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State of New Mexico  
*Office of the Governor*

Bill Richardson  
*Governor*

March 11, 2009

Mr. Lawrence E. Starfield  
Acting Regional Administrator  
United States Environmental Protection Agency, Reg. 6  
Dallas, TX 75202-2733

Dear Mr. Starfield:

This letter is submitted to fulfill New Mexico's requirements under Section 107(d)(1) of the Clean Air Act. The Clean Air Act requires all state governors to submit initial designations within one year of the promulgation of a new or revised National Ambient Air Quality Standard (NAAQS). The U.S. Environmental Protection Agency promulgated in March of 2008 a revised NAAQS for ground level ozone pollution.

Our certified monitoring data show that one ambient air monitor in New Mexico has recorded exceedances of the NAAQS for ozone. This monitor is located in Doña Ana County. The State of New Mexico's recommended county designations for the eight-hour ozone National Ambient Air Quality Standard are included in the attachment to this letter.

In the case of the Dona Ana County monitor, we believe the evidence shows that the exceedance is contributed to by emissions from sources beyond the borders and beyond the control of the State of New Mexico. We intend to explore this aspect of the New Mexico situation in detail with your staff over the coming year. We also request that USEPA conduct a thorough audit of the Dona Ana County monitor that indicates exceedance of the standard as soon as possible to rule out any possibility of monitor error.

That discussion notwithstanding, the State of New Mexico's recommendations for ozone nonattainment boundaries are included in the attachment to this letter. These boundary recommendations could change should 2009 data show that a nonattainment designation is not warranted.

If you have any questions regarding the enclosed document, please contact Mary Uhl, Air Quality Bureau Chief, at (505) 476-4301.

Sincerely,

A handwritten signature in cursive script that reads "Bill Richardson".

Bill Richardson  
Governor of New Mexico  
BR/am

*New Mexico  
Recommended Area Designations  
for the  
2008 Revised Ozone NAAQS*

Prepared by  
The State of New Mexico  
Environment Department  
Air Quality Bureau



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**Acronyms**

ADT	Average Daily Traffic
AQCR	Air Quality Control Region
AQS	Air Quality System
BBER	Bureau of Business and Economic Research
BLM	Bureau of Land Management
Btu	British Thermal Unit
CAA	Clean Air Act
CAAP	San Juan County Clean Air Action Plan
CBSA	Core Based Statistical Area
CO	Carbon Monoxide
EPA	United States Environmental Protection Agency
EPA Natural Gas	EPA Natural Gas Science to Achieve Results
STAR	
GCCS	Gas Collection and Control System
hp	Horsepower
HYSPLIT	Hybrid Single-Particle Lagrangian Integrated Trajectory
LFG	Landfill Gas
mi <sup>2</sup>	Square Mile
MMBtu	Million British Thermal Unit
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standard
NEI	National Emissions Inventory
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMAC	New Mexico Administrative Code
NMDOT	New Mexico Department of Transportation
NMED	New Mexico Environment Department
NO <sub>2</sub>	Nitrogen Dioxide
NOAA	National Oceanic and Atmospheric Administration
NO <sub>x</sub>	Oxides of Nitrogen
NSPS	New Source Performance Standards
NSR	New Source Review
ppm	Parts per Million
RAWS	Remote Automated Weather Station
RFD	Reasonable Foreseeable Development
SCRTD	South Central Regional Transit District
TPD	Tons per Day
TPY	Tons per Year
USPS	United States Postal Service
VISTAS	Voluntary Innovative Strategies for Today's Air Standards
VOC	Volatile Organic Compound
WRAP	Western Regional Air Partnership

# New Mexico Environment Department 2008 8-Hour Ozone Designation and Boundary Recommendations

## I. Introduction

On March 12, 2008, the United States Environmental Protection Agency (EPA) revised the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) from 0.08 parts per million to 0.075 parts per million (ppm) ([73 FR 16436; March 27, 2008](#)). Section 107(d)(1)(A) of the federal [Clean Air Act](#) (CAA) requires states to submit to EPA recommendations on area designations no later than one year after the promulgation of a new or revised NAAQS. Areas are to be identified as attainment, nonattainment, or unclassifiable. The deadline for submitting these recommendations is March 12, 2009.

The State of New Mexico recommends that the counties under the jurisdiction of the New Mexico Environment Department (NMED), exclusive of tribal lands and Bernalillo County, be designated as identified in Table 1 below. These recommendations rely on air quality monitoring data using the most recent three consecutive years of quality-assured data (2006-2008) and EPA's December 4, 2008 Area Designation Guidance Memo (Appendix A) as the basis for its recommendations. The data for 2005-2007 and 2006-2008 for all ozone monitors are presented in Appendix B.

**Table 1: 2009 New Mexico County Designations for 8-hour Ozone NAAQS (based on 2006-2008 data)**

County	County Monitor Data (4th Max 8-hr Avg., ppm)	8-Hour Ozone NAAQS Recommendation
Bernalillo County	out of NMED's jurisdiction	out of NMED's jurisdiction
Catron County	no data	Attainment/Unclassifiable
Chaves County	no data	Attainment/Unclassifiable
Cibola County	no data	Attainment/Unclassifiable
Colfax County	no data	Attainment/Unclassifiable
Curry County	no data	Attainment/Unclassifiable
De Baca County	no data	Attainment/Unclassifiable
	0.070 ---- La Union	Non-attainment/partial
	0.069 ---- SPCY	
	0.069 ---- Chaparral	
	<b>0.076</b> ---- Desert View	
	0.072 ---- Santa Teresa	
Doña Ana County	0.065 ---- Solano	
Eddy County	0.069 ---- Carlsbad	Attainment
Grant County	0.064 ---- Hurley Smelter	Attainment
Guadalupe County	no data	Attainment/Unclassifiable
Harding County	no data	Attainment/Unclassifiable
Hidalgo County	no data	Attainment/Unclassifiable
Lea County	0.068 ---- Hobbs	Attainment
Lincoln County	no data	Attainment/Unclassifiable

County	County Monitor Data (4th Max 8-hr Avg., ppm)	8-Hour Ozone NAAQS Recommendation
Los Alamos County	no data	Attainment/Unclassifiable
Luna County	0.058 ---- Deming	Attainment
McKinley County	no data	Attainment/Unclassifiable
Mora County	no data	Attainment/Unclassifiable
Otero County	no data	Attainment/Unclassifiable
Quay County	no data	Attainment/Unclassifiable
Rio Arriba County	no data	Attainment/Unclassifiable
Roosevelt County	no data	Attainment/Unclassifiable
Sandoval County	0.061 ---- Bernalillo	Attainment/Unclassifiable
	0.070 ---- Rio Rancho	Attainment/Unclassifiable
San Juan County	0.065 ---- Bloomfield	Attainment*
	0.075 ---- Navajo Lake	
	0.071 ---- Substation	
San Miguel County	no data	Attainment/Unclassifiable
Santa Fe County	no data	Attainment/Unclassifiable
Sierra County	no data	Attainment/Unclassifiable
Socorro County	no data	Attainment/Unclassifiable
Taos County	no data	Attainment/Unclassifiable
Torrance County	no data	Attainment/Unclassifiable
Union County	no data	Attainment/Unclassifiable
Valencia County	no data	Attainment/Unclassifiable
<b>Bold</b> - exceeds NAAQS		

\*See discussion below.

Within New Mexico, one monitor has detected ozone concentrations during the 2006-2008 data time period that violates the revised 8-hour ozone standard of 0.075 ppm, the Desert View monitor located in southern Doña Ana County within the City of Sunland Park. The monitor located at Navajo Lake in eastern San Juan County recorded some anomalously high ozone concentrations in late October that, if valid, would have indicated this area was not in attainment with the 8-hour ozone standard. However, the NMED has recently determined that ozone monitoring data collected at the Navajo Lake site is likely not of sufficient quality to validate and certify for use in the attainment/nonattainment designation process. The NMED and EPA Region 6 are currently conducting a joint investigation into the validity of the data. However, as of this submittal, there is substantial doubt concerning the validity of the data, particularly data exceeding NAAQS collected in October 2008, and the resulting design value at Navajo Lake, excluding data that cannot be validated at this time is not in violation of the 8-hour ozone standard.

The New Mexico Environment Department has recently determined that ozone monitoring data collected at the Navajo Lake site may not be of sufficient quality to certify for use in the attainment/nonattainment designation process. The NMED and USEPA are currently conducting a joint investigation into the validity of the data;

however, at this time, there is substantial doubt that the data is valid, particularly data collected in October 2008 that would indicate that the area would not attain the federal ozone standard. Due to this recent development, the state of New Mexico will not recommend ozone nonattainment status for San Juan County and part of Rio Arriba County, as was previously posted on our website.

An extensive Through-the-Probe (TTP) performance audit of the ozone and nitrogen dioxide monitor was conducted by USEPA at the Navajo Lake monitoring site in San Juan County on March 4, 2009. As many of you know, the ozone monitor at this site has recorded the highest ozone levels in the county, and, in recent months, has recorded levels of ozone that did not appear to correlate with levels of ozone recorded at other monitors in the region. NMED and USEPA have conducted rigorous analyses at the site since October of 2008, including the co-location of an additional ozone monitor last November to determine if there were problems with the permanent monitor at the site. Initial statistical analysis of the audit by EPA showed that both the permanent and co-located monitors passed the audit; however, shortly after the audit a problem was identified with the subsequent monitoring data collected. At this time, there are several possible issues that may be the cause of the data errors. NMED is working with USEPA to ensure that future data collected at Navajo Lake is valid.

The New Mexico Environment Department (NMED) draft recommendation "New Mexico Recommended Area Designations for the 2008 Revised Ozone NAAQS" was based on the ozone design value recorded at the Navajo Lake monitor site (2006-2008). The Navajo Lake monitor design value considered in the draft recommendation included some high ozone readings in October 2008 that contributed to the 0.077 ppm design value. After removing ozone data from October 2008 through the present from calculations, the new preliminary 8-hour ozone design value for Navajo Lake site (2006-2008) is 0.075 ppm. This level is in attainment with the revised federal ozone standard of 0.075 ppm. The other two federal regulatory design-value monitors in San Juan County (Substation and Bloomfield monitors) have design values below the revised 8-hour ozone standard. The Bloomfield monitor design value (2006-2008) is 0.065 ppm. The Substation monitor design value (2006-2008) is 0.071 ppm. A monitor design value must be greater than the revised 8-hour ozone standard of 0.075 ppm for a nonattainment designation. Based on EPA's statistical analysis, New Mexico is revising its recommendation to "Attainment" for San Juan County, and "Unclassifiable" for Rio Arriba County because there are no ozone monitors sited in Rio Arriba County.

The NMED conducted an analysis to determine whether New Mexico would recommend the presumptive boundary for Doña Ana County area designation, or propose an alternate boundary. EPA recommends that the Core Based Statistical Area (CBSA) serve as the presumptive boundary when considering the geographic boundaries of an ozone nonattainment area. The presumptive boundary for Doña Ana County is the county's boundaries. To assist with these determinations, NMED evaluated the 9 factors listed in Attachment 2 of EPA's December 4, 2008 Memorandum on Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards, as follows:

- Air quality data
- Emissions data (location of sources and contribution to ozone concentrations)
- Population density and degree of urbanization (including commercial development)
- Traffic and commuting patterns
- Growth rates and patterns
- Meteorology (weather/transport patterns)
- Geography/topography (mountain ranges or other air basin boundaries)
- Jurisdictional boundaries (e.g., counties, air districts, existing nonattainment areas, Reservations, Metropolitan Planning Organizations)
- Level of control of emission sources

Based on the results of the analysis, the NMED has decided to recommend an area smaller than the Doña Ana County CBSA.

Should the 2009 ozone data for San Juan County demonstrate that the area is not in attainment with the 8-hour ozone standard, the 9-factor analysis completed for San Juan and Rio Arriba Counties is included as Appendix E. Given that the preliminary design value for this area is 0.075 ppm, there is a possibility that the state could recommend a nonattainment designation for the area in the future.

