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7th Semi-Annual Report: The Early Action Compact for the San Antonio Region

June 2006

Prepared by the Alamo Area Council of Governments

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Abstract: Protocol for the Early Action Compact (EAC) stipulates that areas participating in the compact will assess and report their progress against milestones every six months. This report contains the progress made towards the required milestones for the San Antonio EAC region from January 2006 through June 2006. Several milestones were accomplished during this timeframe. These include progress of the Alamo Clean Air Partnership and other public outreach efforts, and continuing progress in emissions inventory updates and air quality planning. Attached to this report are Appendices for Outreach Efforts, Transportation Emissions Reductions Measures (TERMs), a list of new major point source air permits in or around the EAC region, and a progress report regarding EAC milestone achievements.		
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Executive Summary

As required by the Early Action Compact (EAC), areas that are participating in this early voluntary 8-hour air quality planning process must assess and report their progress in achieving EAC milestones on a regular basis, through a public process, at least every six months or semi-annually. This document fulfills these requirements for the seventh semi-annual (January through June 2006) period for the San Antonio EAC region.

Emissions Inventory (EI) and modeling progress for this period include continued development of the 2005 EI, as required for the Emissions Trend Analysis, and updates to the Conceptual Model. The Conceptual Model for the San Antonio area was revamped to include the new U.S. Environmental Protection Agency (EPA) modeling guidelines published in Fall 2005¹ and updates with 2005 meteorological and ozone seasonal data.

Continued progress of State Implementation Plan (SIP) creditable control strategies include progress in Transportation Emission Reduction Measures (TERMs) projects. The completion dates for TERMS projects have been updated or added where applicable. TERMS projects listed in the original March 2004 submission of the local revisions to the SIP were to be completed by December 31, 2007. The TERMS list will be reviewed on an ongoing basis to determine when new projects should be substituted for projects that will not be complete by December 31, 2007.

Voluntary control strategy development continues with progress marked by the Alamo Clean Cities program, Alamo Adopt a School Bus program, and the Alamo Clean Air Partnership (ACAP) program. The Alamo Area Clean Cities program participated in performing an alternate fuel survey and the coordinator attended a meeting of coordinators in Washington D. C. Alamo Area Council of Governments (AACOG) Staff continue to actively seek new partners for participation in the ACAP program. The partnership list now includes eight local entities dedicated to improving air quality in the San Antonio region. In 2006, AACOG staff hosted and will host a series of ACAP workshops for local businesses called "Greening Your Business." These workshops will focus on energy conservation and alternative fuels, vehicles, and infrastructure.

Newspaper, Internet, TV, and radio announcements on air quality met the Public Involvement milestone. Outreach efforts included group presentations and area events participation, notably the Air Quality Health Fair at the Seguin Outdoor Learning Center, hosted by AACOG.

Under the heading of Maintenance for Growth, local air quality planners are working to ensure the attainment of the eight-hour average ozone (8-hour ozone) National Ambient Air Quality Standard (NAAQS) by assuring the implementation of locally-proposed measures such as Stage 1 vapor recovery and degreasing operations control strategies. The section "Updating the Planning Process" contains efforts made towards the identification of major new point source permits in or near the EAC area that may have an impact on local air quality. Maintenance of the ozone standards is important to operators of local industry; several have proven receptive to planning suggestions that would aid local air quality improvement efforts.

The San Antonio region has successfully maintained steady progress in accomplishing EAC milestones from July to December 2005, ensuring proper development of the Clean Air Plan.

¹ EPA, October 2005. "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS", EPA-454/R-05-002. Available on-line: <http://www.epa.gov/scram001/guidance/guide/8-hour-o3-guidance-final-version.pdf>. Accessed 03/08/06.

Chapter 1 – Introduction

The Early Action Compact protocol is designed to guide development and implementation of control strategies, including planning for near-term growth, in order to achieve and maintain the 8-hour ozone standard. This compact offers a timeline with a more rapid timeframe for achieving emission reductions than the EPA 8-hour implementation rulemaking², while providing "fail-safe" provisions for the area to revert to traditional nonattainment processes if specific milestones are not met. The EAC agreement signed by the EPA, the Texas Commission on Environmental Quality (TCEQ), and local elected officials is available online at: <http://www.aacog.com/cap/>.

As required by EAC guidance, areas participating in early voluntary 8-hour air quality plans must assess and report their progress in achieving EAC milestones in a regular, public process every six months. This document will fulfill the requirement for the seventh semi-annual progress report written for the San Antonio EAC.

The milestones in this report which are described in the EAC are:

- Completion of and updates to emissions inventories as outlined in section b), Emissions Inventory;
- Completion of and updates to modeling as outlined in section c), Modeling;
- Post-attainment demonstration and plan updates as outlined in section e), Maintenance for Growth;
- Continued public involvement in the planning process which will be conducted as outlined in section f), Public Involvement. This is in addition to the public reporting conducted at least once every six months, as outlined above.

² Federal Register / Vol. 68, No. 105 / Monday, June 2, 2003 / Proposed Rules; 40 CFR Part 51; Proposed Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard; see "2. What Is the 'Early Action Compact' for Implementing the 8-Hour Ozone NAAQS," page 32859. Available online: <http://www.epa.gov/fedrgstr/EPA-AIR/2003/June/Day-02/a13240.pdf>

Chapter 2 – Early Action Compact Milestones

The Early Action Compact (EAC) specifies milestone requirements and delivery dates based on the EAC Memorandum of Agreement (MOA).³ The milestones are addressed in the sections that follow.

2.1 Emissions Inventory Milestones

The ongoing analysis of emissions in the San Antonio EAC Region (SAER) is an essential element in the maintenance of the Emissions Trend Analysis milestone of the Clean Air Plan. AACOG staff continues to develop the 2005 EI. Emissions estimates were calculated for many of the area and nonroad source categories. These included:

Area Sources

- Stationary Diesel Generators
- Fertilizer and Pesticides
- Commercial and Residential Gas Cans
- Above and Underground Storage Tanks
- Surface Coatings
- Consumer and Commercial solvents
- Bakeries

Nonroad sources

- Railway Maintenance Equipment
- Mining Equipment
- Quarry Equipment
- Landfill Equipment
- Recreational Boating
- Recreational Equipment
- Lawn and Garden Equipment (residential, commercial, schools, government, and golf courses)

In addition to the area and nonroad sources, emissions were calculated for commercial, private, and small airports. These emissions include aircraft, aircraft fuel, nonroad airport equipment, generators, and any other airports emission sources within the AACOG region.

2.2 Modeling Milestones

The photochemical model is the most important tool available to air quality planners interested in understanding and reducing ground-level ozone concentrations. The photochemical model is a computer simulation of the formation and movement of ground-level ozone. Performing on-going modeling updates ensures that planners have the most accurate modeling data required for air quality planning activities. These updates may come in the form of refinements to past emissions inventories, creation of new emissions inventories for more recent years than the inventories used in past episodes, and continuing updates to the Conceptual model.

The Conceptual Model is a tool to aid in the selection of modeling episodes for use in the photochemical model. A good episode candidate needs to represent a typical high ozone period for the region. Episode candidates are analyzed on the basis of meteorological data, designated design values, ozone maximum averages, and seasonal/other norms for typical high ozone days in the San Antonio area. If updates to the Conceptual Model support arguments for development of other episodes as necessary to fully represent the variety of situations that typically contribute to local ozone production in the region, new episode development will be

³ Chapter V. Early Action Compact Memorandum of Agreement (MOA); available online: <http://www.aacog.com/cap/CAP2002.html#5>

considered. The following sections describe modeling updates conducted during the period of this report.

