentives for innovative and effective approaches
- 31         -encourage better integration of transportation, land use and air quality
- 32         planning
- 33         -establish mobile source emissions budgets for selected major urban areas
- 34         -suggest retiring high-emitting vehicles
- 35

36 **(4) Area Sources-Dust from Paved & Unpaved Roads**

37     Take voluntary measures to control dust emissions

38

39 **(5) Fire Emissions**

- 40     ▪ Improve integrated assessment of emissions
- 41     ▪ Develop cooperative funding mechanisms
- 42     ▪ Promote public education programs
- 43

44 **(6) Clean Air Corridors**

45     (all recommendations are incorporated into the final RHR)

46

47 **(7) Emissions within and near Class 1 Areas**

48     Although the final RHR does not have a section dedicated to emissions within and near

49     Class 1 Areas, the GCVTC goals [eff]\_to: a) Implement park and wilderness planning

50     processes, b) Develop strategies for nearby communities and activities, c) Apply existing

1 regulatory requirements, and d) Utilize other planning processes, are addressed at  
2 various places in the final RHR.

3  
4 **(8) Transboundary Emissions from Mexico**

- 5 ▪ Develop community mechanisms for cooperative transboundary planning
- 6 ▪ Finance air pollution control projects
- 7 ▪ Provide incentives for transboundary investment in pollution control

8  
9 **~~C)~~ (b) Implementation of Additional Recommendations:**

10  
11 Based on the ~~[AQCB's]~~ Department's evaluation of the GCVTC recommendations, and the  
12 fact that the WRAP has not modeled nor recommended any additional GCVTC  
13 recommendations, it is impracticable for the ~~[AQCB]~~ Department to include any additional  
14 recommendations in this implementation plan. Though it will address all of the requirements  
15 as delineated in the final RHR, ~~[at this time (in the 2003 SIP submittal)]~~, the ~~[AQCB]~~  
16 Department opts not to include any of the GCVTC's additional recommendations at this time.

17  
18 **~~[D)]~~ (c) Future Progress Reports:**

19  
20 Pursuant to 40 CFR 51.309(d)(9), the ~~[AQCB]~~ Department shall prepare a progress report in  
21 ~~[2008]~~, 2013, and 2018 that contains an evaluation in accordance with Sections ~~[B and C]~~ (a)  
22 and (b) above. The copy of this report shall be provided to EPA and made available to the  
23 general public.

24  
25  
26 **~~[XII.]~~ SECTION I. PERIODIC SIP REVISIONS**

27  
28 **~~[A) Introduction & Requirements:]~~**

29  
30 The 1999 Regional Haze Rule (RHR) ~~[requires]~~ required states to submit progress reports in  
31 the form of State Implementation Plan (SIP) revisions in 2008, 2013 and 2018. The SIP  
32 revisions must comply with the procedural requirements of 40 CFR 51.102 for public  
33 hearings and 51.103 for submission of plans. Page 35755 of the Preamble to the RHR  
34 discusses the requirements for periodic SIP revisions.

35  
36 Unless a state ~~[chooses]~~ chose to address "other" Class I Areas (those within their own  
37 state) in their 2003 SIP, it ~~[will need]~~ would have needed to do so in ~~[approximately]~~ 2008, in  
38 accordance with 51.309(g). The SIP revisions required under 309(d)(10) must therefore  
39 include assessments for Class I Areas located within the state and for the Class I Areas  
40 outside the state that are affected by emissions from the state. Note that EPA views these  
41 SIP revisions as a periodic check on progress, rather than a thorough revision of regional  
42 strategies.

43 However, because the time-clock for the State's first SIP revision was based on a December  
44 31, 2003 submittal deadline, and these submittals have been unavoidably delayed for four  
45 years by litigation, the first "periodic" revision to the 2007 SIP is not anticipated until 2013.

46  
47 **~~[B)]~~ (a) Periodic Progress Reports for Demonstrating Reasonable Progress:**

48  
49 Pursuant to 40 CFR 51.309(d)(10)(i), the ~~[AQCB]~~ Department shall submit to EPA, as a SIP  
50 revision, periodic progress reports for the years ~~[2008]~~, 2013, and 2018 for the purpose of  
51 demonstrating reasonable progress in Class I Areas within Bernalillo County, and Class I



1 Areas outside Bernalillo County, that are affected by emissions from Bernalillo County. This  
2 demonstration may be conducted by the WRAP, with assistance from the ~~[Albuquerque–~~  
3 ~~Bernalillo County Air Quality Control Board AQCB] Department~~, and shall address the  
4 elements listed under ~~[40 CFR 51.309(d)(10)(i)(1) through (7)]~~ 40 CFR 51.309(d)(10)(i)(A)  
5 through (G), as summarized in (1) through (7) below:  
6

- 7 (1) Implementation status of 2003 SIP measures;
- 8 (2) Summary of emissions reductions;
- 9 (3) Assessment of most/least impaired days;
- 10 (4) Analysis of emission reductions by pollutant;
- 11 (5) Significant changes in anthropogenic emissions;
- 12 (6) Assessment of 2003 SIP sufficiency; and
- 13 (7) Assessment of visibility monitoring strategy.

14  
15 **C) (b) Actions to be Taken Concurrent with Periodic Progress Reports.**

16  
17 Pursuant to 40 CFR 51.309(d)(10)(ii), the ~~[AQCB] Department~~ shall take one of the following  
18 actions based upon information contained in each periodic progress report:  
19

20 (1) Provide a negative declaration statement to EPA saying that no implementation plan  
21 revision is needed if reasonable progress is being made, in accordance with Section ~~[B] (a)~~  
22 above;  
23

24 (2) If the ~~[AQCB] Department~~ finds that the implementation plan is inadequate to ensure  
25 reasonable progress due to emissions from outside Bernalillo County, the ~~[AQCB]~~  
26 ~~Department~~ shall notify EPA and the other contributing state(s), and initiate efforts through a  
27 regional planning process to address the emissions in question. The ~~[AQCB] Department~~  
28 shall identify in the next progress report the outcome of this regional planning effort, including  
29 any additional strategies that were developed to address the implementation plan's  
30 deficiencies;  
31

32 (3) If the ~~[AQCB] Department~~ finds that the implementation plan is inadequate to ensure  
33 reasonable progress due to emissions from another country, the ~~[AQCB] Department~~ shall  
34 notify EPA and provide information on the impairment being caused by these emissions; or  
35

36 (4) If the ~~[AQCB] Department~~ finds that the implementation plan is inadequate to ensure  
37 reasonable progress due to emissions from within Bernalillo County, the ~~[AQCB] Department~~  
38 shall develop additional strategies to address the implementation plan deficiencies and  
39 revise the implementation plan no later than one year from the date that the progress report  
40 was due.  
41

42 **[XIII.] SECTION J. STATE PLANNING AND INTERSTATE COORDINATION [ & TRIBAL**  
43 **IMPLEMENTATION**

44  
45 **A) Introduction & Requirements:]**

46  
47 ~~[Pages 35755-35756 of the Regional Haze Rule (RHR) Preamble discuss]~~ The requirements  
48 for state planning and interstate coordination, and tribal implementation are discussed on  
49 Pages 35755-35756 of the Regional Haze Rule (RHR) Preamble. Both Sections

1 51.309(d)(11) & (12), allow states and tribes to use the work of regional planning bodies like  
2 the Western Regional Air Partnership (WRAP) in their individual SIPs/TIPs.

3  
4 Section 51.309(d)(11) allows states to participate in regional planning efforts, such as the  
5 WRAP, in developing their 309 SIPs. The interstate strategies that are developed need to  
6 document each state's contribution to visibility impairment in the 16 Class I Areas, how  
7 coordination between state implementation plans will be accomplished, and how compliance  
8 will be determined. It also allows states to develop their own programs without relying on a  
9 regional entity such as the WRAP.