## II. The 9-Factor Analysis and Boundary Determination: Doña Ana County

Sunland Park, New Mexico lies within Doña Ana County, New Mexico. Doña Ana County has a total area of 3,804 mi.<sup>2</sup> and a population of 180,077 (estimate 2002).

Sunland Park was officially designated as nonattainment for the 1-hour ozone NAAQS in a Federal Register announcement published June 12, 1995 ([60 FR 30789](#)), see Appendix D). Sunland Park was designated as a marginal nonattainment area. The nonattainment area included the communities of Sunland Park, Santa Teresa, and La Union, which will be referred to from now on as the Sunland Park area. The Sunland Park area is located along the border region of New Mexico and is adjacent to El Paso, Texas, and Ciudad Juarez, Mexico, in what is commonly referred to as the Paso del Norte Airshed.

Due to the revocation of the 1-hour NAAQS for ozone in 2005, EPA required that all areas that were currently nonattainment for the 1-hour NAAQS, but in attainment for the new 8-hour NAAQS for ozone conduct an analysis to re-designate those nonattainment areas to attainment/maintenance status. An attainment plan was submitted to EPA for the Sunland Park area in June of 2007. NMED is still waiting on EPA approval of the attainment plan.

The Sunland Park area is included within the El Paso Metropolitan Planning Organization (MPO). For population and employment determinations the MPO divided the area into four segments: 1) Sunland Park, 2) Santa Teresa, 3) La Union, and 4) Gadsden (the area north of La Union).

### II.1: Air Quality Data

The monitoring network in Doña Ana County contains six federal regulatory design-value monitors operated and maintained in accordance with 40 CFR 58. Table 2 below contains information on the current ozone monitors in the Sunland Park area.

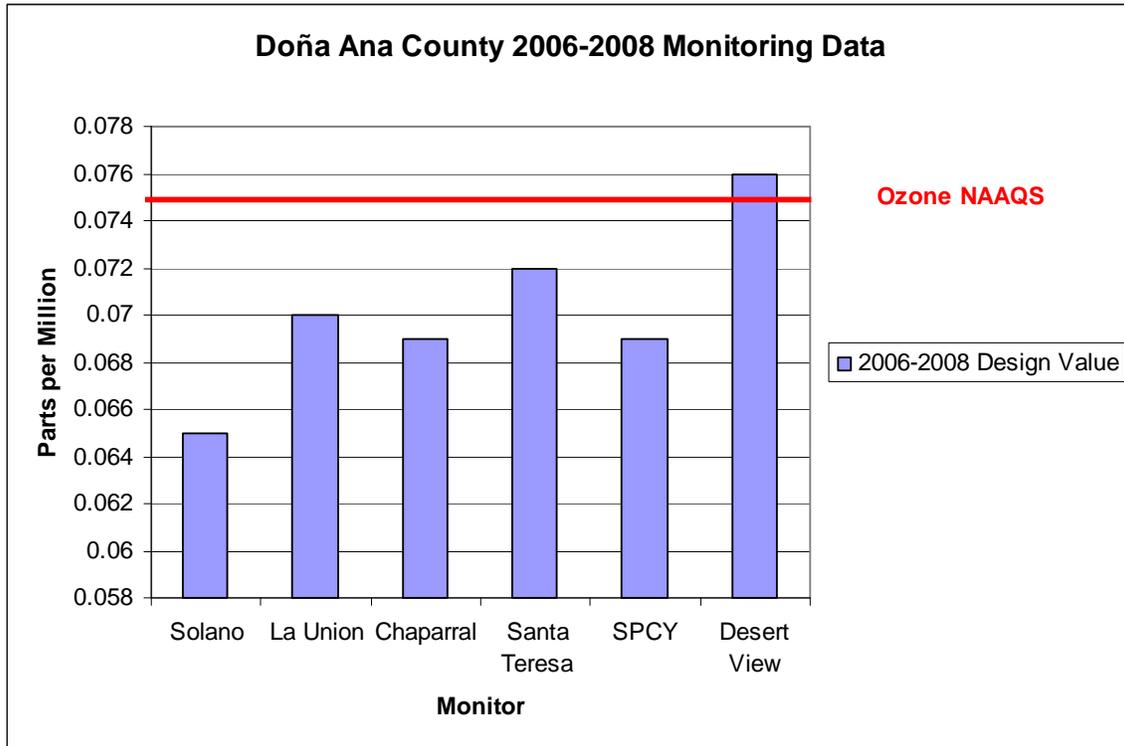
**Table 2: Sunland Park Area Monitoring Data**

Sunland Park Area								
Site Name	AQS#	Year				3-Year Avg. [2005-2007] (ppm)	3-Year Avg. [2006-2008] (ppm)	Design-Value (ppm)
		2005 (ppm)	2006 (ppm)	2007 (ppm)	2008 (ppm)			
Sunland Park	35-013-0017	0.070	0.073	0.070	0.065	0.071	0.069	0.069
Desert View	35-013-0012	0.076	0.080	0.076	0.074	0.077	0.076	<b>0.076</b>
Santa Teresa	35-013-0022	0.070	0.073	0.073	0.072	0.072	0.072	0.072
La Union	35-013-0008	0.070	0.072	0.068	0.071	0.070	0.070	0.070
<b>Bold – exceeds NAAQS</b>								

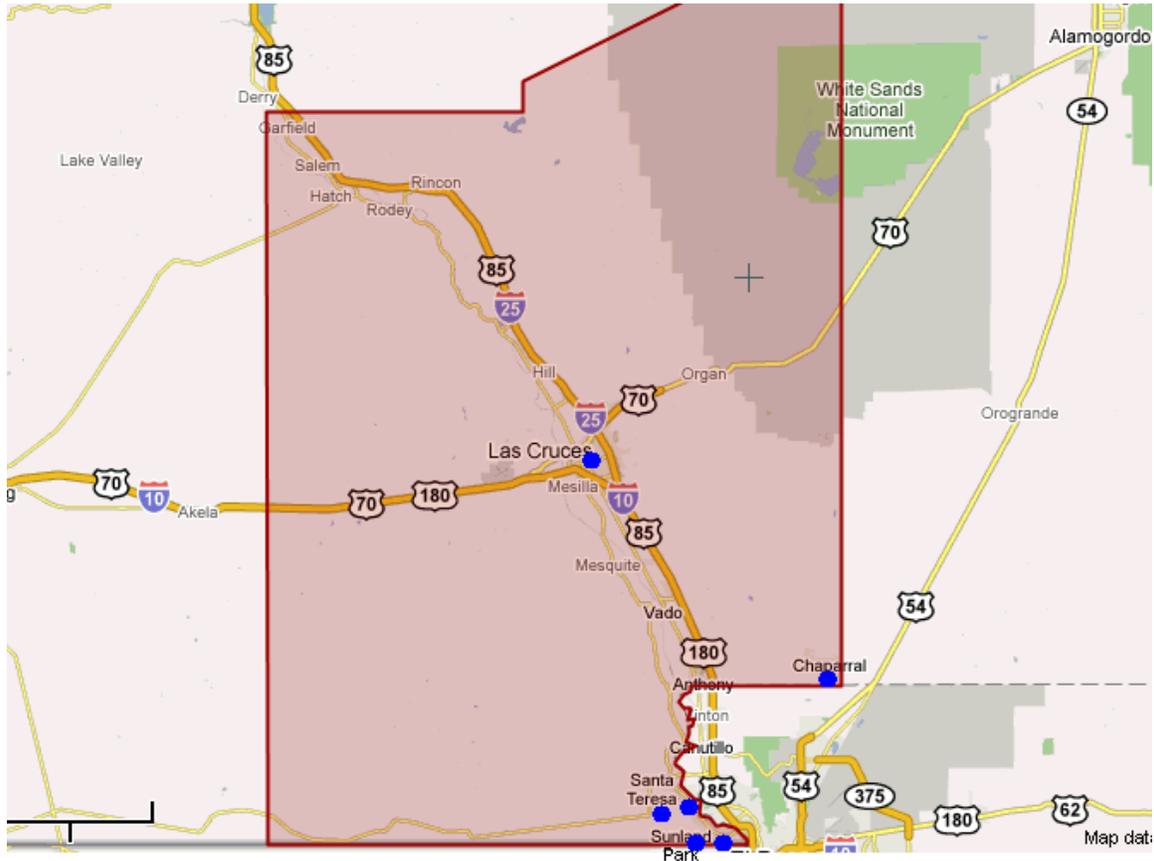
Within the Sunland Park area monitoring network, only the Desert View monitor has recorded levels that exceed the revised 8-hour ozone standard of 0.075 ppm for the years

of 2006-2008 (see Figure 1 below). Other monitors within the Sunland Park area have design-values between 0.069 and 0.072 ppm. The state has two other ozone monitors in Doña Ana County located in Chaparral and Las Cruces, NM (Solano). Both of those monitors have design-values below 0.075 ppm. Figure 2 shows the ozone monitoring network for Doña Ana County.

**Figure 1: Doña Ana County 2006-2008 Monitoring Data.**



**Figure 2: Doña Ana County Ozone Monitoring Network**



**II.2: Emissions Data**

The U.S. Environmental Protection Agency’s guidance requires that an emissions inventory be developed to identify the level of emissions in the violating area and adjacent regions that might have contributed to an area’s ozone exceedance. For the proposed Sunland Park Nonattainment area, the attainment inventory uses a base year of 2002. The following table (Table 3) lists all actual emissions (area, point and mobile) for the base year of 2002 for the ozone precursors nitrogen oxides, carbon monoxide, and volatile organic compounds in tons per year and tons per day.

**Table 3: Summary of Source Categories for 2002 Emissions Inventory - Sunland Park Area**

Source Category	NOx		CO		VOC	
	TPY	TPD	TPY	TPD	TPY	TPD
Area	30.40	0.09	157.94	0.59	193.73	0.55
Point	921.48	2.53	159.55	0.44	30.70	0.08
Mobile	829.63	2.27	6,040.64	16.55	530.14	1.45
<b>TOTAL EMISSIONS</b>	1,781.51	4.89	6,358.13	17.57	754.57	2.08

\* Point and mobile source emissions data from 2002 National Emission Inventory. Area source emission data from 2005 Sunland Park 8-hour ozone Maintenance plan.

Air quality within the Paso del Norte Airshed has improved over the last 10 years due to cooperative efforts between the State of Texas, the State of New Mexico, and the State of Chihuahua in Mexico through organizations such as the Paso Del Norte Joint Advisory Committee. The Sunland Park area total VOC, CO and NOx emissions are 1.6% of those in El Paso and Ciudad Juárez combined. Table 4 shows the contributions from El Paso County and Ciudad Juarez in comparison to the Sunland Park area.