2.2.1 Conceptual Mode Update

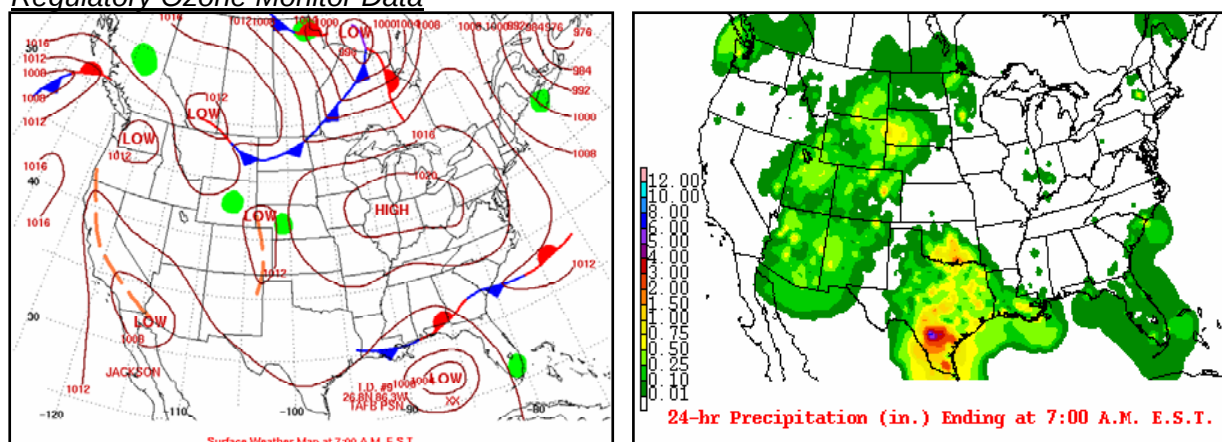
The Conceptual Model was updated to include the 2005 meteorological and ozone season data. In addition to these updates, the Conceptual Model was modified to incorporate suggested episode selection criteria, as stated in the new modeling guidelines, published by the EPA in November 2005.⁴ To illustrate some of these modifications, several additional text sections, charts, and tables were utilized; these are discussed in the following subsections.

Regional and Mesoscale Weather Patterns

Weather maps illustrate the presence of fronts, precipitation, tropical systems, and other weather patterns. Figure 1 shows sample maps furnished by the National Oceanic & Atmospheric Administration and the National Centers for Environmental Prediction, used in the Conceptual Model update. Analysis of weather patterns allows identification of events that may be difficult to replicate in the meteorological model; such events may make an ozone episode, which would otherwise be a candidate for photochemical modeling unsuitable.

Figure 1. Daily Weather Maps for 09/12/2002 Indicating Tropical Storm Hanna (left) and 09/09/2002 Precipitation Totals (right)

Regulatory Ozone Monitor Data



The EPA guidelines recommend certain candidate episode criteria be evaluated for each monitor that recorded an exceedance of the 8-hour standard (85+ parts per billion, 8-hour average). Thus, several charts and tables in the Conceptual Model were expanded to include the highest 8-hour averages at the regulatory monitors, not just the highest value in San Antonio.

Weighted Design Values Over 3-5 Years: Baseline Design Value (BDV)

Another question to answer in determining episode suitability is, do the highest daily eight-hour ozone averages go above or below certain levels during the entire series of days? That is, if the daily highest 8-hour averages are too high or too low, then the episode does not represent a typical ozone event. In contrast, the photochemical model should portray typical exceedances, since the programmatic goal is to reduce levels recorded during typical exceedances.

⁴ EPA, October 2005. "Guidance on the Use of Models and Other Analyses in Attainment Demonstrations for the 8-hour Ozone NAAQS", EPA-454/R-05-002. Available on-line: <http://www.epa.gov/scram001/guidance/guide/8-hour-o3-guidance-final-version.pdf>. Accessed 03/08/06.

The EPA guidelines recommend creating a 10 part per billion range of values, a "window" within which the highest daily 8-hour averages in the candidate episode should fall. The range of values for the Baseline Design Value (DVB) used in The Model Attainment Test is calculated based on "the average (of the three) design value periods, which include the baseline inventory year. It is, in effect, a weighted average of the annual averages. This has the desired effect of weighting the projected ozone values towards the middle year of the five year period, which is the emissions year."⁵ The central, or candidate year, is weighted more heavily than the other years in the average calculation.

Notably, this is different from nonattainment designation design values, which are measured over three years. Tables 1 and 2 contain the site-specific DVB calculated in the Conceptual Model by year for C23 and C58 based on 3 sets of 3 years of truncated DV when data is available. The examples below are for episodes in the years 2003, 2004, and 2005. For episodes occurring during the years 2000 – 2002, the weighted design values are calculated the same as the example for 2003.

Table 1. Annual 4th highest 8-hour average ozone concentrations

CAMS Station	Year							
	2000	2001	2002	2003	2004	2005	2006	2007
CAMS 23	77	78	104	86	85	84	--	--
CAMS 58	80	81	95	85	89	86	--	--

Sample data and calculation for CAMS 23:

$$\begin{aligned}
 \text{2003 Baseline DV} &= [(2001\text{-}2003 \text{ DV}) + (2002\text{-}2004 \text{ DV}) + (2003\text{-}2005 \text{ DV})] / 3 \\
 &= [(78 + 104 + 86) / 3 + (104 + 86 + 85) / 3 + (86 + 85 + 84) / 3] / 3 \\
 &= [89 + 92 + 85] / 3 \\
 &= \mathbf{88.3}
 \end{aligned}$$

$$\begin{aligned}
 \text{2004 Baseline DV} &= [(2002\text{-}2004 \text{ DV}) + (2003\text{-}2005 \text{ DV})] / 2 \\
 &= [(104 + 86 + 85) / 3 + (86 + 85 + 84) / 3] / 2 \\
 &= [92 + 85] / 2 \\
 &= \mathbf{88}
 \end{aligned}$$

$$\begin{aligned}
 \text{2005 Baseline DV} &= [(2003\text{-}2005 \text{ DV})] \\
 &= [(86 + 85 + 84) / 3] \\
 &= \mathbf{85}
 \end{aligned}$$

⁵*Ibid.*, p. 13.

Table 2. Three year Design Value and Baseline Design Values, CAMS 23

Emission Year	Values used in calculation of the Baseline Design Value (DVB)				DVB Used In The Modeled Attainment Test, ppb	± 10 ppb of DVB
	2001-2003 DV, ppb.	2001-2003 DV, ppb.	2002-2004 DV, ppb.	2003-2005 DV, ppb.		
2005	N/A	N/A	N/A	85	85.0	75 – 95
2004	N/A	N/A	91	85	88.0	78 – 98
2003	N/A	89	91	85	88.3	78 – 98
2002	86	89	91	N/A	88.7	79 – 99

Table 3. Three year Design Value and Baseline Design Values, CAMS 58

Emission Year	Values used in calculation of the Baseline Design Value (DVB)				DVB Used In The Modeled Attainment Test, ppb	± 10 ppb of DVB
	2001-2003 DV, ppb.	2001-2003 DV, ppb.	2002-2004 DV, ppb.	2003-2005 DV, ppb.		
2005	N/A	N/A	N/A	86	86.0	76 – 96
2004	N/A	N/A	89	86	87.5	78 – 98
2003	N/A	87	89	86	87.3	77 – 97
2002	85	87	89	N/A	87.0	77 – 97

Analysis focuses on monitors with current violations (as recommended)

The San Antonio region was declared nonattainment based on the violations at C23 from 2000 – 2002; however, the region was also in violation at C58 for the design values calculated over 2002 – 2004 (90 ppb) and 2003 – 2005 (86 ppb). Thus, the C23 and C58 monitored data is of primary importance and consideration for modeling purposes.