10  
11 Section 51.309(d)(12) clarifies that all tribes within transport region have the option to  
12 implement Section 309, not just those who were originally members of the GCVTC. The  
13 Tribal Authority Rule (40 CFR Part 49) gives tribes in the transport region the option of  
14 implementing 51.308 or 51.309.

15  
16 **~~[B]~~ (a) Participation in Regional Planning and Coordination:**

17 Pursuant to 40 CFR 51.309(d)(11), the ~~[Albuquerque-Bernalillo County Air Quality Control~~  
18 ~~Board (AQCB)] Department~~ has participated in regional planning and coordination with other  
19 states in developing its emission reduction strategies under 40 CFR 51.309, related to  
20 protecting the 16 Class I Areas of the Colorado Plateau. This participation was through the  
21 WRAP and with the State of New Mexico. The ~~[AQCB] Department~~ has not participated in  
22 any regional planning outside of its participation with the WRAP. The ~~[AQCB] Department~~  
23 has worked with the WRAP to obtain guidance regarding technical information and county-  
24 level data as necessary. In addition, the ~~[AQCB] Department~~ has participated in interstate  
25 coordination efforts with the State of New Mexico.

26  
27 **~~[C]~~ (b) Tribal Implementation.**

28  
29 Pursuant to 40 CFR 51.309(d)(12), and in accordance with the Tribal Authority Rule, no  
30 Tribes whose lands extend into Bernalillo County have elected to develop a regional haze  
31 TIP at this time to assure reasonable progress in the 16 Class I Areas of the Colorado  
32 Plateau.

33  
34 **~~[D]~~ (c) Federal Implementation:**

35  
36 Pursuant to 40 CFR 49.11(a), the Administrator under Sections 301(a) and 301(d)(4) shall  
37 promulgate without unreasonable delay such federal implementation provisions as are  
38 necessary or appropriate to protect air quality, consistent with the provisions of 304(a) and  
39 301(d)(4), if a Tribe does not submit a TIP, meeting the completeness criteria of 40 CFR part  
40 51, Appendix V, or does not receive EPA approval of a submitted TIP.

41  
42 **~~[XIV.] SECTION K. GEOGRAPHIC ENHANCEMENT [& REASONABLY ATTRIBUTABLE~~**  
43 **~~VISIBILITY IMPAIRMENT (RAVI)]~~**

44  
45 **~~[A] Introduction & Requirements:]~~**

46  
47 ~~[Page 35757 in the Preamble to the Regional Haze Rule (RHR) discusses]~~ The requirements  
48 for geographic enhancement are discussed on page 35757 in the Preamble to the Regional  
49 Haze Rule (RHR). These requirements are related to Section 51.309(f)(1), which describes  
50 requirements for the Annex. The Annex allows states to submit a SIP, or tribes a TIP, which  
51 adopts an alternative measure to regional haze Best Available Retrofit Technology (BART).

1  
2 Geographic enhancement is a voluntary approach that can be included in the Annex for  
3 addressing Reasonably Attributable Visibility Impairment (RAVI) for stationary sources, under  
4 the provisions of Section 51.302(c). RAVI is different from regional haze in that it addresses  
5 “hot spots” or situations where visibility impairment in a Class I Area is reasonably  
6 attributable to a single source or small group of sources in relatively close proximity to the  
7 Class I Area. The geographic enhancement approach would allow states or tribes to use the  
8 efficiencies and reduced cost provided by the market trading program in the Annex to  
9 accommodate situations where RAVI needs to be addressed.

10  
11 **B) (a) Procedure for addressing Reasonably Attributable Visibility Impairment (RAVI)**  
12 **under the Regional Haze Rule:**

13  
14 Pursuant to 40 CFR 51.309(f)(4), the [~~Albuquerque-Bernalillo County Air Quality Control~~  
15 ~~Board (AQCB)] Department shall use the following process to address reasonably~~

16 attributable visibility impairment (RAVI) in any Class I Area, and the potential need for BART,  
17 as specified in 40 CFR § 302(c):  
18  
19 **(1)** The [~~AQCB~~] Department and applicable Federal Land Managers (FLMs) have agreed  
20 ~~on~~ upon the principles that will be followed for addressing RAVI within the context of  
21 regional SO<sub>2</sub> milestones and a backstop emission trading program that have been developed  
22 to address regional haze. These principles are outlined in a draft template Memorandum of  
23 Agreement (MOA) that the WRAP Market Trading Forum (MTF) produced. The use of this  
24 template MOA is optional.

25  
26 ~~[(2)]~~ The FLMs have an obligation to protect the National Parks and Wilderness Areas that  
27 have been designated as mandatory federal Class I Areas. The MOA does not restrict ~~[the]~~  
28 their authority ~~[of the FLMs]~~ to fulfill this obligation. In the course of certifying impairment, the  
29 FLMs may make recommendations to the [~~AQCB~~] Department regarding a source or sources  
30 to which impairment may be reasonably attributable. Within the context of established  
31 regional milestones for SO<sub>2</sub> and a backstop trading program, the FLMs agree to use the  
32 following screening process in making these recommendations as part of the certification  
33 process:

34  
35 **(i)** The applicable Federal Land Management Agency determines that sulfate  
36 concentrations are not decreasing since the year 2000, based on ambient monitoring,  
37 and

38  
39 **(ii)** There are BART-eligible sources of SO<sub>2</sub> within 100 miles of the mandatory  
40 Federal Class I Area, and

41  
42 **(iii)** The BART-eligible sources have not installed control technology to reduce  
43 SO<sub>2</sub> emissions at a rate equivalent to capture of 85% of potential annual emissions.

44  
45 ~~[(3) In approximately]~~ **(2)** Sometime during the 2009 to 2010 timeframe, but no later than  
46 December 2010, the AQCB ~~[will]~~ shall conduct a public meeting to facilitate the exchange of  
47 information regarding current visibility monitoring data at Class I Areas in [~~Bernalillo County]~~  
48 New Mexico or in nearby states within 100 miles of any BART-eligible sources located in  
49 Bernalillo County. The purpose of the meeting will be to provide as much information as  
50 possible to all interested parties about the potential for a certification of visibility impairment  
51 to occur, based on the screening criteria in the MOA. The information will include visibility

1 trends, as well as the type of impairment that is occurring at individual areas (haze, episodic  
2 impairment, etc.). The goal of this meeting is to provide information to sources and to the  
3 market so that potential problems could be addressed in the most cost-effective manner. For  
4 example, a large utility company with multiple units may use this information in decisions  
5 about where to apply limited resources when ~~[deciding]~~ developing plans to install new  
6 control technology on some of its plants.

7  
8 **[C) Attribution Determinations:]**

9  
10 **(3)** If a Federal Land Manager (FLM) certifies (visibility) impairment, the ~~[Albuquerque-~~  
11 ~~Bernalillo County Air Quality Control Board (AQCB)]~~ Department will fulfill its obligation to  
12 determine attribution and if necessary determine BART for the applicable source or group of  
13 sources.

14  
15 ~~[(1)]~~ **(i)** The WESTAR report entitled *Recommendations for Making Attribution*  
16 *Determinations in the Context of Reasonably Attributable BART* (May 2003), supplemented  
17 by new techniques and information available at the time of review, will be used to provide a  
18 toolbox of appropriate technical criteria and methods for determining attribution. The  
19 WESTAR report is included in Appendix P-O of this implementation plan.

20  
21 ~~[(2)]~~ **(ii)** If attribution is determined, then the following alternative remedy solutions will be  
22 considered when determining BART for the applicable source:

23  
24 ~~[(a)]~~ **(A)** BART-level controls could be installed on the attributed source or group of sources;

25  
26 ~~[(b)]~~ **(B)** SO<sub>2</sub> emission reductions that may be more cost-effective or have other air quality  
27 benefits could be required at nearby sources in lieu of, or in combination with, controlling the  
28 attributed source to achieve greater visibility improvements than the application of BART.