**Table 4: Emissions in Paso del Norte Airshed**

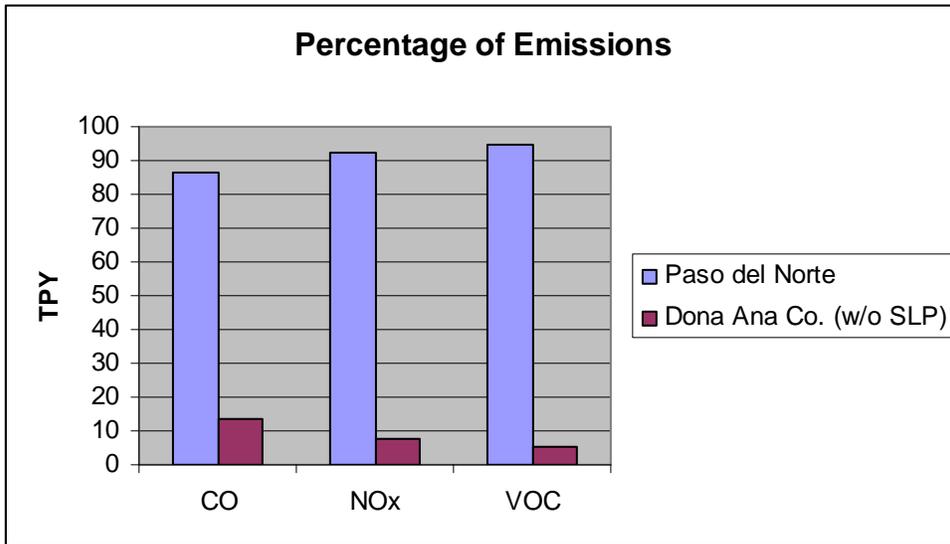
Source	*Ciudad Juárez TPY			**El Paso County TPY			Sunland Park TPY		
	VOC	NOx	CO	VOC	NOx	CO	VOC	NOx	CO
Mobile	20,208	25,590	155,583	9,939	17,122	148,277	530	830	6,040
Area	68,085	14,082	52,393	8,640	872	5,993	190	30	158
Point	2,308	18,133	13,821	861	4,223	1,704	31	921	160
<b>Total</b>	<b>90,601</b>	<b>57,805</b>	<b>221,797</b>	<b>19,440</b>	<b>22,217</b>	<b>155,974</b>	<b>751</b>	<b>1,781</b>	<b>6,358</b>
<b>Percentage</b>	<b>81.7</b>	<b>70.6</b>	<b>57.7</b>	<b>17.5</b>	<b>27.2</b>	<b>40.6</b>	<b>0.73</b>	<b>2.2</b>	<b>1.7</b>

\* The emissions data for Ciudad Juarez comes from, *The 1999 Mexico NEI: Six Border States* and are based on the inventory data for the State of Chihuahua. This is the only complete emission inventory data currently available for this area.

\*\* The emissions data for El Paso comes from the, *El Paso County 8-Hour Ozone Maintenance Plan* and the *El Paso Redesignation to Attainment for Carbon Monoxide and Maintenance Plan*, both submitted to EPA by the Texas Commission on Environmental Quality in January of 2006.

Figure 3 shows that the combined Paso del Norte airshed emissions (including the cities of Sunland Park, El Paso, and Juarez) for VOC, CO and NOx comprise 89% of the emissions within the region (Doña Ana County, City of El Paso, and Ciudad Juarez). The most significant emission contribution from Doña Ana County is CO emissions primarily from mobile sources, which comprise only 13% of the total CO emissions within the region. NOx and VOC emissions from Doña Ana County comprise less than 8% of the total emissions for the region.

**Figure 3: Summary of Regional Emissions**



**II.3: Population Density and Degree of Urbanization**

In order to determine the population of the proposed nonattainment area, the NMED used data from the U. S. Census Bureau - 2000 Census and estimated population counts for the city of Sunland Park. The data used for the proposed nonattainment area was retrieved using U.S. Postal Service (USPS) Zip Codes for: 1) Sunland Park, NM, 88063, 2) Santa Teresa, NM, 88008 and, 3) Anthony, NM, 88024. Anthony, NM is being used as a substitute due to the lack of census data for the La Union area. The reported population and housing units for the three zip codes totaled 16,735 and 4,864 respectively. The combined land area of the three communities, excluding any surface water, totaled 25.46 mi<sup>2</sup>. The proposed nonattainment area covers 42 mi<sup>2</sup>.

The population housing density for the proposed nonattainment area equals 398.45 people/mi<sup>2</sup> and 115.81 housing units/mi<sup>2</sup>, respectively. When the communities are looked at individually, the population and housing densities increase due to the exclusion of vacant land. For the city of Sunland Park and the communities of Santa Teresa and Anthony, the population densities change to 982.7 people/mi<sup>2</sup>, 506.9 people/mi<sup>2</sup>, and 204.3 people/mi<sup>2</sup> respectively. This information is summarized in Table 5 below.

**Table 5: Population and Housing Densities - 2000 - Census**

Population and Housing Density	Santa Teresa 88008	Anthony 88024	Sunland Park 88063	Nonattainment Area Total	NM
<b>Population</b>	5,551	807	10,377	16,735	1,819,046
Housing Units	1,856	224	2,784	4,864	780,579
Total Area (mi <sup>2</sup> )	10.9	3.9	10.8	42	121,589.4
Water Area (mi <sup>2</sup> )	0	0	0.25	0.25	233.96
Land Area (mi <sup>2</sup> )	10.9	3.9	10.5	42	121,355
<b>Density/mi<sup>2</sup></b>					
Population	506.9	204.3	982.7	398.5	15.0
Housing Units	169.5	56.7	263.6	115.8	6.4

Due to the close proximity of the Sunland Park area to El Paso County (2000 Census population of 704,318) and Ciudad Juarez (2000 population of 1,257,926), the U. S. Census Bureau classifies the three areas as urban.

Since 1980, the community of Santa Teresa has been targeted by developers wishing to establish a commercial center on New Mexico’s southern border. Today, Santa Teresa is a busy port-of-entry with warehouses, customs broker services, and approximately 65 import, manufacturing, and support operations that serve the community and its industrial park.

**II.4: Traffic and Commuting Patterns**

Within the Sunland Park area, the majority of the vehicular traffic is limited to a few major thoroughfares, including Hondo, Country Club Rd., NM 273 (McNutt), and Racetrack. For the whole of Doña Ana County, most vehicular traffic is concentrated to the central and southern part of the county. Figure 4 shows the traffic patterns for Doña Ana County. The major thoroughfares in the county are Interstate 25 and Interstate 10. Vehicular traffic on both of these thoroughfares increases when approaching the cities of Las Cruces and El Paso.

The New Mexico South Central Council of Government Transit Service and Financial Plan that was issued in August of 2008 states that within Doña Ana County, nearly one in five residents (18.5%) travel to another county, primarily El Paso County, to get to work (see Table 6). The Plan was developed for the South Central Regional Transit District (SCRTD), which includes Doña Ana, Otero and Sierra Counties, all located in south central New Mexico. In 2000, more than 12,000 inter-county work trips were made by residents in south central New Mexico. Approximately 3,000 daily work trips were made from Otero County comprising about 12.6% of the people travelling to work. Only 400 work trips comprising less than 10% of overall work trips were made out of Sierra County.

**Table 6: Travel Patterns to Work by County for 2000**

<b>County</b>	<b>Total Workers</b>	<b>Work in County of Residence</b>	<b>Percent</b>
Doña Ana County	66,761	54,431	81.5%
Otero County	24,896	21,769	87.4%
Sierra County	4,362	3,956	90.7%
El Paso County	244,464	232,843	95.2%
Total	348,820	320,391	91.8%

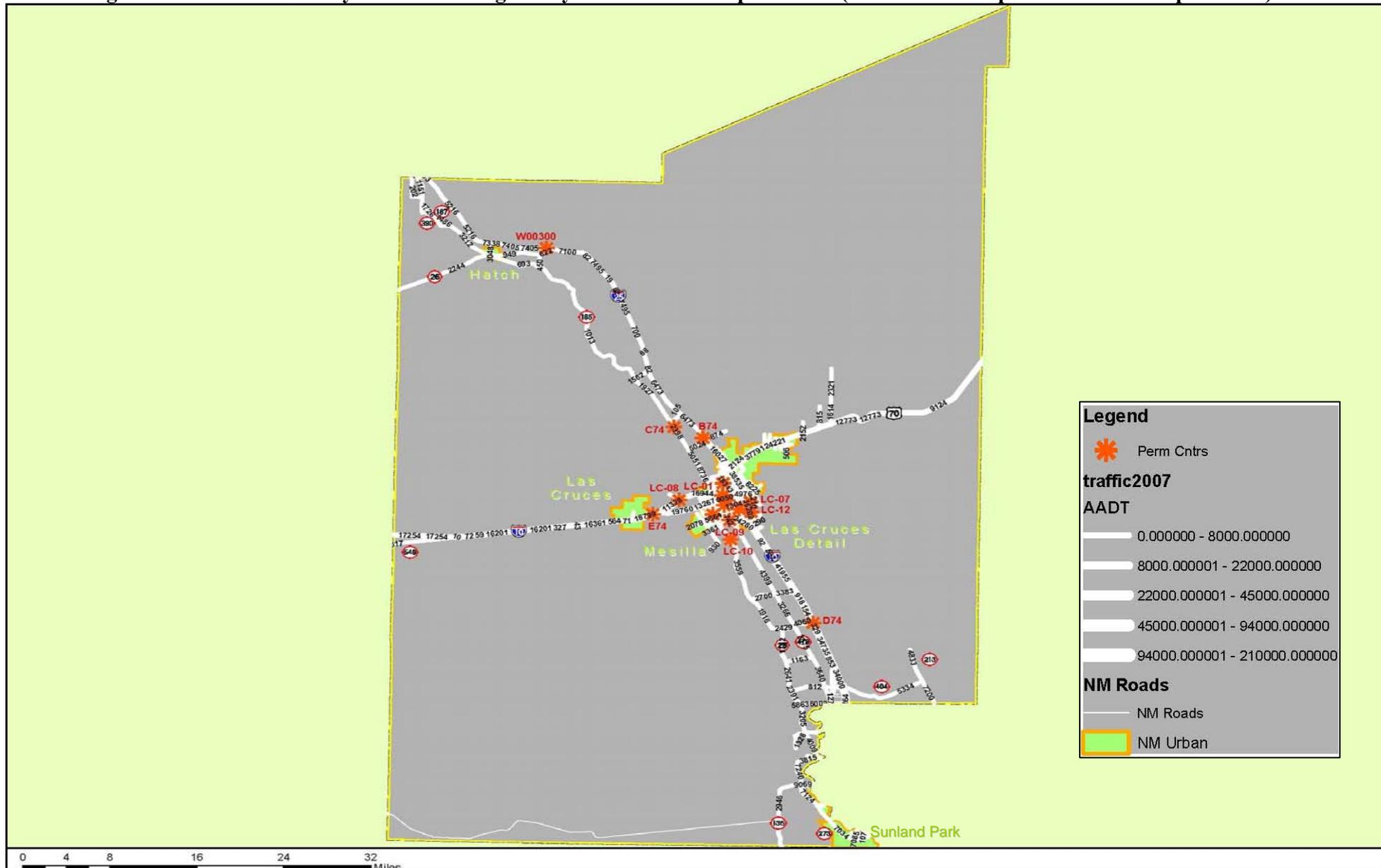
The Plan also indicates that more than 56% of all inter-county work trips in SCRTD originate in Doña Ana County with a final destination of El Paso County (see Table 7). Trips originating in El Paso County with a destination of Doña Ana County comprise nearly 25% of all inter-county work trips. More than 80% of the work trips in the SCRTD region occur between Doña Ana County and El Paso County.

Another 11% of the work trips are comprised of trips originating in Otero County with destinations of either El Paso County or Doña Ana County. Inter-county trips between Otero and Lincoln Counties comprise another 4% of total inter-county trips.

**Table 7: Inter-County Work Trips for 2000**

<b>County Trip/Origin-Destination</b>	<b>Count</b>	<b>Percent of Total</b>
Doña Ana - El Paso	10,446	55.85%
El Paso - Doña Ana	4,674	24.99%
Otero - El Paso	1,176	6.29%
Otero - Doña Ana	882	4.72%
Otero - Lincoln	419	2.24%
Doña Ana - Sierra	347	1.86%
Doña Ana - Otero	231	1.24%
Sierra - Doña Ana	203	1.09%
El Paso - Otero	163	0.87%

Figure 4: Doña Ana County Annual Average Daily Traffic Flow Map for 2007 (New Mexico Department of Transportation).