Number of Days with Recorded Elevated Ozone Levels

For optimal modeling performance, the EPA recommends at least 10 days of high ozone (>70 ppb) over the selected episode. However, in areas that normally don't have extended periods of high ozone such as near nonattainment areas, a minimum of 5 days at each violating monitor is acceptable.

2.3 Control Strategy Development Milestones

Enforceable state control strategies were put in place under the Early Action Compact at the request of local elected officials. The regional leadership is interested in ensuring that the greatest emissions reductions available through these measures are obtained. These measures include degreasing controls and Stage 1 vapor recovery. The Air Improvement Resources Executive and Advisory Committees requested information from the state regarding the methods used by the state to determine compliance with state rules in the existing nonattainment regions of Texas.

In addition to control measures for which SIP credit can be obtained, **voluntary strategies** are considered and implemented in the San Antonio region. These measures include programs such as Commute Solutions, Clean Cities, and employer promoted programs.

2.3.1 Alamo Area Clean Cities

Through the Alamo Area Clean Cities program, technical and outreach assistance is provided for alternative fuels and Clean Cities technologies (fuel blends, idle reduction technologies,

hybrids, and fuel economy) to fleet operators in the San Antonio Early Action Compact Region. During the six-month reporting period, January - June 2006, there were 2 stakeholder meetings: February 14, 2006 and May 19, 2006. In addition to these stakeholder meetings, the following events highlight this reporting period:

Clean Cities Coordinator Meeting in Washington D.C.

A meeting of Clean Cities coordinators was held by the U.S. Department of Energy (US DOE) in Washington D.C. on March 6th and 7th to discuss the consolidation of the US DOE Regional Offices as well as the upcoming funding opportunities from the US DOE for Clean Cities projects. Coordinators from all over the United States provided presentations on their most successful project of 2005. The Alamo Area Clean Cities Coordinator was recognized by the National Ethanol Vehicle Coalition for Coordinator Excellence in promoting E85 as well as playing a part in establishing the first publicly accessible E85 station in Texas and received an award of \$5,000 to use for Coalition activities.

Annual Clean Cities Survey

An alternative fuel survey of stakeholder and non-stakeholder vehicle fleets was performed as required by the U.S. Department of Energy (U.S. DOE). Clean Cities Coalitions must report the number of alternative fuel vehicles in their areas to the U.S. DOE on an annual basis. The survey inquired about the number of alternative fuel vehicles and stakeholder activities that promoted alternative fuels and other Clean Cities technologies. The results of the survey are detailed below (Table 4).

Table 4. Annual Clean Cities Survey Results

2005 Survey Results	
No. of stakeholders in coalition	36
Alternative Fuels Outreach Efforts	12,275 people reached
Number of Alternative Fuel Vehicles	
Light Duty CNG	218
Light Duty E85	513
Light Duty Electricity	61
Light Duty LPG	1176
Heavy Duty LPG	472
Heavy Duty CNG	5
Light Duty Biodiesel 20	6
Heavy Duty Biodiesel 20	654
Light Duty Hybrid Electric Vehicle	32
Light Duty LNG	50
Grants	
Grantor Program	
2006 SEP Coordinator Support	\$20,000
TCEQ TERP Funds	\$1,243,950
TCEQ TERP Funds	\$96,858
Railroad Commission	\$39,530

Clean Cities Congress 2006

On May 6-10, 2006 the Clean Cities Congress Conference was held in Phoenix, Arizona to address: advancements in alternative fuel technology, studies on air quality effects of alternative fuels, and advancements in hybrid technologies. In addition, educational materials on US

dependence of foreign oil were provided. Representatives of major vehicle manufacturers such as Ford, GM, Daimler Chrysler, Honda, and Toyota were in attendance and showcased vehicles with hybrid technologies and vehicles that operated on alternative fuel. GM awarded the Alamo Area Clean Cities coordinator \$1,000 to use towards coalition activities.

H-E-B Grocery to Sell E85

H-E-B Grocery announced their plans to install E85 dispensers at several gasoline retail locations along Interstate 35 in the state of Texas. H-E-B will construct five E85 sites, with one of the sites being in northeast Bexar County at the intersection of I-35 and FM 3009. H-E-B plans to have the station completed by the end of August.

2.3.2 Alamo Adopt A School Bus

AACOG is promoting and coordinating the Alamo Adopt A School Bus (AASB) program, which is a cooperative partnership established to aid school districts in replacing their aging school bus fleet with new "clean fuel" buses. This goal will be achieved by educating school districts and corporations about the benefits of replacing older diesel buses with lower emission "clean fuel" buses. Efforts at reducing the emission capacity of school buses could also involve the combination of replacing and retrofitting buses with new technology to achieve NO_x and PM reductions and the possible use of low-sulfur fuel.

Letters were distributed to school district superintendents and transportation directors with information about the AASB program and the types of assistance the program can offer school districts in technical and public outreach services. Assistance includes notification of grant opportunities for school districts as well as assistance in composing grant applications to acquire new buses. The letter also contained a survey letter inquiring as to the number of school buses within each district fleet.

In addition, development of a new program, through AASB, has begun called the Green Patrol program. The Green Patrol is geared towards educating students on the benefits of idle reduction; they would then go on "patrol" to reward parent for not idling while waiting to pick up their children from school. Once the plan is developed, a pilot project of the Green Patrol program will occur at a school yet to be determined.

2.3.3 Alamo Clean Air Partnership

AACOG staff is conducting a series of Alamo Clean Air Partnership (ACAP) workshops in 2006 to encourage companies in the region to adopt air pollution reduction measures that are cost effective or for which financial incentives are available. These financial incentives take a variety of forms, e.g., fuel savings, reductions in materials use, energy conservation, tax benefits, grants, and low-interest loans. On February 1, 2006, AACOG staff presented a "Greening Your Business" seminar, in conjunction with the Greater San Antonio Chamber of Commerce, to kick off the workshop series. The 2006 workshop series will focus on energy conservation and alternative fuels, vehicles, and infrastructure.

Current ACAP Partners

- City of San Antonio
- H-E-B Grocery Company
- Raba-Kistner Consultants, Inc.
- San Antonio Water System
- USAA
- Alamo Area Council of Governments
- Valero Energy Corporation

Honorary ACAP Partners

To encourage participation in the Walk&Roll Corporate Challenge, an event hosted by AACOG in the Month of June, ACAP is making all participating groups honorary ACAP partners. The miles pledged for commuting/walking/biking/bussing can count towards emission reductions in the program.

All outreach efforts for the ACAP program are listed in Appendix A under the headers: Alamo Clean Air Partnership (ACAP) Efforts and Informational Materials and Distributions for All Outreach Efforts by AACOG.