29  
30  
31 ~~[XV. REASONABLE]~~ **SECTION L. REASONABLE PROGRESS FOR ADDITIONAL**  
32 **CLASS I AREAS**

33  
34 **[A) Introduction & Requirements:]**

35  
36 The requirements for reasonable progress for additional Class I Areas are discussed on  
37 page 35758 in the Preamble to the Regional Haze Rule (RHR). Section 309 of the final  
38 RHR ~~[requires]~~ required that the first SIP, due by December 2003, address the 16 Class I  
39 Areas of the Colorado Plateau. The Albuquerque-Bernalillo County Air Quality Control Board  
40 (AQCB) ~~[is meeting]~~ has met this requirement by addressing the 16 Class I Areas of the  
41 Colorado Plateau in Chapter IV Section A, "Projection of Visibility Improvement", of this  
42 Implementation plan.

43  
44 The term "Other Class I Areas" refers to federal Class I Areas that are NOT located in the  
45 Colorado Plateau region. For the first SIP submittal, Other Class I Areas within the nine  
46 transport region states ~~[do not need]~~ were non required to be addressed until the ~~[2008 SIP~~  
47 ~~submittal]~~ first SIP revision, originally scheduled for 2008, but now deferred until 2013 due to  
48 litigation. The only requirement in Section 51.309(g) for states that ~~[follow]~~ followed this  
49 original timetable ~~[is]~~ was under (g)(1), which ~~[requires]~~ required a declaration in ~~[this]~~ the  
50 first Implementation plan indicating if the other Class I Areas in the state ~~[are]~~ were going to  
51 be addressed under Section 308 or 309.

1  
2 The rest of Section 51.309(g) describes the requirements for addressing other Class I Areas  
3 in the “2008 SIP”, for states that followed Section 309. This necessitates a modeling  
4 demonstration ~~[must include]~~ including an analysis sufficient to meet the requirements  
5 defined in 51.308(d)(1). The state may elect to use the control package adopted for the 16  
6 Class I Areas on the Colorado Plateau if it can demonstrate that BART or better reductions  
7 will be met through 2018. The state may elect to select alternative controls to complete the  
8 309 package and adopt that package. Also, states ~~[have]~~ had the option to address both the  
9 16 Class I Areas on the Colorado Plateau and the other Class I Areas in 2003 and combine  
10 them both into one SIP. However, in the interim between the 2003 SIP submittal and today,  
11 EPA has amended the RHR so that now all 309 states are required to comply with 51.309(g),  
12 [see below].

13  
14 **~~[B]~~ (a) Declaration for Other Class I Areas – Albuquerque / Bernalillo County:**

15  
16 ~~[As mentioned, pursuant to 40 CFR 51.309(g)(1), an area must declare if it will follow Section~~  
17 ~~308 or Section 309 to address the other (non Colorado Plateau) Class I Areas in the nine~~  
18 ~~transport region states in its 2008 SIP submittal. the AQCB declares that it will not develop~~  
19 ~~an implementation plan revision by December 31, 2008 for any other Class I Areas. This is~~  
20 ~~because no other Class I Areas exist within the jurisdiction of the AQCB.] Pursuant to the~~  
21 amended Regional Haze Rule, the Department declares that it will follow Section 309(g)(2) in  
22 supplementing this Regional Haze SIP, for the eight Class I Areas not on the Colorado  
23 Plateau within the State of New Mexico.

24  
25 **~~C) Federal Class I Areas in the State of New Mexico:~~**

26  
27 ~~[However,]~~ A total of nine federal Class I Areas are located in the State of New Mexico.  
28 ~~[One]~~, The San Pedro Parks Wilderness Area, is defined in 40 CFR 51.309(b)(1) as one of  
29 the 16 Federal Class I Areas on the Colorado Plateau (see Chapter IV Section A of this  
30 Implementation plan). San Pedro Parks and the eight other federal Class I Areas in New  
31 Mexico are located in counties other than Bernalillo (see Table ~~[20]~~ 21 on the following  
32 page). Therefore, since the AQCB’s jurisdiction for air quality planning purposes is limited to  
33 Bernalillo County only, the AQCB does not have jurisdiction over any of ~~[the]~~ these federal  
34 Class I Areas in New Mexico for air quality planning purposes. Such jurisdiction corresponds  
35 to the State of New Mexico Environment Department.

1 **Table 21: All Federal Class I Areas in New Mexico**

2

Name	Location	
Bandelier Wilderness	Sandoval County	3
Bosque del Apache Wilderness	Socorro County	4
Carlsbad Caverns National Park	Eddy County	5
Gila Wilderness	Patron County	6
Pecos Wilderness	Mora County	7
Salt Creek Wilderness	Chaves County	8
Wheeler Peak Wilderness	Taos County	9
White Mountain Wilderness	Lincoln County	10
San Pedro Parks Wilderness Area*	Rio Arriba County	11
		12
		13

14 \*The San Pedro Parks Wilderness Area is one of the 16 federal Class I Areas on  
 15 the Colorado Plateau. The other areas are not thus classified.

16  
 17  
 18 **[C) Declaration for Other Class I Areas-State of New Mexico:]**

19  
 20 ~~[Pursuant to 40 CFR 51.309(g)(1), the State of New Mexico declares that it will follow Section~~  
 21 ~~309(g)(2) in developing an implementation plan for the eight federal Class I Areas in the~~  
 22 ~~State of New Mexico that are not on the Colorado Plateau, to be submitted by December 31,~~  
 23 ~~2008. Table 19 above lists all federal Class I Areas (Colorado plateau and non-Colorado~~  
 24 ~~plateau) in New Mexico.~~

25  
 26 ~~For its 2003 SIP submittal, the State of New Mexico is including only the 16 federal Class I~~  
 27 ~~Areas on the Colorado Plateau; one of which happens to be located in New Mexico and is~~  
 28 ~~not including any additional Class I Areas located in the state, the Colorado Plateau or~~  
 29 ~~outside of the Colorado Plateau.]~~

30  
 31 **[D)] (b) Other Class I Areas to be Included in the [2003] 2007 SIP Submittal:**

32  
 33 ~~The Albuquerque-Bernalillo County Air Quality Control Board (AQCB) [is not including] did~~  
 34 ~~not include any additional federal Class I Areas, located on the Colorado Plateau or outside~~  
 35 ~~of it, in its 2003 SIP submittal. The AQCB [opts] opted not to follow 40 CFR 51.309(g)(4),~~  
 36 ~~which [allows] allowed states to incorporate reasonable progress goals for additional Class I~~  
 37 ~~Areas into their SIPs [now]. Consistent with the State of New Mexico's approach [(see~~  
 38 ~~Section C above)], only the 16 Class I Areas on the Colorado Plateau [are] were included in~~  
 39 ~~Bernalillo County's 2003 SIP submittal. Pursuant to the newly revised 40 CFR 51.309(g), the~~  
 40 ~~Department is including in this 2007 SIP submittal, reasonable progress goals for additional~~  
 41 ~~Class I Areas, and a demonstration that these goals will be met for the Other Class I Areas in~~  
 42 ~~New Mexico.~~

43  
 44 **[XVI. COMPLIANCE / CONCLUSION**

45  
 46 ~~This report entitled Section 309 Regional Haze State Implementation Plan (SIP) Element~~  
 47 ~~demonstrates how the Albuquerque-Bernalillo County Air Quality Control Board (AQCB) will~~  
 48 ~~meet the requirements of the final Regional Haze Rule (RHR), found in Section 309 of Title~~  
 49 ~~40 of the Code of Federal Regulations (40 CFR 51.309).~~

1 This report also presents technical evidence to support the AQCB's approval of this report as  
2 the 309 Regional Haze State Implementation Plan (SIP) element for Bernalillo County, New  
3 Mexico. In addition to this document, two regulations support Bernalillo County's regional  
4 haze program. 20.11.21 NMAC *Open Burning* addresses RHR requirements regarding fire  
5 and smoke management practices. 20.11.46 NMAC, *Western Backstop Sulfur Dioxide (SO<sub>2</sub>)*  
6 *Trading Program*, addresses RHR requirements with respect to regional trading of SO<sub>2</sub>  
7 emissions from stationary sources.