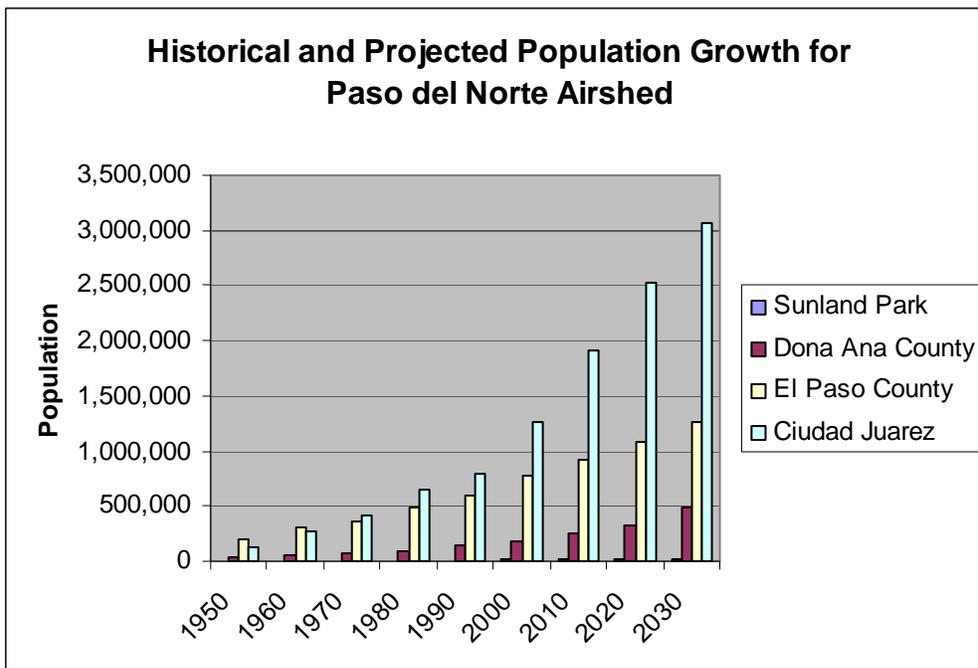


## II.5: Growth rates and patterns

In order to evaluate growth rates and patterns in the proposed nonattainment area, NMED analyzed changes in population and density, and current and future land use patterns. During the time period from 1990 to 2000, the Sunland Park area exhibited steady growth with nearly a 6.2% annual increase in population from 8,179 in 1990 to 13,309 residents in 2000. After 2000, the growth rate in the area slowed considerably with an estimated population of 14,225 in 2007 corresponding to a growth rate of 6.9% for this time period. Doña Ana County, from 1990 to 2000 showed an overall growth increase of 2.2% annually, with an increase in population from 135,510 to 174,682 in 2000.

Within the Paso del Norte region the majority of the population growth centers around the cities of El Paso, Tex.; and Ciudad Juárez, Chihuahua. According to the 2000 Census, approximately 2.25 million people reside in the Paso del Norte region, 1,257,926 are residents of Ciudad Juárez. The El Paso County census reported 704,318 inhabitants, with a 1.45% annual growth rate throughout the 1990s; Ciudad Juarez showed a 4.36% average annual increase. Figure 5 illustrates the historic and projected population growth for the Paso del Norte region from 1950 through 2030.

**Figure 5: Historical and Projected Population Growth for the Paso del Norte Airshed**



The City of Sunland Park was incorporated in 1984 after sixty years of being an established railroad settlement. Nearly the entire city is privately owned with two-thirds of the land classified as vacant. Residential neighborhoods account for 14% of the area while commercial and industrial use accounts for 4.5% of the area. Approximately 42% is zoned residential with 27% of the City zoned for commercial/industrial uses. With the

close proximity to the large and fast growing City of El Paso, Sunland Park may have a high demand for development in the future. Based on existing zoning, Sunland Park currently has vacant land to accommodate over 7,000 residential units (28,000 people based on average household size), 4.9 million square feet of commercial development and 5.2 million square feet of industrial development.

To the north of the City of Sunland Park and Santa Teresa, historic and current agricultural land uses predominate in the area with no foreseeable changes in the future. To the west and north of Sunland Park, Doña Ana County has two dedicated sites zoned for industrial use, dubbed as Foreign Trade Zones. The first site is south of the Santa Teresa airport and is a mix of county and privately owned property equaling approximately 897 acres of land. The second site is located near the Santa Teresa Port of Entry on the international border with Mexico and encompasses approximately 304 acres of land.

## **II.6: Meteorology**

The NMED has maintained design-value monitors that comply with federal regulations at each of its 6 monitoring sites in the Sunland Park area and has quality assured data since 1996. To determine the predominant wind patterns in the area, NMED used data from 1996 through 2008 to create wind rose charts. The Sunland Park area is surrounded on the northeast, east, southeast, south and southwest by the cities of El Paso, TX and Ciudad Juárez, Chihuahua, MX. The Sunland Park area, City of El Paso, and Ciudad Juarez are all part of the Paso del Norte airshed. The charts below (Figures 6.1 - 6.3) indicate that the wind flows from these directions nearly 55 percent of the time. The data also indicate that winds blow from the west approximately 22 percent of time.

**Figure 6: Doña Ana County Monitor Wind Roses**

Figure 6.1: Santa Teresa Monitor, January 23, 1996 – December 31, 2008

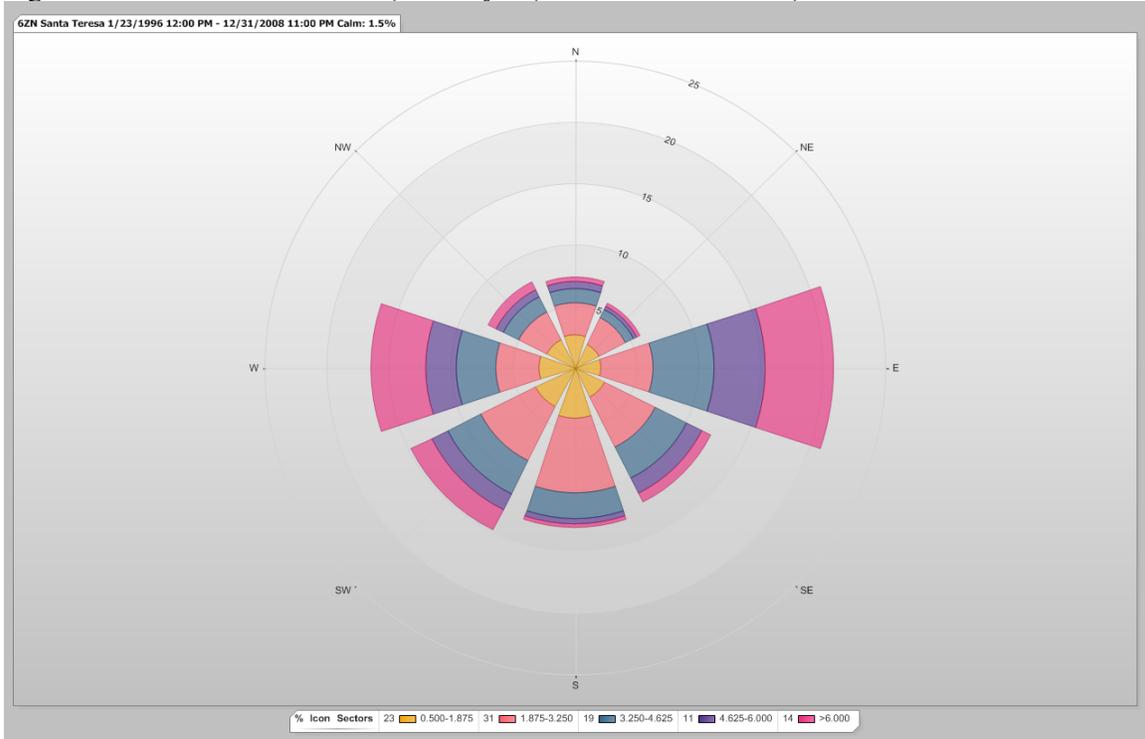


Figure 6.2: Desert View Monitor, February 20, 1996 – December 31, 2008

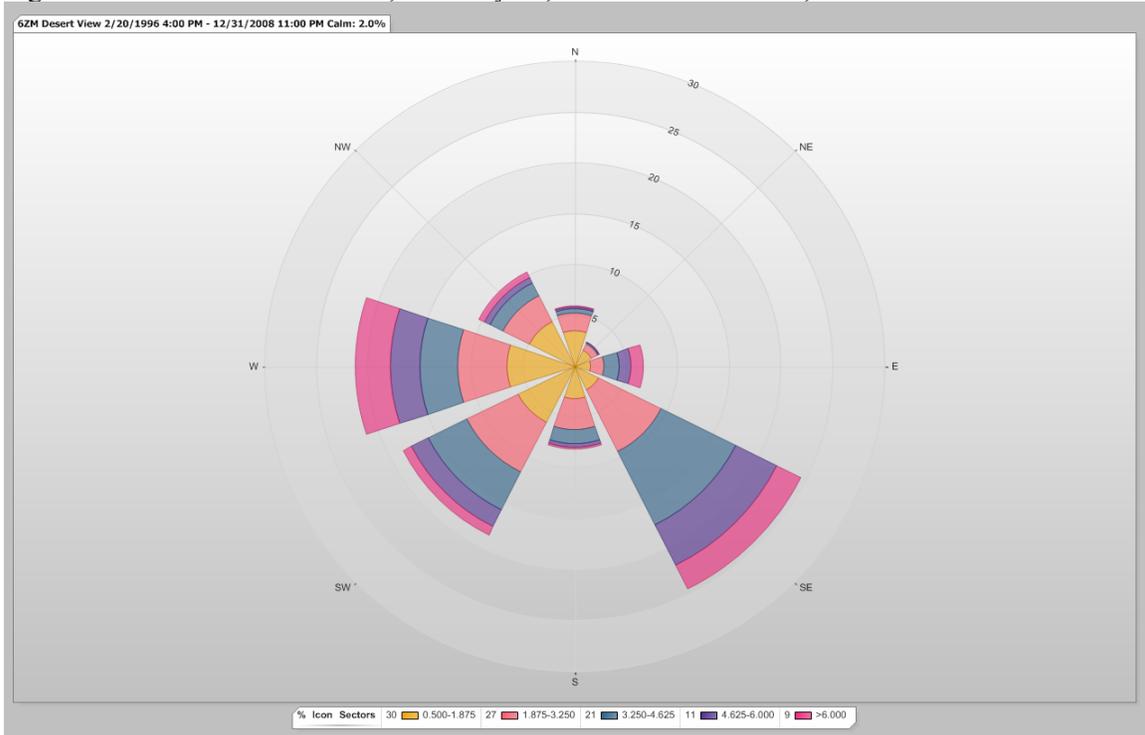
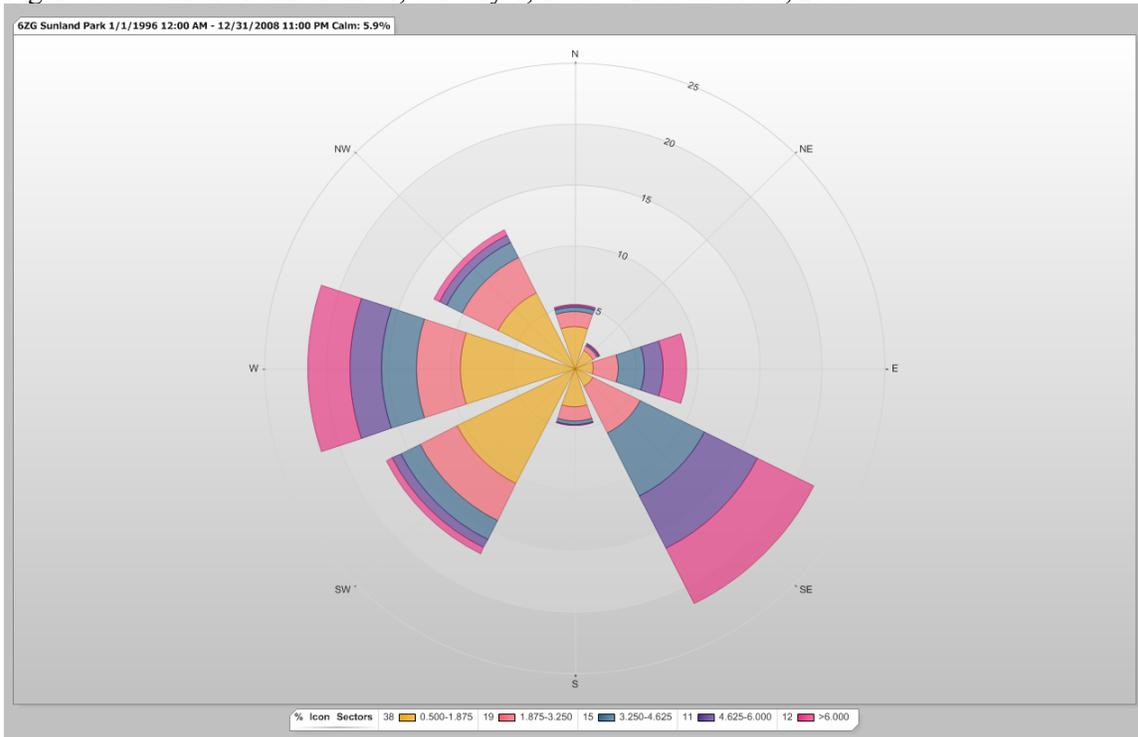