2.3.4 Texas Emission Reduction Plan

AACOG staff continues to vigorously promote the Texas Emissions Reduction Plan (TERP), created in 2001 by Texas Senate Bill 5. When finalizing the local revisions to the SIP, in compliance with the EAC, local elected officials requested a 2-ton per day reduction of NOx emissions in the 4-county SAER through local TERP projects.

The estimated total reductions for TERP projects within the San Antonio EAC region are **2.14 tpd**⁶. This figure is based on the percentage of use, within the San Antonio EAC region, for each vehicle or equipment as listed on the TERP grant application. No applications were solicited from the San Antonio region for the FY 2006 TERP grants, as funding was directed to Dallas/Fort Worth and Houston area nonattainment needs. The state is currently not soliciting applications from the San Antonio area because the state has successfully provided the level of funding required for the region to meet the 2.0 tpd NOx emissions reduction target.

The TERP IdleAire projects noted in Table 4 are for two projects, one at the Petro Truck Stop in San Antonio at I-10 Exit 582 (Ackerman Rd). The other is Travel Center of America TA #232 in New Braunfels at I-35 Exit 193 (Conrads Rd). The Petro installation is underway, while the TA location is operational. The funding level listed, \$1,243,950, is for both projects.

2.3.5 Transportation Emission Reduction Measures (TERMs)

TERMs projects include projects listed on the San Antonio/Bexar County Metropolitan Planning Organization's Transportation Improvement Program (TIP) and projects sponsored by local governments that are not federally funded. The projects, which qualify as TERMS projects, aim to reduce congestion and/or the number of trips made by vehicles, ultimately improving the air quality by reducing emissions. These projects have completion dates scheduled from 1999 through 2007.

However, the completion of **some** TERMS projects is not anticipated by Dec. 2007. Projects such as these have progressed slowly due to external influences (changes in construction plans, etc.). The EPA has accounted for these external influences by allowing substitute projects to replace the slower moving ones. Substitute projects are projects that were not on the original list approved for SIP credit and are scheduled for completion prior to Dec. 31, 2007. Substitutions for the projects not completed by December 2007 listed in Appendix B will be determined during a continuing evaluation process.

Project Completion Status as of June 2006

- 265 - Completed
- 7 - 2007 completion dates (all 7 are expected to complete prior to end of 2007)
- 54 - Unknown completion dates (may contain projects which fall into the two categories above or the one below)

⁶ Email correspondence; Steve Dayton of TCEQ, dated 5/31/2006.

- 6 - Will complete post 2007 (Substitutes must be found for these projects with equivalent or greater reductions)

2.4 Maintenance for Growth Milestones

Assurance of the air quality situation in Maintenance Year 2012 is a vital aspect of the ongoing planning activities by stakeholders in the EAC for the San Antonio region. Accomplishing this milestone is essential and would indicate that the efforts of the stakeholders in the SAER were successful.

2.4.1 Updating the Planning Process

Various stages of planning and verification must be performed on a continual basis to ensure timely emission reductions for the region to maintain air quality standards. The impacts of new point source related emissions, economic and population growth, and the implementation of new control strategies are evaluated during the air quality modeling process.

2.4.2 SIP Control Strategy Implementation

Appendix D lists progress achieved in implementation of the San Antonio EAC region control strategies. The table lists by measure, description, status, implementation date, and NO_x and VOC reductions. The only control strategy that remains to be fully implemented is TERMS. The TERMS projects were scheduled for full implementation by December 2007; that is, all TERMS projects were originally to be completed by the end of December 2007.

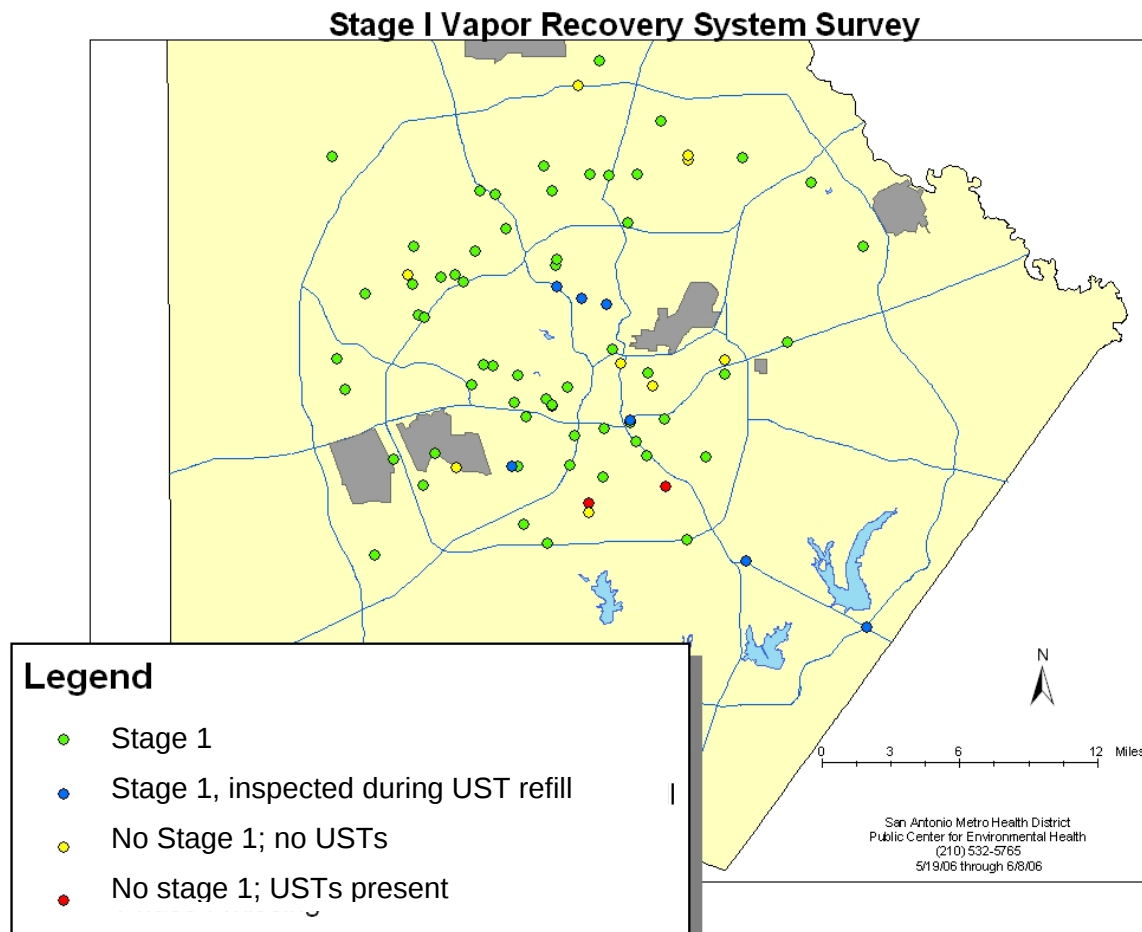
As discussed in section 2.3.5 of this chapter, some TERMS projects now have implementation dates close to the end of 2007 or later, Appendix B (bold dates). Some of these projects will need to be replaced with other projects that are scheduled for completion prior to December 2007 and are estimated to have the same or greater emissions reductions.

Stage 1 Vapor Recovery Systems

The San Antonio Metro Health District (SAMHD) performed a field survey of service stations across the City of San Antonio. The SAMHD performed inspection over a three-week period, 05/19/06 – 06/08/06, inspecting 81 stations. Nine stations did not contain underground storage tanks (USTs); of the 72 remaining stations, 70 had Stage 1 systems. Eight stations were inspected during refill operations and appeared to be using the Stage 1 systems correctly.