8  
9 In conclusion, the AQCB has developed its program to address regional haze and believes  
10 that it is in compliance with the requirements of the final RHR. ]

11  
12 The amended rule requirements for 309(g) are as follows:

13  
14 309(g) Additional Class I areas. Each Transport Region State implementing the provisions of  
15 this section as the basis for demonstrating reasonable progress for mandatory Class I  
16 Federal areas other than the 16 Class I areas must include the following provisions in its  
17 implementation plan. If a Transport Region State submits an implementation plan which is  
18 approved by EPA as meeting the requirements of this section, it will be deemed to comply  
19 with the requirements for reasonable progress for the period from approval of the plan to  
20 2018.

21  
22 (1) A demonstration of expected visibility conditions for the most impaired and least impaired  
23 days at the additional mandatory Class I Federal area(s) based on emissions projections  
24 from the long-term strategies in the implementation plan. This demonstration may be based  
25 on assessments conducted by the States and/or a regional planning body.

26  
27 (2) Provisions establishing reasonable progress goals and implementing any additional  
28 measures necessary to demonstrate reasonable progress for the additional mandatory  
29 Federal Class I areas. These provisions must comply with the provisions of §51.308(d)(1)  
30 through (4).

31  
32 (i) In developing long-term strategies pursuant to §51.308(d)(3), the State may build upon the  
33 strategies implemented under paragraph (d) of this section, and take full credit for the  
34 visibility improvement achieved through these strategies.

35  
36 (ii) The requirement under §51.308(e) related to Best Available Retrofit Technology for  
37 regional haze is deemed to be satisfied for pollutants addressed by the milestones and  
38 backstop trading program if, in establishing the emission reductions milestones under  
39 paragraph (d)(4) of this section, it is shown that greater reasonable progress will be achieved  
40 for these additional Class I areas than would be achieved through the application of source-  
41 specific BART emission limitations under §51.308(e)(1).

42  
43 (iii) The Transport Region State may consider whether any strategies necessary to achieve  
44 the reasonable progress goals required by paragraph (g)(2) of this section are incompatible  
45 with the strategies implemented under paragraph (d) of this section to the extent the State  
46 adequately demonstrates that the incompatibility is related to the costs of the compliance, the  
47 time necessary for compliance, the energy and no air quality environmental impacts of  
48 compliance, or the remaining useful life of any existing source subject to such requirements.

1 VISIBILITY IMPAIRMENT FOR OTHER CLASS I AREAS

2  
3 The Western Regional Air Partnership (WRAP) has modeled the impacts of emissions on  
4 Class I areas in the west as part of their assistance in development of the Regional Haze  
5 SIPs for 309 and 308 states. However, the WRAP has not yet analyzed the effects on Class  
6 I Areas from emissions at the individual county scale. This puts Bernalillo County, which acts  
7 as a 'state', in a predicament. Without county-level modeling, the required analysis of the  
8 effects upon Class I Areas caused by Bernalillo County's emissions, will be qualitative and  
9 not quantitative. It is anticipated that the WRAP will complete the modeling of Bernalillo  
10 County's effects on visibility at Class I Areas within New Mexico, at its' earliest convenience,  
11 and this data will be incorporated into a SIP revision in the future. Therefore, the qualitative  
12 analysis will consist of the following:

13  
14 1. Emissions inventory data showing emissions by New Mexico, Counties within New  
15 Mexico including Bernalillo County. This data provides a rough estimate of the percentage of  
16 the State's overall emissions that are generated by Bernalillo County, as well as the  
17 percentage of Bernalillo County's share of the emissions inventory as it relates to the impact  
18 on visibility each pollutant has at each individual Class I Area. The pollutants included in this  
19 analysis include: Sulfur Oxide (SOx), Nitrogen Oxide (NOx), Organic Carbon (OC),  
20 Elemental Carbon (EC), Fine Particulate Matter (PMf), Coarse Particulate Matter (PMc),  
21 Ammonia, Volatile Organic Compounds (VOCs), and Carbon Monoxide (CO).

22  
23 2. Bar graphs of the potential effects of New Mexico's emissions on Class I Areas on 20%  
24 worst visibility days. These graphs give an estimate of which pollutant is the most significant  
25 in the impairment of visibility at that Class I Area. The pollutants included in this analysis  
26 include OC, EC, PMf, and PMc for each Class I Area in New Mexico.

27  
28 3. Mapping of the normalized weighted emission potential (WEP) for each pollutant using  
29 2000-04 baseline data and 2018 predicted emissions. WEP values are a function of  
30 emissions multiplied by residence time divided by distance from source. These maps will  
31 give a rough estimate as to the proximity of elevated WEP% values to Bernalillo County.  
32 The pollutants included in this analysis included OC, EC, PMf, and PMf, for each Class I  
33 Area in New Mexico.

34  
35 The results of this analysis are summarized below. The full analysis can be found at  
36 Appendix 2007-H.

37



<u>Class I Area</u>	<u>Visibility Impairment Species</u>	<u>OC Source(s) / Bernalillo Contribution?</u>	<u>EC Source(s) / Bernalillo Contribution?</u>	<u>PM Fine Source(s) / Bernalillo Contribution?</u>	<u>PM Coarse Source(s) / Bernalillo Contribution?</u>	<u>Downwind Effects?</u>
<u>Bandelier [BAND]</u>	<u>Organic Mass Carbon (OMC)</u>	<u>Natural Fire, Off-Road, Possible</u>	<u>Natural Fire, On-Road, Off-Road, Possible</u>	<u>Fugitive Dust, Wind Blown (WB) Dust, Area, Likely</u>	<u>Fugitive Dust, WB Dust, Road Dust, Likely</u>	<u>No</u>
<u>Bosque del Apache [BOAP]</u>	<u>Coarse Mass (CM), OMC, AmmSO4</u>	<u>Natural Fire, Off-Road, Possible</u>	<u>Natural Fire, Off-Road, On-Road, Unlikely</u>	<u>WB Dust, Fugitive Dust, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Road Dust, Possible</u>	<u>Sulfate: AZ, MX, CENWRAP</u>
<u>Gila [GICL]</u>	<u>OMC</u>	<u>Natural Fire, Unlikely</u>	<u>Natural Fire, Off-Road, On-Road, Unlikely</u>	<u>WB Dust, Fugitive Dust, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Natural Fire, Possible</u>	<u>Sulfate, Nitrate: AZ</u>
<u>Carlsbad [GUMO]</u>	<u>CM, AmmSO4</u>	<u>Natural Fire, Unlikely</u>	<u>Natural Fire, Unlikely</u>	<u>WB Dust, Fugitive Dust, Possible</u>	<u>WB Dust, Fugitive Dust, Road Dust, Possible</u>	<u>Yes; Sulfate / Nitrate: CENWRAP (TX), MX</u>
<u>San Pedro [SAPE]</u>	<u>OMC, AmmSO4</u>	<u>Natural Fire, Area, Possible</u>	<u>Natural Fire, Off-Road, On-Road, Possible</u>	<u>WB Dust, Fugitive Dust, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Road Dust, Possible</u>	<u>Sulfate</u>
<u>Salt Creek [SACR]</u>	<u>CM, AmmSO4, AmmNO3</u>	<u>Point, Natural Fire, Area, Unlikely</u>	<u>Off-Road, Natural Fire, On-Road, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Road Dust, Possible</u>	<u>Yes; Sulfate: CENWRAP (TX), MX</u>
<u>Wheeler Peak [WHPE]</u>	<u>OMC, AmmSO4</u>	<u>Natural Fire, Unlikely</u>	<u>Natural Fire, Unlikely</u>	<u>WB Dust, Fugitive Dust, Natural Fire, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Possible</u>	<u>Sulfate: AZ, CENWRAP</u>
<u>White Mt. [WHIT]</u>	<u>CM, OMC, AmmSO4</u>	<u>Natural Fire, Area, Point, Anthropogenic Fire, Unlikely</u>	<u>Natural Fire, Off-Road, On-Road, Possible</u>	<u>WB Dust, Fugitive Dust, Area, Possible</u>	<u>WB Dust, Fugitive Dust, Road Dust, Possible</u>	<u>Yes; Sulfate / Nitrate: CENWRAP</u>