Figure 6.3: Sunland Park Monitor, January 1, 1996 – December 31, 2008



## II.7: Geography/Topography

The Paso del Norte Region lies along the Rio Grande River Valley encompassing El Paso County, TX, Doña Ana County, NM and Municipio de Ciudad Juárez, Chihuahua, MX. The Rio Grande flows south through Doña Ana County and the Mesilla Valley serving as a common boundary for the City of Sunland Park, NM, the City of El Paso, TX and Ciudad Juárez, Chihuahua, MX. As the Rio Grande exits New Mexico, the river bends around a large igneous formation known as Mount Cristo Rey. The river proceeds through the valley generally flowing in a southeasterly direction between El Paso and Ciudad Juárez into the Brad Valley in Texas.

The topography of the Paso del Norte Region plays an important part in the transportation of air pollution and is used as a starting point to define the region's air basin boundaries. Elevations in the Paso del Norte region range from 3,773 feet at the valley floor to 6,070 feet at Range Peak in the Franklin Mountains. The Franklin Mountains in Texas lie to the east/northeast of the Sunland Park area and the Sierra Juárez lie to the south in Mexico. The Franklin and Sierra Juárez mountain ranges help define airflow patterns in the Sunland Park area through the creation of downward wind flows off the mountains into the valley areas. Over the past ten years, New Mexico has monitored high levels of particulate matter due to drainage into the Rio Grande River Valley from the south.

## II.8: Jurisdictional boundaries

The Paso del Norte region is a unique bi-national, tri-state community with shared air pollution problems. The Paso del Norte Air Basin is defined as El Paso County, TX, and portions of Doña Ana County, NM and Ciudad Juárez, Chihuahua. Within the state of New Mexico, the NMED holds jurisdictional authority to implement and enforce state and federal regulations pertaining to air quality with the exception of Bernalillo County in central New Mexico and tribal lands. No tribal lands exist within Doña Ana County.

Transportation planning and programming for the southern portion of Doña Ana County falls under the jurisdiction of the El Paso MPO. The planning boundary for the MPO covers much of the Paso del Norte airshed in the United States. For past and present nonattainment areas in the southern portion of Doña Ana County, the El Paso MPO has been the responsible agency for transportation conformity planning.

## II.9: Level of Control of Emissions Sources

### II.9.1: Camino Real Landfill

In August of 2000, the Camino Real landfill installed a gas collection and control system (GCCS), which significantly reduced their VOC emissions by greater than 99%. The GCCS consists of 36 vertical extraction wells and buried transmission piping to collect and convey landfill gas to a utility flare for destruction. Destruction of landfill gas is achieved by routing collected gas to a blower/flare assembly via a blower-induced vacuum.

In 2006, the landfill installed landfill gas (LFG) scrubbers and Miratech IQ-34-18-H1 oxidation catalysts on the exhaust of the facility's two permitted LFG fired internal combustion engines. The installation of the scrubbers and oxidation catalysts reduced CO emissions by 90% and VOC emissions by 76%.

### II.9.2: Other Major Sources

Within the Sunland Park area, there is only one other major source (El Paso Electric, Rio Grande Generating Station) which does not control NO<sub>x</sub>, VOC, or CO emissions. Outside of the Sunland Park area, there is also a flexible polyurethane foam manufacturer which is currently a major source of hazardous air pollutants, but has been a major source of VOCs in the past.

### II.9.3: Volatile Organic Compounds

[20.2.88 NMAC](#) *Emission Standards for New Motor Vehicles* (also referred to as the Clean Cars Rule) requires that new passenger cars, light-duty trucks, or medium-duty passenger vehicles, or medium-duty vehicles be certified to the California standards, starting with model year 2011. This rule will reduce the amount of non-methane organic gases (of which VOCs are a subset) emitted from these mobile sources.

The following federal rules contain performance or emission standards for VOCs that may apply to sources within the Sunland Park area:

- [NSPS Subpart JJJ](#)- Standards of Performance for Petroleum Dry Cleaners.
- [NSPS Subpart WWW](#)- Standards of Performance for Municipal Solid Waste Landfills.
- [NSPS Subpart JJJJ](#) - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.
- [NESHAP Subpart H](#) - National Emission Standards for Organic Hazardous Pollutants for Equipment Leaks
- [NESHAP Subpart M](#) - National Perchloroethylene Air Emissions Standards for Dry Cleaning Facilities
- [NESHAP Subpart R](#) - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations).
- [NESHAP Subpart HHH](#)- National Emissions Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities.
- [NESHAP Subpart YYYY](#)- National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines
- [NESHAP ZZZZ](#)- National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
- [NESHAP Subpart DDDDD](#)- National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
- [NESHAP Subpart CCCCC](#)- National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
- [NESHAP Subpart HHHHHH](#) - National Emissions Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources
- [NESHAP Subpart XXXXXX](#)- National Emissions Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal Fabrication and Finishing Source Categories

#### II.9.4: Nitrogen Dioxide

[20.2.3 NMAC](#)- Ambient Air Quality Standards establishes ambient air quality standards for those areas under NMED's jurisdiction. The standard for nitrogen dioxide (NO<sub>2</sub>) is 0.10 ppm as a 24-hour average, and 0.05 ppm as an annual arithmetic average. The annual average is more stringent than the NAAQS for NO<sub>2</sub> of 0.053 ppm. All facilities that are required to obtain a New Source Review (NSR) permit under 20.2.72 NMAC or a Title V permit under 20.2.70 NMAC must demonstrate compliance with the State's air quality standard before a permit can be issued.

[20.2.32 NMAC](#) *Coal Burning Equipment - Nitrogen Dioxide* specifies nitrogen dioxide emission standards for coal burning equipment. The limit (pounds/MMBtu heat input) varies depending on when construction of the equipment was completed and it became fully operational. There are no sources located in the Sunland Park area that are subject to this rule.

[20.2.33 NMAC](#) *Gas Burning Equipment - Nitrogen Dioxide* specifies nitrogen dioxide emission standards for new and existing gas burning equipment having a heat input greater than 1,000,000 million Btu per year. There is one source located in the Sunland Park area that is subject to this rule.

[20.2.34 NMAC](#) *Oil Burning Equipment - Nitrogen Dioxide* specifies nitrogen dioxide emission standards for oil burning equipment having a heat input greater than 1,000,000 million Btu per year. There are no sources located in the Sunland Park area that are subject to this rule.

[20.2.88 NMAC](#) *Emission Standards for New Motor Vehicles* requires that new passenger cars, light-duty trucks, or medium-duty passenger vehicles, or medium-duty vehicles be certified to the California standards, starting with model year 2011. This rule will reduce the amount of nitrogen oxides emitted from these mobile sources.

There are no other state rules that require control of NO<sub>x</sub> emissions, except for permitting rules that require sources to meet state and national ambient air quality standards.

The following federal rules contain performance or emission standards for NO<sub>x</sub> that may apply to sources within the Sunland Park area:

- [NSPS Subpart D](#)- Standards of Performance for Fossil-Fuel-Fired Steam Generators for which Construction is Commenced after August 17, 1971.
- [NSPS Subpart Da](#) - Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978.
- [NSPS Subpart Db](#) - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
- [NSPS Subpart Dc](#)- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
- [NSPS Subpart IIII](#) - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
- [NSPS Subpart JJJJ](#)- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

## **II.9.5: Carbon Monoxide**

[20.2.3 NMAC](#)- Ambient Air Quality Standards establishes ambient air quality standards for those areas under NMED's jurisdiction. The standard for carbon monoxide (CO) is 8.7 ppm as an 8-hour average, and 13.1 ppm as a 1-hour average. Both of the standards are more stringent than the NAAQS for CO, 9 ppm (8-hour average) and 35 ppm (1-hour average). All facilities that are required to obtain a New Source Review (NSR) permit under 20.2.72 NMAC or a Title V permit under 20.2.70 NMAC must demonstrate compliance with the State's air quality standard before a permit can be issued.

[20.2.37 NMAC](#)- *Petroleum Processing Facilities* specifies CO standards for existing and new petroleum processing facilities. There are no petroleum processing facilities in the Sunland Park area

[20.2.62 NMAC](#)- *Municipal Waste Combustion* contains emission limits for CO. There is one municipal waste combustor in the Sunland Park area.

[20.2.63 NMAC](#)- *Biomedical Waste Combustion* contains emission limits for CO. There are no biomedical waste combustors in the Sunland Park area.

[20.2.88 NMAC](#)- *Emission Standards for New Motor Vehicles* requires that new passenger cars, light-duty trucks, or medium-duty passenger vehicles, or medium-duty vehicles be certified to the California standards, starting with model year 2011. This rule will reduce the amount of carbon monoxide emitted from these mobile sources.

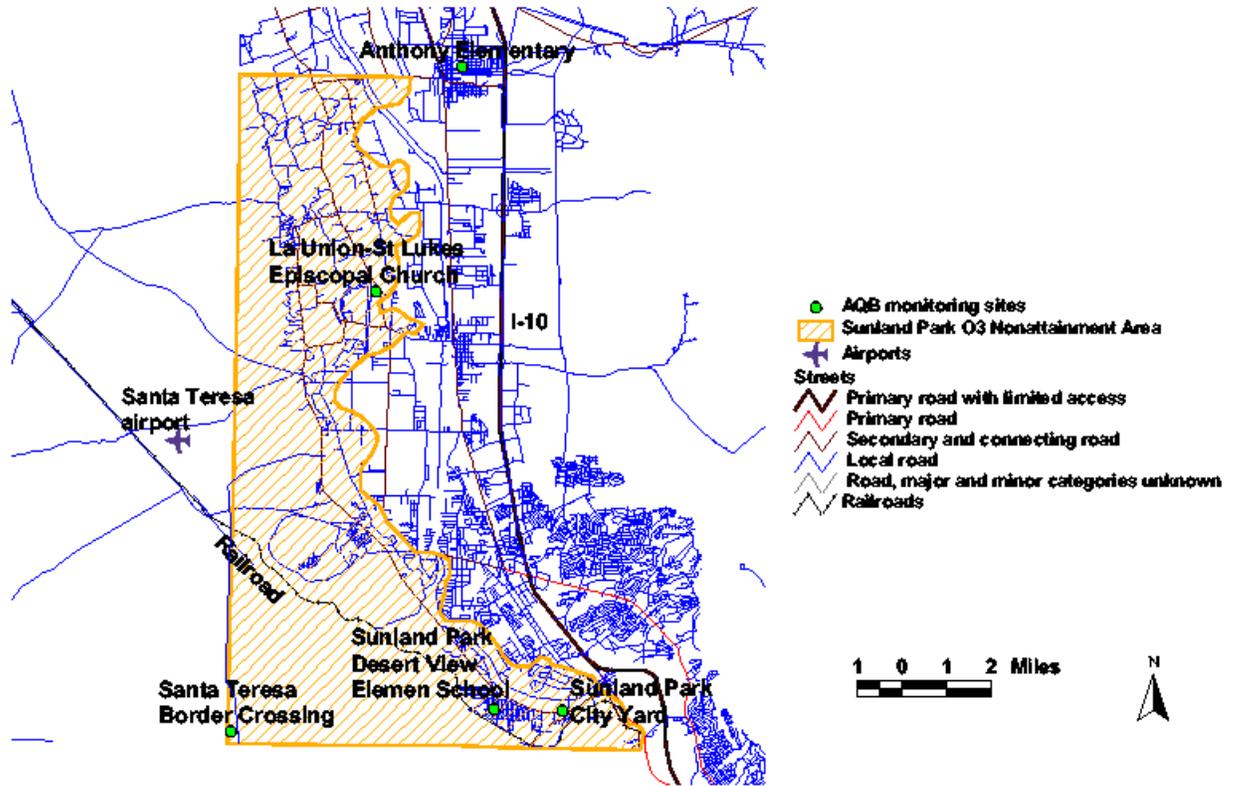
The following federal rules contain performance or emission standards for CO that may apply to sources within the Sunland Park area:

- [NSPS Subpart CCCC](#)- Standards of Performance for Commercial and Industrial Solid Waste Incineration Units for which Construction is Commenced after November 30, 1999 or for which Modification or Reconstruction is Commenced on or after June 1, 2001.
- [NSPS Subpart EEEE](#)- Standards of Performance for Other Solid Waste Incineration Units for which Construction is Commenced after December 9, 2004, or for which Modification or Reconstruction is Commenced on or after June 16, 2006.
- [NSPS Subpart IIII](#)- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
- [NSPS Subpart JJJJ](#)- Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

### **III: Boundary Recommendation - Sunland Park Area**

The State of New Mexico is recommending the same nonattainment boundary for the Sunland Park area as the 1-hour nonattainment boundary approved by EPA (60 FR 30789) in 1995 (Appendix D). This nonattainment area boundary is approximately 42 mi<sup>2</sup> in area (see Figure 7). The northern portion extends from the north boundary at latitude 32° 00' south to about latitude 31° 49'. The area is roughly 3.5 miles in width by 6.25 miles in height for a total of 21.9 mi<sup>2</sup>. The southern portion extends from 31° 49' south to the Mexico border and is about 8 miles by 2.5 mi. for a total of 20.0 mi<sup>2</sup>. This 42 mi<sup>2</sup> area represents 1.10% of the total county area. The nonattainment boundary area includes the communities, from south to north, of Sunland Park, Santa Teresa, and La Union. This nonattainment boundary area does not include the Santa Teresa border crossing. Although the U. S. Census Bureau categorizes the Paso del Norte airshed as urban, the Sunland Park area is largely rural with a small population and is primarily agricultural along the Rio Grande, especially north of Santa Teresa.

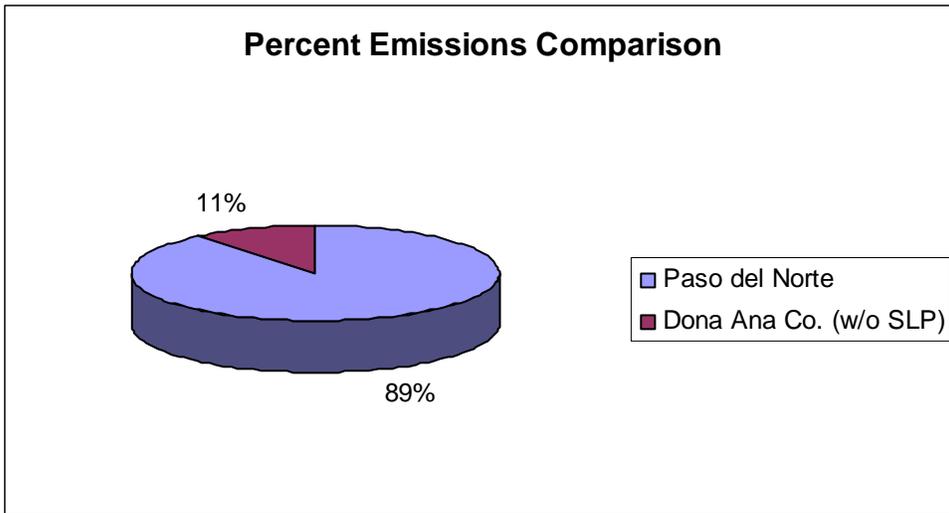
Figure 7: Previous 1995 Sunland Park 1-Hour Ozone Nonattainment Area



#### IV.1: Justification for Boundary Recommendation

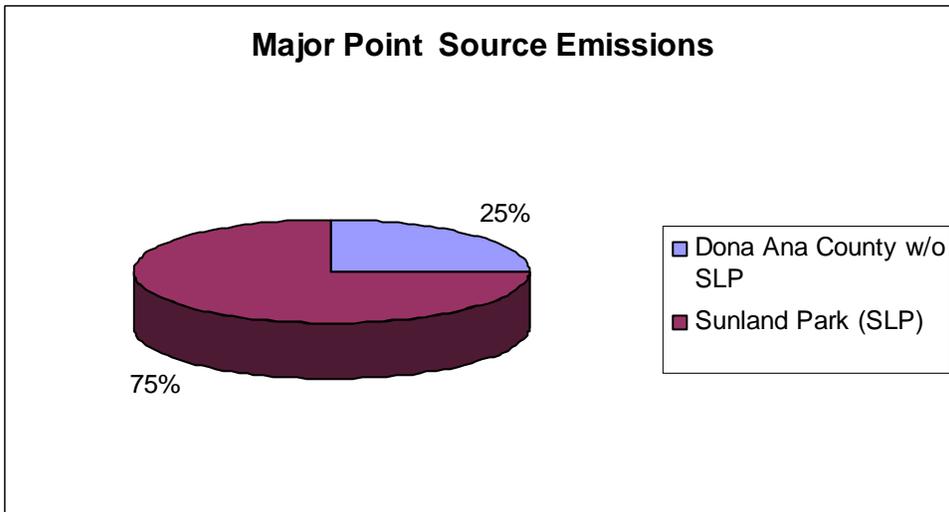
The land area of Doña Ana County is approximately 3% of the total land area of New Mexico. Since Sunland Park was originally designated nonattainment for the 1-hour ozone standard in 1995, the State of New Mexico has maintained that the predominate sources contributing to the ozone exceedances in the Sunland Park area are not within Doña Ana County or even within the State of New Mexico's jurisdiction. As Figure 8 shows, Doña Ana County as a whole only contributes 11% of the combined total NO<sub>x</sub>, VOC, and CO emissions within this region.

**Figure 8: Total Emission Percentages for the Border Region.**



Although designations for nonattainment areas are traditionally based on the CBSA, basing the boundary on the Las Cruces, New Mexico Metropolitan Area CSA (Doña Ana County) would result in limited emissions reductions outside of the Sunland Park area. As Figure 9 shows, 75% of the ozone precursor emissions generated by major sources originate within the recommended nonattainment area.

**Figure 9: Major Point Source Emissions for Doña Ana County.**



The monitoring data for the region also does not support including all of the Las Cruces MSA in the designation boundary. The violating monitor (Desert View site) is located in the southeastern corner of Doña Ana County. This monitor is approximately 35 mi. south of the Solano monitoring site located in Las Cruces. As Table 2 shows, there is a significant difference in the design-values for Desert View compared to the Solano monitoring site. In contrast, the preliminary 2006-2008 design-value for the City of El Paso, as of November 3, 2008, is 0.078 ppm. This indicates that ozone emission levels

monitored within the Sunland Park area are more indicative of the levels monitored in the City of El Paso than with the levels recorded to the north of the Sunland Park area.

The Paso del Norte Airshed is located in a region characterized by high mountain ranges and low river valleys. The Sunland Park area is located at one of the lowest points within the Rio Grande river valley with prevailing winds from the southeast. Based on the terrain, prevailing winds, and close proximity to two major metropolitan areas (El Paso and Ciudad Juarez), it is evident that the violation monitored in Sunland Park is not the result of New Mexico sources outside of the Sunland Park area.

**Appendix A**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

DEC - 4 2008

OFFICE OF  
AIR AND RADIATION

**MEMORANDUM**

**SUBJECT:** Area Designations for the 2008 Revised Ozone National Ambient Air Quality Standards

**FROM:** Robert J. Meyers   
Principal Deputy Assistant Administrator

**TO:** Regional Administrators, Regions I-X

This memorandum provides information on the timeline for designating areas for the purpose of implementing the 2008 revised primary and secondary ozone National Ambient Air Quality Standards (NAAQS). In addition, this memorandum identifies important factors states and tribes should consider in making recommendations for area designations. Please share this information with the state and tribal agencies in your Region.

The U.S. Environmental Protection Agency (EPA) revised the ozone NAAQS on March 12, 2008 (73 FR 16436; March 27, 2008). The new primary ozone standard was lowered from 0.08 parts per million (ppm) to a level of 0.075 ppm based on numerous epidemiological studies conducted during the past decade in which many of the health effects associated with ozone exposure were identified. These studies showed health effects at and below the level of the 0.08 ppm standard, which was promulgated in 1997. Prolonged (i.e., 8-hour) exposure to ozone is associated with increased mortality and a range of serious morbidity health effects, including aggravation of a variety of respiratory symptoms and lung impairment, asthma attacks, respiratory hospital admissions and emergency department visits, and cardiovascular problems. In March 2008, EPA also strengthened the secondary ozone standard to provide increased protection against adverse public welfare effects including impacts on vegetation and forested ecosystems. EPA made the secondary standard identical in all respects to the revised primary standard.

Section 107(d) of the Clean Air Act (CAA) governs the process for area designations following the establishment of new or revised NAAQS. Under section 107(d), states are required to submit recommendations on designations for their areas to EPA not later than one year after the promulgation of a new or revised standard. If, after careful consideration of the recommendations, EPA intends to promulgate a designation that deviates from a state recommendation, EPA must notify the state at least 120 days prior to promulgating the final designation, and EPA must provide the state an opportunity to demonstrate why the potential

modification is inappropriate. The CAA requires EPA to complete the designation process within two years of promulgation of a new or revised NAAQS unless the Administrator has insufficient information to make these decisions. In such a case, EPA may take up to an additional year to make the designations. While the language of section 107 specifically addresses states, EPA intends to follow the same process for tribes to the extent practicable, pursuant to section 301(d) of the CAA and the Tribal Authority Rule, or TAR (see 63 FR 7254).

Accordingly, state designation recommendations for the 2008 revised ozone standards should be submitted to the Administrator no later than March 12, 2009. Areas should be identified as attainment, nonattainment, or unclassifiable on the basis of available information. We will notify states by letter no later than November 12, 2009 if we plan to modify a state's recommendation. In order to consider public input in the designation process, we plan to provide a 30-day public comment period immediately following issuance of EPA's response letters to the states and tribes; we anticipate the comment period would conclude in mid-December 2009. If a state or tribe has additional information that they want EPA to consider with respect to a designation recommendation EPA plans to modify, we would request such information be submitted by January 12, 2010. This will ensure that EPA can fully consider any such information as we move forward to issue designations by March 12, 2010. Because the 2008 revised primary and secondary ozone NAAQS are identical, EPA expects that each area will have the same designation and boundary for both standards.

We recommend that states and tribes identify violating areas using the most recent three consecutive years of quality-assured, certified air quality data. In most cases, we expect these to be data from 2005-2007 or 2006-2008 (if these 2006-2008 data have been certified more quickly than is required) that are stored in the EPA Air Quality System (AQS).<sup>1</sup> In general, violations are identified using data from Federal reference method (FRM) and Federal equivalent method (FEM) monitors that are sited and operated in accordance with 40 CFR Part 58. Special Purpose Monitors (SPM) using an FRM or FEM which have operated for more than 24 months are eligible for comparison to the relevant NAAQS, subject to the requirements given in the October 17, 2006 Revision to Ambient Air Monitoring Regulations (71 FR 61236). Procedures for using the air quality data to determine whether a violation has occurred are given in 40 CFR Part 50 Appendix P, as revised on March 27, 2008 (73 FR 16511). We expect to base the final designations in March 2010 on the most recent quality-assured data which would be from 2006-2008 or 2007-2009.