AACOG staff contacted representatives with Valero (125 stations + 2 in SAMHD survey) and HEB (22 stations + 1 in SAMHD survey) regarding their use of Stage 1; both verified that all their stations have Stage 1 and use it properly. With the addition of Valero and HEB, the number of stations surveyed totaled 227. Hence 37% of the 614 stations in San Antonio have been confirmed as using Stage 1 vapor recovery in their operations, through this survey.

Figure 2. Gasoline Service Stations Surveyed by SAMHD, May 2006



Degreasing Operations

Safety-Kleen and Crystal Clean together provide degreasing equipment and products to 75% - 83% of the local market. According to TCEQ, the solvents and equipment they sell are fully compliant with the degreasing rules.

2.4.3 New Issues & Questions

An increase in state air permit applications by the cement, electrical generation, and petroleum refinery industries in Texas occurred during the first several months of 2006. Investigations are underway by AACOG and other air quality staff of both near nonattainment and nonattainment areas of the state to determine the potential impacts of such industrial growth.

Statewide growth and accompanying emissions increases are viewed as a critical issue given that transport of ozone and ozone precursors is a much more significant component of high eight-hour average ozone readings when compared with high one-hour ozone readings. Thus, industrial growth both in the San Antonio region and in regions upwind of San Antonio can have important impacts on the region's attainment status.

Two expansion proposals in Comal County involve cement plants owned by CEMEX and TXI.

- 1) The CEMEX expansion will not increase plant wide emissions due to the use of Selective Non-Catalytic Reduction (SNCR) technology on the existing kiln and proposed kiln.
- 2) Projected NO_x reductions achieved through the implementation of SNCR control technology on the existing kiln at the TXI Hunter plant are anticipated soon after finalization of the

pending permit and should be in place by ozone season 2007. The proposed second kiln at the Hunter plant is not anticipated to go online until fall 2009. The estimates are as follows:

Table 5. Ozone Season Emissions Estimates for TXI Hunter Plant

Control	Kiln 1 (Existing)		Total NOx Emissions (tpd)	NOx Emission Reductions (tpd)
	Emission Rate (lbs./ton of Clinker)	NOx Emissions (tpd)		
Uncontrolled	2.87	3.34	3.34	0.00
SNCR*	1.95	2.27	2.27	1.07

* With proposed SNCR retrofits, beginning as early as the ozone season of 2007

TXI has estimated final NOx emissions due to the planned expansion as shown in the table below. Both the existing and proposed kilns will be required to operate SNCR during the ozone season, April 1 - October 31. Note that the emissions from the new proposed Kiln 2 would not occur prior to startup of the kiln, anticipated for fall 2009.

Table 6. Emission Estimation for TXI Hunter Plant as early as fall 2009

Control	Kiln 1 (Existing)		Kiln 2 (Proposed startup as early as Fall 2009)		Total NOx Emissions (tpd)	Increase in NOx emissions (tpd)
	NOx production (lbs./ton of clinker)	NOx Emission (tpd)	Emission Rate (lbs./ton of Clinker)	NOx Emission (tpd)		
Uncontrolled	2.87	3.34	2.45	4.20	7.54	4.20
SNCR*	1.95	2.27	1.95	3.34	5.61	2.27

* With proposed SNCR retrofits on Kiln 1 operational during ozone season, SNCR technology on Kiln 2 operational year-round. As part of their revised permit application, TXI is committed to run SNCR on their existing Kiln (Kiln 1) during the Ozone Season (April to Oct. every year) after they get their permit approved. The most critical period of the ozone season in San Antonio is mid-August through September.

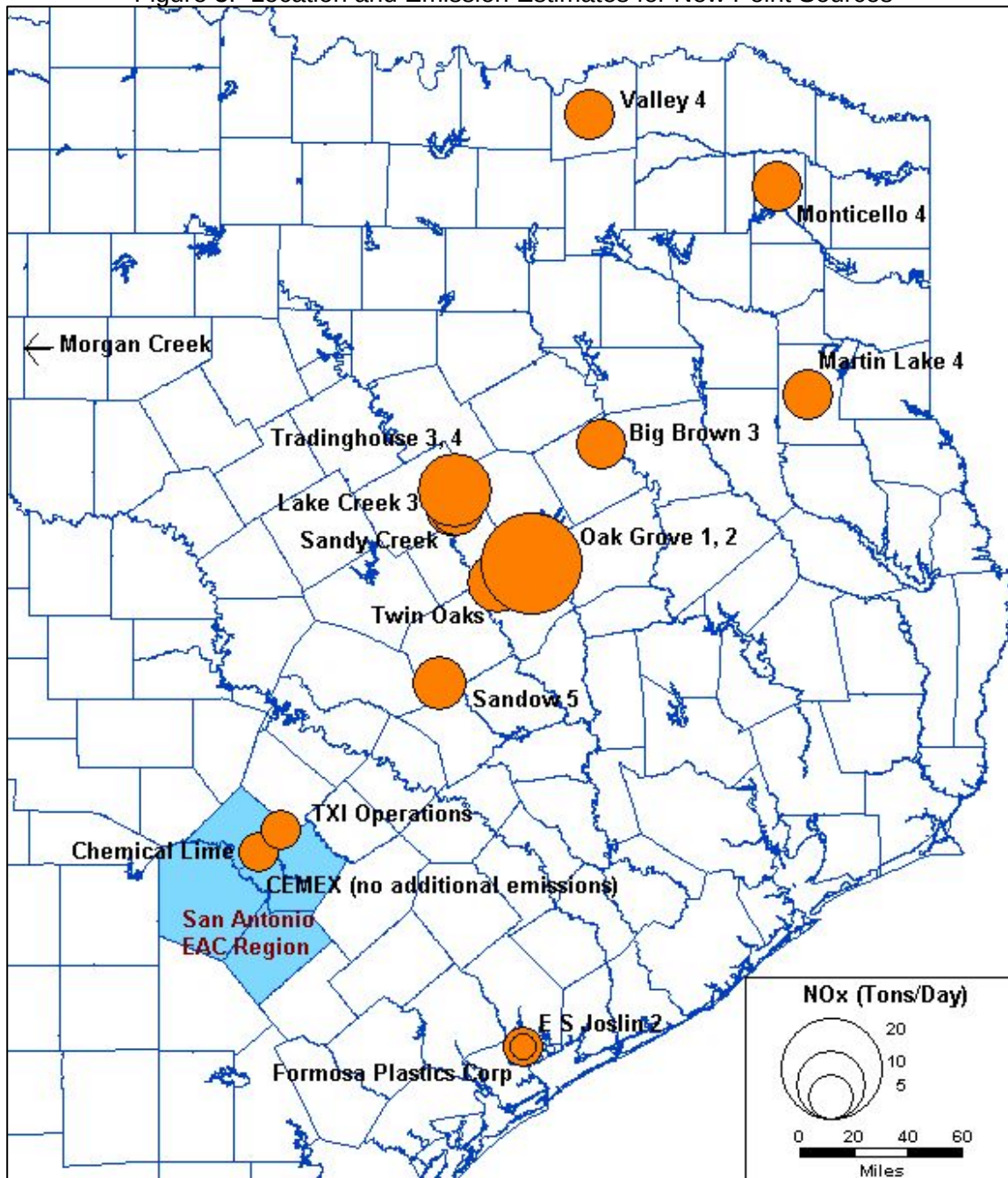
Local cement manufacturers have expressed a continued willingness to work with regional air quality planners to develop changes or adjustments to their operations to benefit air quality planning, as exemplified by TXI. One such adjustment could be to coordinate consecutive annual maintenance shut downs by regional cement manufacturers during the ozone season. This could lower the net emissions from this important point source category during the critical periods of the season.