1 Until the WRAP has completed their analysis of county-level emissions on Other Class I  
 2 Areas, it is impracticable to promulgate any further regulations in an attempt to reduce  
 3 emissions that may or may not affect Other Class I Areas. However, in the interim, there are  
 4 a number effective regulations currently on the books. These regulations are outlined below.  
 5

<u>Regulation</u>	<u>Description</u>	<u>Pollutant Controlled</u>
<u>20.11.20 NMAC</u>	<u>Fugitive Dust Control</u>	<u>PM</u>
<u>20.11.46 NMAC</u>	<u>SO2 Emissions Inventory Requirements; Western Backstop Sulfur Dioxide Trading Program</u>	<u>SOx</u>
<u>20.11.21 NMAC</u>	<u>Open Burning</u>	<u>OC, EC, CO, PM</u>
<u>20.11.71 NMAC</u>	<u>Municipal Solid Waste Landfills</u>	<u>NMOC (i.e. CO)</u>
<u>20.11.100 NMAC</u>	<u>Motor Vehicle Inspection – Decentralized</u>	<u>CO, PM, HC</u>
<u>20.11.102 NMAC</u>	<u>Oxygenated Fuels</u>	<u>CO</u>
<u>20.11.65 NMAC</u>	<u>Volatile Organic Compounds</u>	<u>VOCs</u>
<u>20.11.103 NMAC</u>	<u>Motor Vehicle Visible Emissions</u>	<u>PM</u>
<u>20.11.22 NMAC</u>	<u>Woodburning</u>	<u>CO, PM</u>
<u>20.11.66 NMAC</u>	<u>Process Equipment</u>	<u>PM</u>
<u>20.11.67 NMAC</u>	<u>Equipment, Emissions, Limitations</u>	<u>SOx, NOx, PM</u>
<u>20.11.104 NMAC</u>	<u>Emission Standards For New Motor Vehicles</u>	<u>On-Road Mobile</u>

6

[ALL TEXT THAT FOLLOWS IS NEW]

**M. BEST AVAILABLE RETROFIT TECHNOLOGY (BART) EVALUATION**

**Best Available Retrofit Technology – BART (Excerpted From *Identification of BART-Eligible Sources in the WRAP Region*, Draft Report, for WRAP by ERG, # 30204-84, April 4, 2005- see Appendix 2007-F)**

**Background:**

In July 1999, EPA published a final rule under the authority and requirements of sections 169A and 169 B of the Clean Air Act (CAA). The rule addresses regional haze and requires states to improve visibility in 156 natural areas encompassing federally-protected parks and wilderness; these areas are referred to as “Class I areas”.

The particular air pollutants that reduce visibility and contribute to regional haze are fine particulate matter (PM<sub>2.5</sub>), and certain compounds which play a part in PM<sub>2.5</sub> formation such as nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), and certain volatile organic compounds (VOC). The CAA requires certain existing sources to control these air pollutants in Class I areas by installing best available retrofit technology, also known as BART.

However, on May 24, 2002, the U.S. Court of Appeals for the District of Columbia Circuit issued a ruling vacating the BART provisions to the regional haze rule. Furthermore, prior to the court’s decision, EPA had proposed BART guidelines intended to clarify the requirements of the BART provisions, yet these guidelines were remanded during the court’s ruling on May 24, 2002. On April 15, 2004, the EPA proposed amendments to its July 1999 regional haze rule, predominantly; these amendments address the BART provisions and clarify previously submitted comments made during the July 1999 proposal by environmental groups, industry, and the public. The BART provisions are located in 40 CFR 51.308. In addition, EPA repropose the BART guidelines which are contained in a new Appendix Y to 40 CFR 51.

The new BART proposal requires all states to develop regional haze implementation plans known as “SIPs” by December 17, 2007. These plans should contain enforceable measures and strategies for reducing visibility-impairing pollution in Class I areas. The SIP must also include a determination of BART for each BART-eligible source. Accordingly, states must first identify sources that will have to install BART controls. This section is intended to discuss the steps for determining BART-eligible sources; in addition, changes and/or clarifications from the April 15, 2004 proposed amendments are discussed in further detail below.

**Identifying BART-eligible Sources:**

The regional haze rule, in 40 CFR 51.301, defines a stationary source as a “building, structure, facility, or installation which emits or may emit any air pollutant.” The rule further defines “building, structure, or facility” as:

- All of the pollutant-emitting activities which belong to the same industrial grouping (same 2-digit Standard Industrial Classification [SIC] code); and
- Are located on one or more contiguous or adjacent properties; and
- Are under the control of the same person (or persons under common control).

1  
2 The CAA uses the term “major stationary source” to describe those sources that are the  
3 focus of the BART requirement. To avoid confusion with other CAA requirements which also  
4 use the term “major stationary source” when referring to a somewhat different population of  
5 sources, the RHR uses the term “BART-eligible source”.

6  
7 Sources that are BART-eligible must meet the following three criteria:

- 8  
9 1. The source must be a stationary source of air pollutants that falls within one of 26 listed  
10 categories (see Table A-1);  
11 2. The source must have been put into operation between August 7, 1962 and August 7,  
12 1977; and  
13 3. The source must have the potential to emit 250 tons per year of any [air] individual air  
14 pollutant (SO<sub>2</sub>, NO<sub>x</sub>, PM<sub>2.5</sub>, VOC, or NH<sub>3</sub>)§§

Step 1	Identify the emission units in the BART categories (See Table A-1)
Step 2	Identify the start-up dates of those emission units
Step 3	Compare the potential emissions from units identified in Steps 1 and 2 to the 250 ton per year cutoff
Step 4	Identify the emission units and pollutants that constitute the BART-eligible source

15  
16  
17 **Clarification To Each Step:**

18  
19 ***Step 1 - Identify the emission units in the BART categories***

20  
21 The CAA uses the 26 source category titles, which can be found in Table A-1, to describe the  
22 types of stationary sources that are BART-eligible. Most of the source category titles are  
23 general descriptors that are inclusive of all the operations at a given plant. However, certain  
24 plant sites may have only some emission units meeting one of these 26 descriptions; not  
25 every emission unit at a particular site will meet one of the 26 categories. States should  
26 identify all emission units at a plant site meeting one or more of the source category  
27 descriptions.

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§§ EPA originally proposed to include ammonia (NH<sub>3</sub>) on the visibility-impairing pollutant list however based on comments received and the current state of knowledge regarding the role of ammonia in PM<sub>2.5</sub> formation and the affects of regional haze that would be expected from reductions in ammonia emissions, EPA no longer believes that ammonia should be included on this list. In the April 15, 2004 proposed amendments, EPA has taken ammonia (NH<sub>3</sub>) off of the visibility-impairing pollutant list.