Air quality monitoring data affected by exceptional events may be excluded from use in identifying a violation if they meet the criteria for exclusion, as specified in the Final Rule on the Treatment of Data Influenced by Exceptional Events (72 FR 13560; March 22, 2007). We recently issued a direct final rule to provide schedules for flagging exceptional event data and submitting documentation specifically for ozone data collected from 2005 through 2009 that are used in the designations process for the 2008 ozone NAAQS. (See 73 FR 58042; October 6, 2008). These schedules reflect our interest in assuring that the exceptional events claims can be fully considered by EPA in the final designations.

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<sup>1</sup> This information is available on EPA's website at [www.epa.gov/ttn/airs/airsaqs/](http://www.epa.gov/ttn/airs/airsaqs/).

Section 107(d)(1) of the CAA defines an area as nonattainment if it is violating the NAAQS or if it is contributing to a violation in a nearby area. Ground-level ozone and ozone precursor emissions are pervasive and readily transported. Therefore, EPA believes it is important to examine ozone-contributing emissions across a relatively broad geographic area. Accordingly, we recommend that the Core Based Statistical Area (CBSA) or Combined Statistical Area (which includes 2 or more adjacent CBSA's) associated with the violating monitor(s) serve as the starting point or "presumptive" boundary for evaluating the geographic boundaries of an ozone nonattainment area. CBSA is a collective term that refers to both metropolitan and micropolitan statistical areas, which are distinguished based on population size.<sup>2</sup> Each CBSA consists of a county or counties containing at least one urban core plus adjacent counties that have a high degree of social and economic integration with the urban core as measured by commuting ties.<sup>3</sup> EPA recommends starting with this presumption because the factors used to establish the CBSAs and CSAs are similar to the factors EPA plans to consider in determining whether a nearby area is contributing to the violation(s) of the standard. EPA used this same conceptual approach in the designations process for the 1997 ozone NAAQS.<sup>4,5</sup> Where a violating monitor is not located in a CBSA or CSA, we recommend that the boundary of the county containing the monitor serve as the starting point for considering the extent of the nonattainment area.

EPA believes that each potential nonattainment area should be evaluated on a case-by-case basis and recognizes that these area-specific analyses conducted by states, tribes, and/or EPA may support nonattainment area boundaries that are larger or smaller than the presumptive area starting point. As a framework for area-specific analyses, we recommend that states and tribes base their boundary recommendations on an evaluation of the 9 factors listed in attachment 2. These factors are consistent with those used in the designations process for the 1997 ozone standard and are factors EPA plans to consider in evaluating and making decisions on the nonattainment area boundaries for the 2008 ozone standards. Additionally, states and tribes may

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<sup>2</sup> The Office of Management and Budget (OMB) delineates CBSAs (metropolitan and micropolitan statistical areas) and CSAs. OMB adopted new standards for defining metropolitan and micropolitan statistical areas on December 27, 2000 (65 FR 82229). A micropolitan statistical area has a population of at least 10,000 but less than 50,000. A metropolitan statistical area has a population of at least 50,000.

<sup>3</sup> For lists of the CBSAs and CSAs and their geographic components see [www.census.gov/population/www/metroareas/metrodef.html](http://www.census.gov/population/www/metroareas/metrodef.html). EPA recommends using the most recent available updated lists of the statistical areas. The lists are updated annually to reflect the most recent Census Bureau population estimates.

<sup>4</sup> Memorandum from John S. Seitz, Director of Office of Air Quality Planning and Standards to Air Directors, Regions I-X, "Boundary Guidance on Air Quality Designations for the 8-Hour Ozone National Ambient Air Quality Standards," March 23, 2000.

<sup>5</sup> In addition, CAA section 107(d)(4) established the consolidated metropolitan statistical area or metropolitan statistical area as the presumptive boundary for the most polluted areas that were designated nonattainment by operation of law in 1991 for the 1-hour ozone NAAQS.

identify and evaluate other relevant factors or circumstances specific to a particular area.

In addition to nearby areas with sources contributing to nonattainment, ozone concentrations in a local area may be affected by long-range transport of ozone and its precursors (notably nitrogen oxides). In certain parts of the country, such as the eastern United States, ozone is a widespread problem. Where this is the case, the CAA does not require that all contributing areas be designated nonattainment, only the nearby areas. Regional strategies, such as those employed in the Ozone Transport Region and EPA's NO<sub>x</sub> SIP Call are needed to address the long-range transport component of ozone nonattainment, while the local component must be addressed through local planning in and around the designated nonattainment area.

This memorandum provides EPA's current views on how boundaries should be determined for ozone designations. The guidance is not binding on states, tribes, the public, or EPA. Issues concerning nonattainment area boundaries will be addressed in EPA's action to designate areas under the 2008 ozone standard. When EPA promulgates designations, those determinations will be binding on states, tribes, the public, and EPA as a matter of law. Ozone nonattainment areas will be classified at the time of designation. The approach EPA will use to classify nonattainment areas under the 2008 revised ozone NAAQS will be established through a separate notice-and-comment rulemaking. Information related to the designations for the 2008 revised ozone NAAQS will be provided on EPA's website at [www.epa.gov/ozonedesignations](http://www.epa.gov/ozonedesignations).

Attachment 1 is a timeline of important dates in the designation process for the revised 2008 ozone NAAQS designation process. Attachment 2 provides the list of nine factors that EPA plans to consider in evaluating and making decisions on nonattainment area boundaries.

Staff in EPA's Office of Air Quality Planning and Standards are available for assistance and consultation throughout the designation process. Questions on this guidance may be directed to Carla Oldham at 919-541-3347.

Attachments (2)

cc: Air Division Directors, Regions I-X  
Greg Green, OAQPS  
Bill Harnett, OAQPS  
Brian McLean, OAP  
Margo Oge, OTAQ  
Stephen D. Page, OAQPS  
Peter Tsirigotis, OAQPS  
Richard Wayland, OAQPS  
Lydia Wegman, OAQPS

## ATTACHMENT 1

<b>TIMELINE FOR REVISED 2008 OZONE NAAQS DESIGNATION PROCESS*</b>	
<b>Milestone</b>	<b>Date</b>
EPA promulgated revised ozone NAAQS	March 12, 2008
State and tribal recommendations due for ozone designations	No later than March 12, 2009
EPA notifies states and tribes concerning any modifications to their recommendations (120-day letters).	No later than November 12, 2009 (120 days prior to final designations)
EPA publishes public notice of state recommendations and EPA's proposed modifications and initiates 30-day public comment period.	Mid-November 2009
End of 30-day public comment period.	Mid-December 2009
States and Tribes submit additional information to demonstrate why an EPA modification is inappropriate.	No later than January 12, 2010
EPA promulgates final ozone designations.	No later than March 12, 2010

\* This schedule assumes EPA has sufficient information to promulgate designations within 2 years. In the event EPA determines that insufficient information is available to do so, the designation process could be extended up to one year, but no later than March 12, 2011.

## ATTACHMENT 2

### **Factors EPA Plans to Consider in Determining Nonattainment Area Boundaries in Designations for the 2008 Ozone NAAQS**

EPA recommends that the Core Based Statistical Area (CBSA) or Combined Statistical Area (CSA) (which includes 2 or more adjacent CBSA's) serve as the starting point or "presumptive" boundary for considering what should be the geographic boundaries of an ozone nonattainment area.<sup>6</sup> Where a violating monitor is not located in a CBSA or CSA, we recommend that the boundary of the county containing the monitor serve as the presumptive boundary for the nonattainment area. As a framework for area-specific analyses to support nonattainment area boundary recommendations and final boundary determinations, we recommend an evaluation of the 9 factors listed below:

- Air quality data
- Emissions data (location of sources and contribution to ozone concentrations)
- Population density and degree of urbanization (including commercial development)
- Traffic and commuting patterns
- Growth rates and patterns
- Meteorology (weather/transport patterns)
- Geography/topography (mountain ranges or other air basin boundaries)
- Jurisdictional boundaries (e.g., counties, air districts, existing nonattainment areas, Reservations, metropolitan planning organizations (MPOs))
- Level of control of emission sources

Analysis of these factors may support nonattainment boundaries that are either larger or smaller than the presumptive boundary. EPA plans to consider these factors, along with any other relevant information, in determining whether to make modifications to the boundary recommendations from states and tribes. The factors listed above, while generally comprehensive, are not intended to be exhaustive. States and tribes may submit additional information they believe is relevant for EPA to consider. In general, a state's or tribe's demonstration supporting their boundary recommendation for an area should show that: 1) violations are not occurring in nearby portions that are excluded from the recommended area, and 2) the excluded nearby portions do not contain emission sources that contribute meaningfully to the observed violations. While states are not bound to use the approach outlined here, EPA plans to evaluate a state recommendation and determine whether to modify such recommendation based on the above factors and any other information the Agency determines is relevant.

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<sup>6</sup> For lists of the CBSAs and CSAs and their geographic components see [www.census.gov/population/www/metroareas/metrodef.html](http://www.census.gov/population/www/metroareas/metrodef.html).

## **Appendix B**

**Appendix B: NMED Ozone Monitoring Data - 2006 through 2008**

County	Site Name	AQS#	Year (4th highest measured ppm)			3-Year Avg. 2006-2008 (ppm)	Design- Value (ppm)
			2006 (ppm)	2007 (ppm)	2008 (ppm)		
Doña Ana County	6O - La Union	35-013-0008	0.072	0.068	0.071	0.070	0.070
	6ZG - SPCY	35-013-0017	0.073	0.070	0.065	0.069	0.069
	6ZK - Chaparral	35-013-0020	0.072	0.068	0.067	0.069	0.069
	6ZM - Desert View	35-013-0021	0.080	0.076	0.074	0.076	<b>0.076</b>
	6ZN - Santa Teresa	35-013-0022	0.073	0.073	0.072	0.072	0.072
	6ZQ - Solano	35-013-0023	0.070	0.062	0.065	0.065	0.065
Eddy County	5ZR - Carlsbad	35-015-1005	0.076	0.066	0.067	0.069	0.069
Grant County	7T - Hurley Smelter	35-017-1003	0.067	0.062	0.064	0.064	0.064
Lea County	5ZS - Hobbs	35-025-0008	0.075	0.064	0.067	0.068	0.068
Luna County	7E - Deming	35-029-0003	0.053	0.062	0.060	0.058	0.058
Sandoval County	2ZJ - Bernalillo	35-043-1001	0.064	0.063	0.057	0.061	0.061
	2ZR - Rio Rancho	35-043-1003	0.074	0.071	0.065	0.070	0.070
San Juan County	1ZB - Bloomfield	35-045-0009	0.063	0.069	0.063	0.065	0.065
	1NL - Navajo Lake	35-045-0018	0.079	0.079	0.069	0.075	0.075
	1H - Substation	35-045-1005	0.071	0.073	0.069	0.071	0.071
Santa Fe County	3SFA - Santa Fe Airport	35-049-0021	###	0.063	0.066	n/a	n/a
<b>Bold</b> – exceeds NAAQS							

## Appendix C

# Sunland Park Area Boundary Recommendation



**Legend**

- Dona Ana Major
- ⊙ ozone Monitors
- El Paso Major
- ▭ Recommended Nonattainment Area



Southern Doña Ana County, NM Major Source Index

ID	Latitude	Longitude	NM Facility Name	2002 Emissions (TPY)		
				NOx	VOC	CO
1	31.805556	-106.545306	El Paso Electric - Rio Grande Generating Station	912	25	145
2	31.789408	-106.594775	Camino Real Landfill	2	1	12
3	36.699678	-107.974211	Foamex - Santa Teresa Plant	10	54	16

El Paso, Texas Major Source Index

ID	Latitude	Longitude	Facility Name	2002 Emissions (TPY)		
				NOx	VOC	CO
1	31.8169	-106.4144	USAADA	184	51	135
2	31.7592	-106.375	El Paso Electric Newman Station	1492	110	442
3	31.965	-106.5839	Border Steel	87	4	216
4	31.7673	-106.4028	Western Refining El Paso Refining	488	302	199
5	31.7638	-106.3883	Phelps Dodge El Paso Plant	65	16	207
6	31.9695	-106.3982	El Paso Natural Gas Compressor Station	239	2	37

**Appendix D**

# Designation of Area for Air Quality Planning Purposes; New Mexico; Designation of Sunland Park Ozone Nonattainment Area

[Federal Register: June 12, 1995 (Volume 60, Number 112)]  
[Rules and Regulations]  
[Page 30789-30791]  
From the Federal Register Online via GPO Access [wais.access.gpo.gov]

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ENVIRONMENTAL PROTECTION AGENCY  
40 CFR Part 81  
[NM-25-1-6980; FRL-5218-1]

Designation of Area for Air Quality Planning Purposes; New Mexico; Designation of Sunland Park Ozone Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).  
ACTION: Final rule.