AACOG is eagerly working with the industry to determine the most cost-effective measures to be employed on the widest scale possible, either within industry or in the community at large, to assist efforts to regain full attainment status. The local TCEQ Region 13 staff has been instrumental in bringing ideas and players to the table to discuss options and mutual goals.

In addition to CEMEX and TXI, 5 new coal-powered plants and 1 chemical plant have applied for permits. These plants are just outside the San Antonio EAC region and could have impacts on local air quality; however, only one plant, Sandow 5, could be online in 2007. Once all plants are online, they are projected to emit 49 tpd of NOx emissions. This increase in NOx would represent an estimated ozone level increase of 0.039 near CAMS 23. With this increase in

ozone the region would still remain in attainment according to the 2007 attainment demonstration. Furthermore, TXU announced plans to build 8 additional coal-fired plants, for a total of 13 plants; these announcements include up to \$2 billion in implementation of cleaner power plant technologies.

Figure 3. Location and Emission Estimates for New Point Sources



Shaded areas represent the 4-county San Antonio EAC region

Compilation Date May 5, 2006

Plot Date: May 5, 2006

Figure 3 contains a map of the location and NOx emissions rates (estimated to be 120 tons per day) from new point sources according to recent state air permit applications. However, there

are a series of important caveats which must be considered regarding this graphic. Assumptions in the graphic allow the same emissions rate for the proposed Chemical Lime plant expansion as for TXI (4.2 tons/day). However, there has not been a submission to date of a permit associated with the Chemical Lime plant expansion.

The graphic also does not represent TXU emission reductions at existing facilities, the locations for which are not now determined. TXU has committed to reducing 51 tons per day at their existing facilities in order to offset the proposed expansions at the eight new coal power plants. AACOG staff will continue to update the emissions inventory for all estimations given below, including the finalized locations and the reductions associated with TXU proposals.

Appendix C contains a list of sources which AACOG staff will continually check for increase/decrease of emissions and ozone due to new/closing plants, expansions/downsizing at existing plants, or the implementation of emission controls.

A measure of the ozone impact at local regulatory monitors is shown in the following table. The figures in the table reflect the increase in ozone due to proposed emissions from TXI and from point sources as shown in the "New Point Source" graphic (notably without the Chemical Lime emissions). These various scenarios were modeled in the 2007 attainment base case photochemical model to produce the figures below. The startup of these plants could not occur until a date beyond the term of the Early Action Compact (December 31, 2007); only one of the expansion projects could be on line as early as 2007 (Sandow 5). Hence the numbers below only serve as a relative measure of potential impact in the region.

Table 7. Increase In 8-hour Ozone Design Value Due to proposed Point Sources, 2007 Model
Data Shown is Greatest Impact on 8-hour Ozone Average, in Parts per Billion

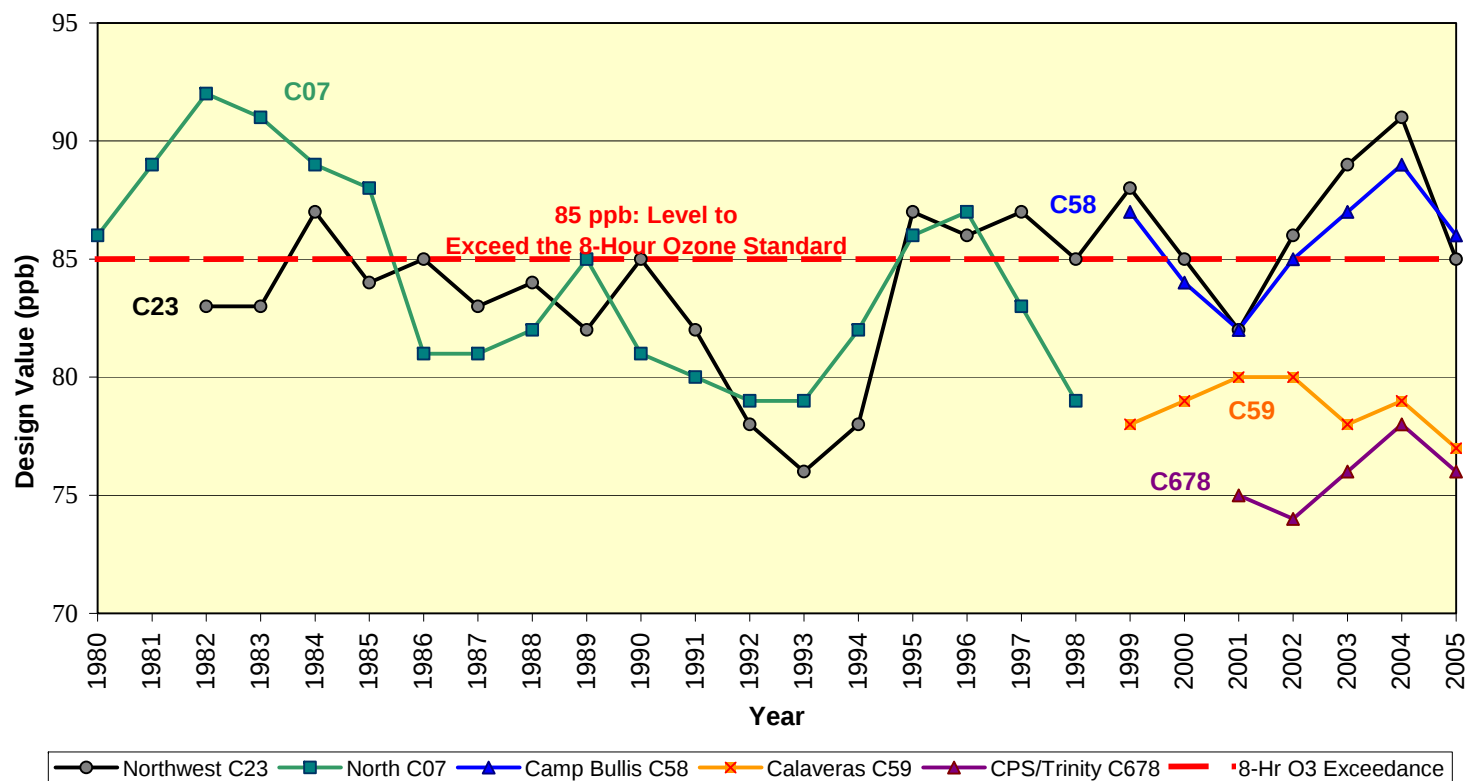
CAMS Station	TXI (4.20 tons/day)	TXI (2.27 tons/day)	All new point sources, incl. TXI (4.20 tons/day)	All new point sources, incl. TXI (2.27 tons/day)
CAMS 23	0.009	0.006	0.050	0.047
CAMS 58	0.042	0.025	0.085	0.067

As a point of reference, the 2007 Projected 8-hour Design Value for CAMS 23 is 84.28 ppb. The 2007 Projected 8-hour Design Value for CAMS 58 is 81.97 ppb. This modeling includes all Federal, State, and Local SIP creditable control measures.