1

Source Category	EPA Clarification
<p>Fossil-fuel fired steam electric plants of more than 250 million British thermal units (BTU) per hour heat input (#1 in Table A-1)</p>	<p>1. The source category interpretation of the word “plants” is best read to aggregate boiler capacities to determine if the 250 million BTU/hr threshold is reached.</p> <p>For this category, states do aggregate all boilers to verify if all site boilers that were put in place within the 1962-1977 time period total up to greater than 250 million BTU/hr.</p> <p>2. EPA clarifies that the definition of “steam electric plants of more than 250 million BTU/hr heat input” refers only to plants that generate electricity for sale.</p> <p>3. “Fossil-fuel boilers” refers to boilers burning greater than 50 percent fossil fuels.</p> <p>4. Enforceable operational limits for a multi-fuel boiler would be relevant to determining whether its “fossil fuel” capacity exceeds 250 million BTU/hr and that it would be reasonable for states to take such limitations into account.</p> <p>An example of this situation would be a boiler that has a rated heat input capacity of 500 million BTU/hr, yet is limited to a heat input of 150 million BTU/hr in the Title V permit. This particular boiler would not be considered (alone) to fall into this category because the boiler is not operating above 250 million BTU/hr due to the enforceable limit. However, the boiler could fall into this category when aggregating to verify if all site boilers (that were put into place within the 1962-1977 time period) total up to greater than 250 million BTU/hr. In such a case, the state would still use the enforceable heat input limit of 150 million BTU/hr when aggregating all boilers.</p>
<p>Phosphate rock and processing plants (#13 in Table A-1)</p>	<p>This source category should be interpreted broadly to include all types of phosphate rock processing facilities, including elemental phosphorous plants as well as fertilizer production plants.</p>
<p>Secondary metal production facilities (#20 in Table A-1)</p>	<p>When identifying unique “secondary metal production facilities” that are not in any other BART category, states may identify those unique facilities based upon SIC code 3341 to determine if the facility falls under the source category “secondary metal production facilities”.</p> <p>However, for informational purposes only, this source category “secondary metal production facilities” is actually broader than SIC code 3341. Yet, many “secondary metal production facilities” that do not fall under SIC code 3341 would fall into another source category. For instance, the secondary ferrous metals facilities such as secondary iron and steel facilities are not included under SIC code 3341, but these facilities are included under another source category “iron and steel mill plants”.</p>
<p>Chemical process plants (#21 in Table A-1)</p>	<p>This source category should be interpreted to include all facilities within 2-digit SIC code 28. Accordingly, this source category includes pharmaceutical manufacturing facilities.</p>

Source Category	EPA Clarification
Fossil-fuel boilers of more than 250 million BTU/hr heat input (#22 in Table A-1)	<p>1. The source category interpretation is best read to include only those boilers at a power plant individually greater than 250 million BTU/hr. For this category, states do not aggregate all boilers to verify if all site boilers that were put in place within the 1962-1977 time period total up to greater than 250 million BTU/hr.</p> <p>2. “Fossil-fuel boilers” refers to boilers burning greater than 50 percent fossil fuels.</p> <p>3. Enforceable operational limits for a multi-fuel boiler would be relevant to determining whether its “fossil fuel” capacity exceeds 250 million BTU/hr and that it would be reasonable for States to take such limitations into account.</p> <p>An example of this situation would be a boiler that has a rated heat input capacity of 500 million BTU/hr, yet it is limited to a heat input of 150 million BTU/hr in the Title V permit. This particular boiler would not be considered under this category because the boiler is not operating above 250 million BTU/hr due to the enforceable limit. However, the boiler could be subject to BART if it was part of a process description at a plant that is in a different source category, for example, the boiler was considered to be part of the source category “chemical process plant” and fell under SIC code 28.</p>
Petroleum storage and transfer facilities with a capacity exceeding 300,000 barrels (#23 in Table A-1)	<p>1. The 300,000 barrel cutoff refers to total, facility-wide tank capacity for tanks that were put in place within the 1962-1977 time period, and includes gasoline and other petroleum-derived liquids.</p> <p>2. EPA states that there was a comment made about this source category, however EPA does not say what the actual comment was.</p> <p>EPA states that the comment “is largely moot given that these storage and transfer facilities are already subject to maximum achievable control technology (MACT) standards and in many cases stringent SIP regulations related to ozone nonattainment. Regardless of the interpretation [of this source category], we [EPA] believe that it is unlikely that BART emissions limitations will require further controls.”</p>
Charcoal production facilities (#26 in Table A-1)	<p>This source category should be interpreted to include charcoal briquette manufacturing and activated carbon production.</p>

1  
2  
3  
4  
5  
6  
7

**Step 2 - Identify the start-up dates of those emission units**

States should identify all emission units within the listed categories as determined in Step 1, which meet the following two criteria listed in the table below:

Criteria	Clarification
Did the unit begin operation after August 7, 1962?	“In operation” is defined as “engaged in activity related to the primary design function of the source.” This means that a source must have begun actual operations by August 7, 1962 to satisfy this test.
Was the unit “in existence” on August 7, 1977?	<p><i>On or prior to August 7, 1977:</i> “the owner or operator has obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has (1) begun, or caused to begin, a continuous program of physical on-site construction of the facility or (2) entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the facility to be completed in a reasonable time.” 40 CFR 51.301.</p> <p>As this definition is essentially identical to the definition of “commence construction” as that term is used in the PSD regulations, the two terms mean the same thing. See 40 CFR 51.165(a)(1)(xvi) and 40 CFR 52.21(b)(9). Under this definition, an emissions unit could be “in existence” even if it did not begin operating until several years after 1977.</p>

*Be aware that a reconstructed source may be BART-eligible.* A reconstructed source is an existing source that is completely or substantially rebuilt such that “the fixed capital cost of the new component exceeds 50 percent of the fixed capital cost of a comparable entirely new source.” A reconstructed source could actually be a BART-eligible source if it was in operation before August 7, 1962, however it would have to have been reconstructed during the August 1962 to August 7, 1977 time period. {40 CFR 51.301}

*An important clarification:* under Step 2 for identifying BART-eligible units, and using boilers as the example emission unit, states should identify only those boilers that were put in place (or reconstructed) within the 1962 – 1977 time period. Only these boilers are carried over to Step 3, and only these boilers would be subject to a BART engineering analysis. This is true for any emission unit.

1 **Step 3 - Compare the potential emissions from units identified in Steps 1 and 2 to the**  
2 **250 ton per year cutoff**

3  
4 The “potential to emit” means the maximum capacity of a stationary source to emit a  
5 pollutant under its physical and operational design. Any physical or operational limitations on  
6 the capacity of the source to emit a pollutant including air pollution control equipment and  
7 restrictions on hours of operation or on the type or amount of material combusted, stored, or  
8 processes, shall be treated as part of its design if the limitation or the effect it would have on  
9 emissions is federally enforceable. Secondary emissions do not count in determining the  
10 potential to emit of a stationary source.

11  
12 To be a BART-eligible source, the source must have emission units that meet the category  
13 description and time window criteria described in Steps 1 and 2 above, and it must have the  
14 potential to emit 250 tons or more of any of the following pollutants: SO<sub>2</sub>, NO<sub>x</sub>, particulate  
15 matter, or VOC.

16  
17 When calculating potential to emit and for the purposes of the regional haze rule, states must  
18 group emissions from all emission units put in place between the 1962-1977 time period that  
19 are within the same 2-digit SIC code, even if those emission units are in different BART  
20 source categories.

21  
22 However, be aware of “support facilities” when grouping pollutant-emitting activities by 2-digit  
23 category according to the SIC manual. Some emission units, for purposes of other air  
24 programs, might be considered subject to an air program even if the unit(s) serves as a  
25 “support facility”. A “support facility” is a facility that conveys, stores, or otherwise assists in  
26 the production of the principle product and falls within the same industrial grouping as the  
27 primary facility. However, an emission unit, even if it is a “support facility” for purposes of  
28 other air programs, would not be considered for BART-eligibility unless the unit fell within one  
29 of the 26 listed source categories, and unless it was put in place within the 1962 to 1977 time  
30 period.