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SUMMARY: Pursuant to section 107(d)(3) of the Clean Air Act (CAA), the EPA is taking final action to redesignate a portion of Dona Ana County, New Mexico (i.e. the Sunland Park area) from unclassifiable/attainment to nonattainment for the ozone National Ambient Air Quality Standards (NAAQS). The redesignation is based upon violations of the ozone NAAQS which were monitored from 1992-1994.

EFFECTIVE DATE: July 12, 1995.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the addresses listed below. The interested persons wanting to examine these documents should make an appointment at least twenty-four hours before the visiting day.

U.S. Environmental Protection Agency, Region 6, Air Programs Branch (6T-A), 1445 Ross Avenue, suite 700, Dallas, Texas 75202-2733  
New Mexico Environment Department, Air Monitoring & Control Strategy Bureau, 1190 St. Francis Drive, room So. 2100, Santa Fe, New Mexico 87503

FOR FURTHER INFORMATION CONTACT: Mr. Mark Sather, Planning Section (6TAP),  
Air Programs Branch (6T-A), USEPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202-2733, telephone (214) 665-7258.

SUPPLEMENTARY INFORMATION:

## Background

The CAA authorizes the EPA to revise the designation of current ozone areas from unclassifiable/attainment to nonattainment on the basis of air quality data, planning and control considerations, or any other air quality-related considerations the EPA deems appropriate (see section 107(d)(3) of the CAA).

Following the process outlined in section 107(d)(3) of the CAA, on December 16, 1994, the Regional Administrator of the EPA Region 6 notified the Governor of New Mexico that the EPA believed the Sunland Park area should be redesignated as nonattainment for ozone. Under section 107(d)(3)(B) of the CAA, the Governor of New Mexico was required to submit to the EPA the designation considered appropriate for the Sunland Park area within 120 days after the EPA's notification. The EPA received the State's response for the Sunland Park area on February 6, 1995 (letter dated January 30, 1995). Following receipt of the Governor's letter, the EPA proceeded to propose the nonattainment designation for the Sunland Park area (see 60 Federal Register (FR) 17756-17758, April 7, 1995). The EPA now is taking final action on the proposed nonattainment redesignation. Based upon the EPA's review of the State's January 30, 1995, letter for the Sunland Park area, the EPA is finalizing a redesignation to nonattainment which is consistent with the request submitted by the Governor of New Mexico.

Section 107(d)(1)(A) of the CAA sets out definitions of nonattainment, attainment, and unclassifiable. A nonattainment area is defined as any area that does not meet (or that significantly contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for ozone (see section 107(d)(1)(A)(i) of the [[Page 30790]] CAA) <SUP>1. Thus, in determining the appropriate boundaries for the nonattainment area finalized in this action, the EPA has considered not only the area where the violations of the ozone NAAQS are occurring, but nearby areas which significantly contribute to such violations.

\1\ The EPA has construed the definition of nonattainment area to require some material or significant contribution to a violation in a nearby area. The Agency believes it is reasonable to conclude that something greater than a molecular impact is required.

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## Response to Public Comments

In the April 7, 1995, proposal FR action, the EPA requested public comments on all aspects of the proposal, including the appropriateness of the proposed designation and the scope of the proposed boundaries. The EPA received no comments on the proposal FR action.

## Final Action

As noted above, pursuant to section 107(d)(3) of the CAA, the EPA is authorized to initiate the redesignation of areas as nonattainment for ozone. Based on the ozone air quality monitoring data for the Sunland Park monitoring station, the EPA notified the Governor of New

Mexico on December 16, 1994, that the Sunland Park area should be redesignated from unclassifiable/attainment to nonattainment for the ozone NAAQS. Ozone monitoring began in Sunland Park on June 15, 1992. Seven measured exceedances of the ozone NAAQS have been recorded at the monitoring site, ranging from a low of .126 parts per million (ppm) to a high of .140 ppm. The seven exceedances represent a violation of the ozone NAAQS (see 40 Code of Federal Regulations (CFR) 50.9). Since less than three years of data have been collected at the Sunland Park monitoring site, the EPA design value (used to determine ozone attainment status) for the site is the third highest ozone value recorded-- .136 ppm. Therefore, the Sunland Park ozone nonattainment area is classified as a marginal ozone nonattainment area according to the classification scheme set forth in section 181 of the CAA. Due to the marginal classification, the attainment date for the Sunland Park ozone nonattainment area will be three years from the effective date of this Federal Register final action establishing the nonattainment designation and classification.

In response to the EPA's December 16, 1994, letter, on January 30, 1995, the Governor of New Mexico concurred with the EPA that a small area of southern Dona Ana County, including Sunland Park, be redesignated as nonattainment for the ozone NAAQS. However, the Governor did not concur with the proposed nonattainment boundaries in one respect, proposing an alternate western boundary for the nonattainment area. Based on the information provided by the Governor, including monitoring data, the EPA believes that the nonattainment boundaries submitted by the Governor are appropriate. The technical information supporting the redesignation request and the boundary selections are available for public review at the addresses indicated above.

#### Significance of Final Action for the Sunland Park Area, New Mexico

Within 24 months after the effective date of this final action on the nonattainment redesignation, New Mexico must submit an implementation plan for the Sunland Park ozone nonattainment area meeting the requirements of part D, title I of the CAA (see section 182(a) of the CAA).

The CAA provides that the plan for the area must contain, among other things, the following items:

1. A comprehensive, accurate, current inventory of actual emissions from all sources, as described in section 172(c)(3) of the CAA, in accordance with guidance provided by the EPA. The pollutants inventoried must include volatile organic compounds (VOC), nitrogen oxides (NO<sub>x</sub>) and carbon monoxide. No later than the end of each three year period after submission of the initial inventory, until the area is redesignated to attainment, the State must submit a revised inventory meeting all EPA requirements (see section 182(a)(1) of the CAA).

2. Requirements that the owner or operator of each stationary source of NO<sub>x</sub> or VOC provide the State with a statement, in such form as the EPA may prescribe, for classes or categories of sources, showing the actual emissions of NO<sub>x</sub> and VOC from that source. The first such statement must be submitted to the State within three years after the effective date of this final action establishing the nonattainment designation. Subsequent statements shall be submitted at least every year thereafter. The statement shall contain a certification that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. The State may waive the emission statement requirement for any class or category of stationary sources which emits less than 25 tons per year of VOC or NO<sub>x</sub>, if the State, in its initial and periodic emission inventories, provides an inventory of emissions from such class or category of sources, based on the use of the emission factors established by the EPA, or other methods acceptable to the EPA (see section 182(a)(3)(B) of the CAA).
3. A revised nonattainment new source review permitting program meeting the requirements of sections 172(c)(5) and 173 of the CAA, including the requirement that the ratio of total emission reductions of VOC to total increased emissions of such air pollutant shall be at least 1.1 to 1 (see section 182(a)(4) of the CAA).
4. Revised conformity rules (Regulations 20 NMAC 2.98 and 20 NMAC 2.99) if necessary (see sections 176 and 182 of the CAA).

#### Miscellaneous

Under the Regulatory Flexibility Act, 5 U.S.C. 600 et seq., the EPA must prepare a regulatory flexibility analysis assessing the impact of any proposed or final rule on small entities (5 U.S.C. 603 and 604). Alternatively, the EPA may certify that the rule will not have a significant impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and government entities with jurisdiction over populations of less than 50,000.

Redesignation of an area to nonattainment under section 107(d)(3) of the CAA does not impose any new requirements on small entities. Redesignation is an action that affects the planning status of a geographical area and does not, in itself, impose any regulatory requirements on sources. To the extent that the area must adopt new regulations, based on its nonattainment status, the EPA will review, as appropriate, the effect of those actions on small entities at the time the State submits those regulations. I certify that approval of the redesignation request will not affect a substantial number of small entities.

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by August 11, 1995. Filing a petition for reconsideration by the Administrator of this final rule does not

affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).  
[[Page 30791]]

Executive Order

The Office of Management and Budget has exempted this action from review under Executive Order 12866.

List of Subjects in 40 CFR Part 81

Environmental protection, Air pollution control, National parks, Wilderness areas.

Dated: May 25, 1995.

Jane N. Saginaw,  
Regional Administrator.

40 CFR part 81 is amended as follows:

PART 81--[AMENDED]

- 1. The authority citation for part 81 continues to read as follows:

Authority: 42 U.S.C. 7401-7671q.

- 2. In Sec. 81.332 the ozone table is amended by revising the entry ``AQCR 153 El Paso-Las Cruces-Alamogordo'' to read as follows:

Sec. 81.332 New Mexico.

■ \* \* \* \*

New Mexico--

Ozone

Classification

Designation

Type Date \1\ Type Date \1\

Cruces-Alamogordo.

(part)--The area bounded by the New Mexico-Texas State line on the east, the New Mexico- Mexico international line on the south, the Range 3E-Range 2E line on the west, and the N3200 latitude line on the north.

County.                      Attainment.

\1\ This date is November 15, 1990, unless otherwise noted.



State of New Mexico  
*Office of the Governor*

Bill Richardson  
*Governor*

February 5, 2009

Mr. Lawrence E. Starfield  
Acting Regional Administrator  
United States Environmental Protection Agency, Region VI  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733

SUBJECT: Ozone Area Designation Recommendation for Bernalillo County, New Mexico

Dear Mr. Starfield:

This letter is submitted to fulfill Bernalillo County's requirements under Section 107 (d)(1) of The Clean Air Act, which requires all state governors to submit initial designations within one year of the promulgation of a new or revised National Ambient Air Quality Standard (NAAQS). Since the NAAQS for ozone was revised on March 12, 2008 (73 FR 16436; March 27, 2008), a letter recommending initial designations must be delivered to EPA by March 12, 2009.

The City of Albuquerque Air Quality Division (AQD) evaluated ambient monitoring data from 2006 through 2008 with respect to the revised ozone NAAQS. The design value for 8-hour ozone, calendar year 2008 (evaluating years 2006-2008) was 0.070 ppm. Hence, all areas of Bernalillo County, New Mexico under the jurisdiction of the AQD, as the agent for the Albuquerque-Bernalillo County Air Quality Control Board, comply with the revised NAAQS. Therefore, I recommend attainment status for all areas of Bernalillo County, New Mexico.

Sincerely,

A handwritten signature in cursive script that reads "Bill Richardson".

Bill Richardson  
Governor of New Mexico

BR/mr

cc: Mr. Ron Curry, Secretary, New Mexico Environment Department  
Ms. Mary Uhl, Chief, Air Quality Bureau, NM Environment Department  
Mr. John Soladay, Acting Director, Albuquerque Environmental Health Department  
Mr. Isreal Tavarez, Environmental Engineering Manager, Air Quality Division  
Ms. Margaret Nieto, Control Strategies Supervisor, Albuquerque Air Quality Division