2.4.4 Air Quality Assessment

A basic assessment of the air quality in the San Antonio region can be accomplished by comparing trends in ozone and NO_x. This section will take a look at the San Antonio monitored ozone data. The number of days each year above the standard, the number of high ozone days, NO_x emissions, and the calculated design values by monitor are factors used for this comparison.

Figure 4. Historical 8-Hour Design Values



Historical 8-Hour Design Values

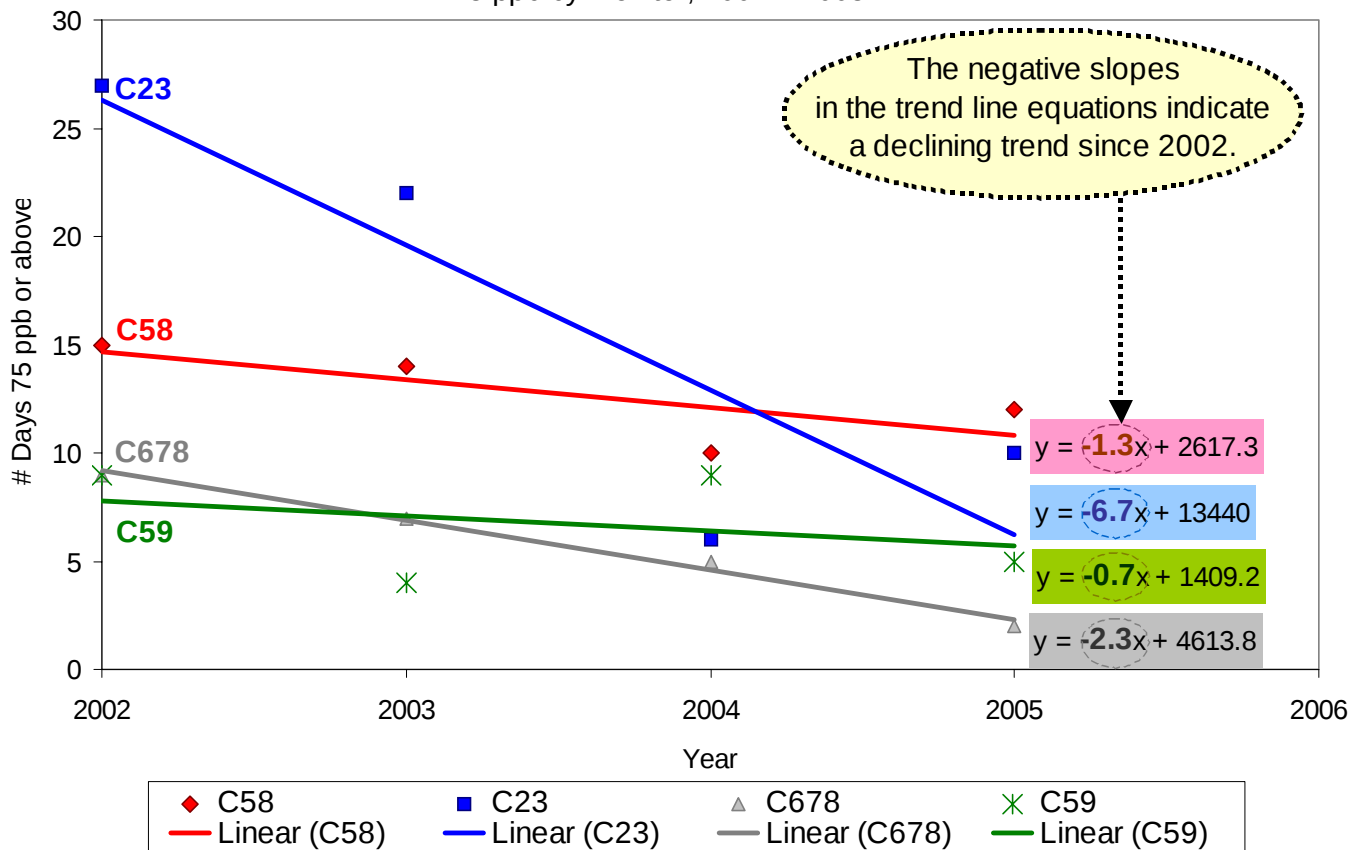
Although the eight-hour average ozone NAAQS has only been fully implemented since 2004, regulatory monitoring data exists, provided by the Texas Commission on Environmental Quality, which shows the long-lived trend for design values in the San Antonio region. This graph shows the 8-hour ozone Design Values for historical ozone data in the San Antonio region.

The analyses on the following pages show data over a much shorter, and a more recent, timeframe. Staff urges caution in extrapolating future projections from these figures.

Number of Days ≥ 75 and ≥ 85 ppb Trends

Figure 5 compares the number of days ≥ 75 ppb for the maximum 8-hour average ozone values measured at C23, C58, or C59 from 2002 to 2005. The equations for the trend lines of data for all four monitors have a negative slope, indicating a declining trend.

Figure 5. Number of Days with Maximum Daily 8-hour Average Ozone Concentrations ≥ 75 ppb by Monitor, 2002 – 2005



In addition to declining trends in the annual number of days showing values at or above 75 ppb, the design value also shows a declining trend since 2002 (Figure 4).

4th Highest Values and Design Values Trends

A comparison of the 4th highest 8-hour average ozone concentrations from year to year can be considered a measure of trends, since the design value is calculated as an average of 4th highest values over three consecutive years. Figure 7 displays these values for C23 and C58. Though slight for C58, values for both CAMS show a declining trend from 2002 to 2005.

Figure 6. Trend in Exceedance Days of the 8-hour Ozone Standard (≥ 85 ppb), San Antonio Region Regulatory Monitors, 2002-2005

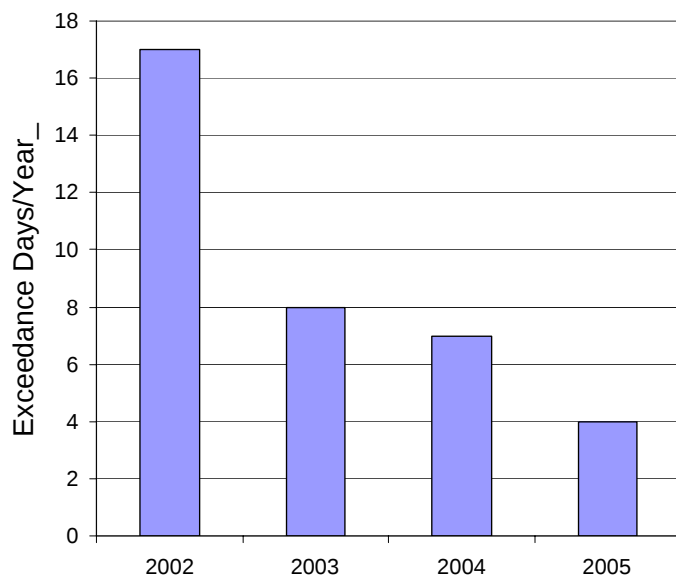


Figure 7. Trend in 4th Highest Values in 8-hour Ozone Averages for Each Year, 2002-2005, C23 & C58