31  
32 *An important note for PM<sub>2.5</sub>:*

33  
34 States may use PM<sub>10</sub> as the indicator for particulate matter. Emissions of PM<sub>10</sub> included the  
35 components of PM<sub>2.5</sub> as a subset. There is no need to have separate 250 ton thresholds for  
36 PM<sub>10</sub> and PM<sub>2.5</sub>, because 250 tons of PM<sub>10</sub> represents at most 250 tons of PM<sub>2.5</sub>, and at  
37 most 250 tons of individual particulate species such as elemental carbon, crustal material,  
38 etc.

39  
40 *An important note for VOCs*

41  
42 Because many industrial sources and most mobile sources of organic gases have been  
43 subjected to VOC control requirements that have the effect of reducing emissions of the  
44 particular compounds that are PM<sub>2.5</sub> precursors, EPA is requesting comment on whether the  
45 states should focus greater control requirements on VOC emissions from BART sources  
46 located in urban areas. EPA also is requesting comment on the circumstances under which,  
47 in rural areas, for sources subject to BART, states may determine that BART would be no  
48 control for VOC.

49  
50 *An important note for ammonia:*



1 . Because of the uncertainties in assessing the impact of ammonia emissions reduction on  
 2 visibility, and because PM2.5 will decrease due to SO2 and NOx controls, EPA proposed not  
 3 to include ammonia on the pollutant list at this time.

4  
 5 **Step 4 - Identify the emission units and pollutants that constitute the BART-eligible**  
 6 **source**

7  
 8 The final step in the identification of BART-eligible sources would be to use the result from  
 9 the previous three steps to identify the equipment that is BART-eligible. If the total allowable  
 10 emissions from the stationary source exceed a potential to emit of 250 tons per year for any  
 11 individual pollutant listed in Step 3, then that collection of emission units is a BART-eligible  
 12 source. Once this BART-eligible source is determined, states must determine the  
 13 appropriate level of BART control for each source subject to BART. The table below provides  
 14 examples for determining a BART-eligible source:

<b>Example</b>	<b>Would BART be required?</b>
A source has two emission units having cumulative emissions exceeding 250 tons for SO <sub>2</sub> , but not for NO <sub>x</sub> and PM <sub>2.5</sub> .	Yes, BART would be required for all three pollutants.
A source has potential emissions that are less than 250 tons for each individual pollutant, but more than 250 tons from the sum over all pollutants.	No, BART would not be required for any of the pollutants.
A source has potential emissions of 500 tons per year of SO <sub>2</sub> , and potential emissions of 1 ton per year of PM <sub>2.5</sub> .	Yes, BART would be required for SO <sub>2</sub> , however, BART may or may not be required for PM <sub>2.5</sub> depending on whether the state has implemented a <i>de minimis</i> level for PM <sub>2.5</sub> .

15  
 16 *An important clarification for de minimis levels:*

17  
 18 Some BART-eligible sources emit individual pollutants listed in Step 3 at levels that would  
 19 make a very small contribution to regional haze. A 1 ton per year amount from a given  
 20 BART-eligible source would likely represent a *de minimis* fraction of a total regional  
 21 inventory. Therefore, EPA is proposing in the April 15, 2004 amendments that states should  
 22 be allowed the flexibility to identify de minimis levels of pollutants at BART eligible sources.  
 23 However, any de minimis values adopted by a state, shall not be higher than PSD levels: 40  
 24 tons per year of SO<sub>2</sub>, NO<sub>x</sub>, and VOC, and 15 tons per year for PM<sub>10</sub>.

25  
 26 **Identifying Which BART-eligible Sources Are Subject to BART:**

27  
 28 Once the four steps above are completed, the state should have a list of BART-eligible  
 29 sources. The state must then determine which of the BART-eligible sources may “emit any  
 30 air pollutant which may reasonably be anticipated to cause or contribute to any impairment of  
 31 visibility in any [Class I] area.”

1  
2

**Table A-1. Source Categories Subject to BART Requirements**

<b>BART Category ID #</b>	<b>Category (BART)</b>	<b>SCC</b>	<b>SIC</b>
1	Fossil fuel-fired steam electric plants > 250 MM BTU per hour	101xxxxx	4911
2	Coal cleaning plants (thermal dryers)	305010xx	1100, 2999
3	Kraft pulp mills	307001xx	2611, 2621, 2631
4	Portland cement plants	305006xx, 305007xx	3241
5	Primary zinc smelters	30303002	33xx, 3339
6	Iron and steel mill plants	303015xx	3312, 332x
7	Primary aluminum ore reduction plants	303001xx	3334
8	Primary copper smelters	303005xx	3331
9	Municipal incinerators capable of charging > 250 tons of refuse per day	501001xx, 502005xx	4953
10	Hydrofluoric, sulfuric, and nitric acid plants	301070xx	2819, 2899
11	Petroleum refineries	306xxxxx	2911
12	Lime plants	305016xx	3274
13	Phosphate rock processing plants	305019xx	1429, 1475
14	Coke oven batteries	303003xx, 303004xx	3312
15	Sulfur recovery plants	30603301, 31000208	2819
16	Carbon black plants (furnace process)	30100509, 30100503	2895
17	Primary lead smelters	303010xx	3339
18	Fuel conversion plants	n/a	n/a
19	Sintering plants	n/a	n/a
20	Secondary metal production facilities	304xxxxx	3341, 334x
21	Chemical process plants	301xxxxx	2899, 28xx
22	Fossil fuel-fired boilers > 250 MM BTU per hour	102001xx through 102007 103001xx through 103007	n/a
23	Petroleum storage and transfer facilities with a capacity > 300,000 barrels	306xxxxx	5171
24	Taconite ore processing plants	303023xx	1011, 3295
25	Glass fiber processing plants	305012xx	32xx
26	Charcoal production facilities	301006xx	2819, 2861

3  
4

1 **EXAMPLES OF BART CATEGORIES FOUND IN BERNALILLO COUNTY**

2  
3 **'BART 01' – Fossil Fuel-Fired Steam Electric Plants with Total Heat Capacity Greater**  
4 **than 250 million Btu per hour**

5  
6  
7 A fossil fuel-fired steam electric plant often includes a steam turbine and electric generator.  
8 Steam is used to drive the steam turbine which in turn drives an electric generator. The  
9 steam is created by either boilers and/or through a combined cycle turbine. The U.S. EPA  
10 proposed BART guidelines clarify that this source category "fossil fuel-fired steam electric  
11 plants" includes both boilers and combined cycle turbines.  
12

13 A combined cycle turbine consists of a gas turbine and a heat recovery steam generator  
14 (HRSG). The gas turbine creates electricity. Hot exhaust gases from the gas turbine are  
15 routed through a HRSG to generate steam. The steam created is used to drive a steam  
16 turbine which also drives an electric generator. A supplementary gas-fired burner, duct  
17 burner, or boiler can be used to increase the steam production by the HRSG.  
18

19 When examining whether the source meets the 250 million Btu per hour (MMBtu/hr) criteria,  
20 the U.S. EPA proposed BART guidelines state that the aggregate of all heat input to the  
21 "plant" should be totaled. This would include the heat input of the combined-cycle turbine as  
22 well as any boiler or dust burner. In a letter dated September 30, 1987. U.S. EPA  
23 addressed the PSD source category "Fossil Fuel-fired Steam Electric Plants." The U.S. EPA  
24 states that the term "plant" is inclusive of all heat generating equipment. A restrictive  
25 definition was not used in this case but the broad word "plant" was used, and, therefore, it is  
26 appropriate to include all heat generating equipment in determining the applicability for the  
27 fossil fuel-fired steam electric plants.  
28

29 If a plant makes electricity only for its own use it should not be considered in this category. A  
30 steam electric plant must sell electricity. However, this type of plant may be considered a  
31 BART-22 source category if it has boilers greater than 250 MMBtu/hr. Enforceable  
32 operational limits should be taken into account when determining whether a boiler's "fossil  
33 fuel" capacity exceeds 250 MMBtu/hr. Also to be considered a fossil fuel-fired combustor, a  
34 given unit must burn at least 50 percent fossil fuel.  
35

36 A New Source Performance Standard (NSPS) for fossil-fuel-fired steam generators (40 CFR  
37 60, Subpart D) regulates fossil-fuel-fired steam generating units that commenced  
38 construction or modification after August 17, 1971 and has a heat input rate of 250 MMBtu/hr  
39 or greater. Fossil-fuel-fired steam generating units of more than 250 MMBtu/hr heat input  
40 which commenced construction or modification after September 18, 1978 are subject to 40  
41 CFR 60, Subpart Da. Any unit covered under 40 CFR 60, Subpart Da is not regulated by 40  
42 CFR 60, Subpart D. Additionally, Subpart Da includes provisions for electric utility combined  
43 cycle gas turbines that are capable of combusting more than 250 MMBtu/hr heat input of  
44 fossil-fuel in the steam generator. However, only emissions resulting from combustion of  
45 fuels in the steam generating unit are subject to 40 CFR 60, Subpart Da. Gas turbines that  
46 commenced construction, modification, or reconstruction after October 3, 1977, with a heat  
47 input at peak load equal to or greater than 10 MMBtu/hr, are subject to Standards of  
48 Performance for Stationary Gas Turbines (40 CFR 60, Subpart GG). The combustion turbine  
49 portion of any stationary combined cycle steam/electric generating system is regulated by the  
50 National Emission Standards for Hazardous Air Pollutants for Stationary Combustion

1 Turbines (40 CFR 63, Subpart YYYY). These regulations are mentioned for information only  
2 and are not pertinent to determining BART-eligibility.  
3  
4

#### 5 **4.0 BART 04 – Portland Cement Plants**

6

7 Portland cement is a fine powder, gray or white in color, which consists of a mixture of  
8 hydraulic cement materials comprising primarily calcium silicates, aluminates and  
9 aluminoferrites. More than 30 raw materials are known to be used in the manufacture of  
10 Portland cement. These materials are chemically combined through pyroprocessing and  
11 subjected to subsequent mechanical processing operations to form gray and white Portland  
12 cement. The process can be divided into the following components: raw materials  
13 acquisition and handling, kiln feed preparation, pyroprocessing, and finished cement  
14 grinding. The heart of the Portland cement manufacturing process is the pyroprocessing  
15 system. This system transforms the raw mix into clinkers, which are gray, glass-hard,  
16 spherically shaped nodules. The pyroprocessing takes place in kilns.  
17

18 Portland cement plants which commenced construction or modification after August 17, 1971  
19 are regulated by the New Source Performance Standard (NSPS), Standards of Performance  
20 for Portland Cement Plants (40 CFR 60, Subpart F). This regulation is applicable to the kiln,  
21 clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker  
22 storage, finished product storage, conveyor transfer points, bagging and bulk loading and  
23 uploading systems. Portland cement plants may also be subject to the National Emission  
24 Standard for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40  
25 CRF 63, Subpart LLL). These regulations are mentioned for information only and are not  
26 required to determine BART-eligibility.  
27

#### 28 **BART-ELIGIBLE SOURCES IN BERNALILLO COUNTY**

29

30 The WRAP identified three potential BART-eligible sources in Bernalillo County. These  
31 were: PNM Reeves Generating Station, GCC Rio Grande Inc, and Cobisa Person Power  
32 Project. After analysis by the Department, all three sources were determined to be NOT  
33 BART-eligible. (See BART determination\_below)  
34

1 **PNM Reeves**

2  
3 **How to determine whether a source is BART-eligible:**

4  
5 **Step 1:** Identify emission units in the BART categories. Does the plant contain  
6 emissions units in one or more of the 26 source categories?

7 No → Stop

8 Yes → Proceed to Step 2

9  
10 **YES. Units 1, 2, & 3**

11  
12 **Step 2:** Identify the start-up dates of these emission units. Do any of these emissions units  
13 meet the following two tests?

14  
15 In existence on August 7, 1977 AND  
16 Began operation after August 7, 1962

17  
18 → No → Stop

19 → Yes → Proceed to Step 3

20  
21 **No.**

22  
23  
24 **Step 3:** Compare the potential emissions from these emission units to the 250 ton/yr  
25 cutoff Identify the “stationary source” that includes the emission units you identified in  
26 Step 2. Add the current potential emissions from all the emission units identified in  
27 Steps 1 and 2 that are included within the “stationary source” boundary. Are the  
28 potential emissions from these units 250 tons per year or more for any visibility-  
29 impairing pollutant?

30 No → Stop

31 Yes → These emissions units comprise the “BART-eligible source.”

32  
33 2) If any of these facilities (even the non-BART eligible ones) have implemented controls  
34 since 2004 to the present, please record that as well.

1  
2 **Delta Person Generating Station**  
3

4 **How to determine whether a source is BART-eligible:**  
5

6 Step 1: Identify emission units in the BART categories. Does the plant contain  
7 emissions units in one or more of the 26 source categories?

8 No → Stop

9 Yes → Proceed to Step 2

10  
11 **No. Unit 1 does not fit into any of the source categories because it is a simple**  
12 **cycle gas turbine.**  
13

14 Step 2: Identify the start-up dates of these emission units. Do any of these emissions units  
15 meet the following two tests?  
16

17 In existence on August 7, 1977 AND  
18 Began operation after August 7, 1962  
19

20 → No → Stop

21 → Yes → Proceed to Step 3  
22  
23

24 Step 3: Compare the potential emissions from these emission units to the 250 ton/yr  
25 cutoff. Identify the “stationary source” that includes the emission units you identified  
26 in Step 2. Add the current potential emissions from all the emission units identified in  
27 Steps 1 and 2 that are included within the “stationary source” boundary. Are the  
28 potential emissions from these units 250 tons per year or more for any visibility-  
29 impairing pollutant?

30 No → Stop

31 Yes → These emissions units comprise the “BART-eligible source.”  
32

33 2) If any of these facilities (even the non-BART eligible ones) have implemented controls  
34 since 2004 to the present, please record that as well.

1  
2 **GCC Rio Grande**  
3

4 **How to determine whether a source is BART-eligible:**  
5

6 Step 1: Identify emission units in the BART categories. Does the plant contain  
7 emissions units in one or more of the 26 source categories?

8 No → Stop

9 Yes → Proceed to Step 2

10  
11 **YES. Unit 1**  
12

13 Step 2: Identify the start-up dates of these emission units. Do any of these emissions units  
14 meet the following two tests?  
15

16 In existence on August 7, 1977 AND  
17 Began operation after August 7, 1962  
18

19 → No → Stop

20 → Yes → Proceed to Step 3  
21

22 **No.**  
23

24 Step 3: Compare the potential emissions from these emission units to the 250 ton/yr  
25 cutoff. Identify the “stationary source” that includes the emission units you identified  
26 in Step 2. Add the current potential emissions from all the emission units identified in  
27 Steps 1 and 2 that are included within the “stationary source” boundary. Are the  
28 potential emissions from these units 250 tons per year or more for any visibility-  
29 impairing pollutant?

30 No → Stop

31 Yes → These emissions units comprise the “BART-eligible source.”  
32

33 2) If any of these facilities (even the non-BART eligible ones) have implemented controls  
34 since 2004 to the present, please record that as well.