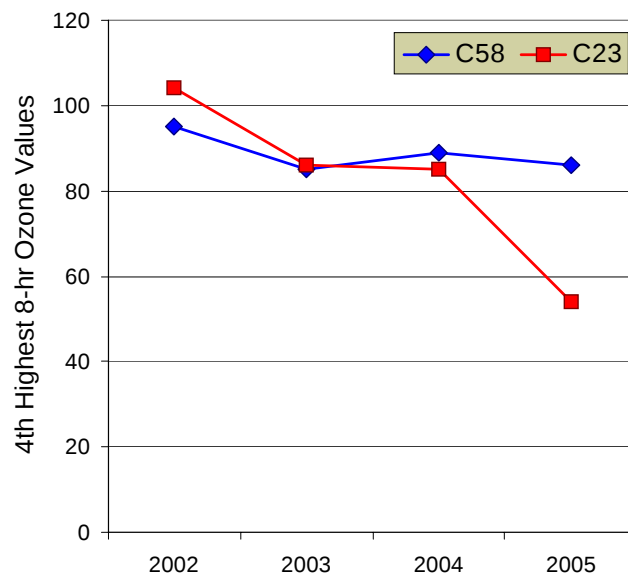


Figure 7 graphically compares the calculated design values from 2005 back to 2002 for C23 & C58. In the year 2002, San Antonio experienced a number of exceedances, higher than typical for the ozone season; thus, the 4th highest value was significantly higher than in other years. This elevated value influenced the calculated design values for the 2002 – 2004 period, the highest design values shown at these two monitors. The design values drop significantly for the 2003 – 2005 calculation.

Figure 8. Design Value Trends at C23 & C58

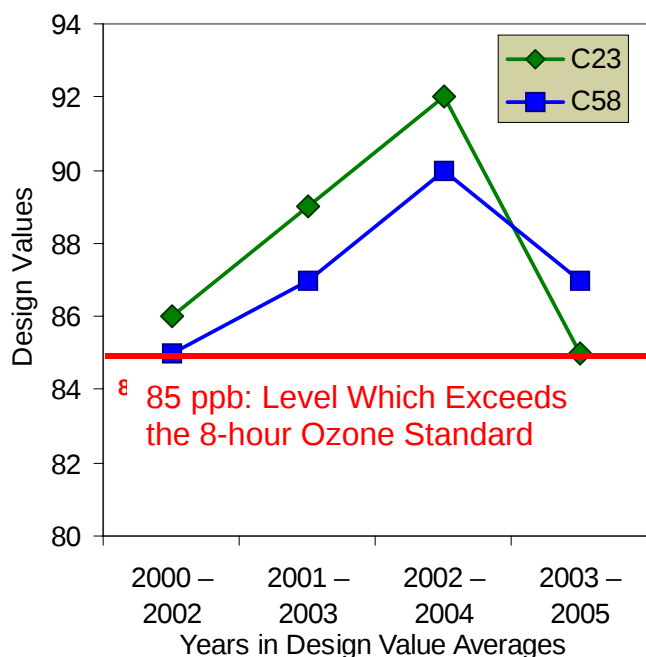
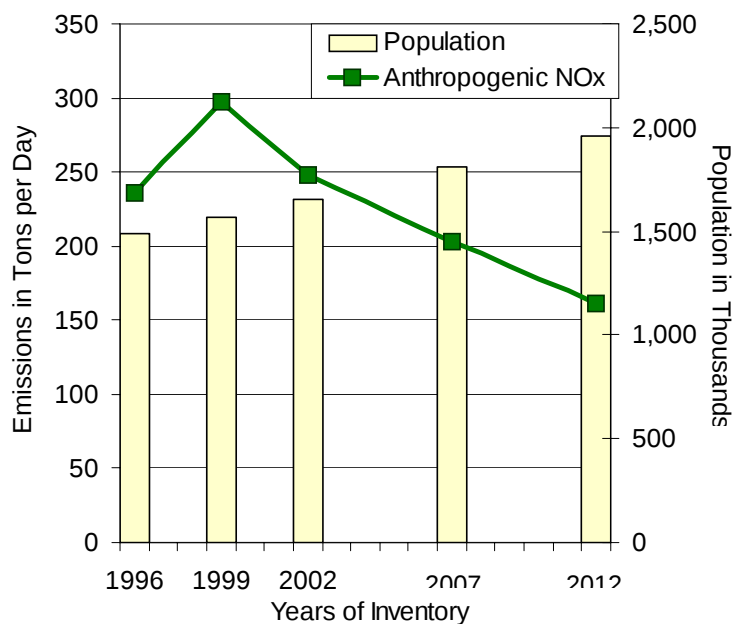


Figure 9. NO_x Emissions Trend in the San Antonio EAC Region with Population Estimations



NOx Emissions Trends

The 2005 Emissions Trend Analysis for the San Antonio Region⁷ was used to compare NOx emissions in the San Antonio region over the years. The analysis utilizes the 1996, 1999, and 2002 inventories as well as the projected 2007 and 2012 inventories. Figure 8 shows the overall NOx emissions for the San Antonio EAC region from these EIs. A declining trend is anticipated through 2012 according to this analysis.

2.4.5 New Strategy Requirements

As prescribed in the Early Action Compact protocol, if at any time the review of growth demonstrates that adopted control measures are inadequate to address growth in emissions, additional measures will be added to the plan. If analysis indicates that additional control measures are necessary to reach attainment by 2007 through a review of growth, they will be verified using the current attainment demonstration photochemical model and adopted according to the public review process overseen by the Air Improvement Resources Committee. If a review of growth indicates additional control measures are necessary to maintain attainment through 2012, AACOG staff will work with the TCEQ and EPA to analyze control strategies based on then-currently available photochemical models. Appropriate control strategies will be adopted according to the public review process overseen by the Air Improvement Resources Committee.

To date, review of growth and emissions inventory patterns does not support a call for additional measures enacted locally.

2.5 Public Involvement Milestones

Educating the public about the importance of the region's air quality continues to be a crucial effort for the Clean Air Plan. Outreach and education efforts continue within the SAER, often through partnerships with other governmental entities and industrial leaders in the area. As the Clean Air Plan is developed, citizens and citizen groups are given the opportunity to be involved in the Clean Air Plan development process.

2.5.1 Media

Local media efforts have played an important role in notifying the public about the development of the Clean Air Plan as well as in educating the public on the state of the region's air quality and how air quality affects respiratory health. Television, radio, newspapers, and websites have been avenues through which information about the Clean Air Plan and the four counties' air quality has been dispersed. Press releases and public service announcements have been and will continue to be utilized to educate the public.

During the first half of 2006, AACOG partnered with a number of agencies and companies to conduct press conferences that focused on such issues as the Air Quality Health Alert (AQHA) notification program; the AQHA banner program; alternative commuting (e.g., carpooling, riding the bus, and walking), alternative, cleaner-burning fuels; and new vehicle technologies that reduce emissions and improve fuel economy.

AACOG ensures the AQHA program is broadcast to as large an audience as possible by working with media partners to distribute AQHA announcements by television, radio, newspaper, and media websites. As of June 2006, the AQHA notifications were received and distributed by seven television stations, twenty-six radio stations, and five newspapers.

⁷ Available online: http://www.aacog.com/naturalresources/082405_TrendAnalysis_Sept05.pdf

Educational segments aired by local media in which AACOG staff participated included a television news interview with AACOG's Executive Director regarding E85 and the emissions reductions associated with use of alternative fuels; a live interview on a local television talk show regarding the San Antonio region's air quality and measures the public can take to reduce air pollution from the vehicles they drive; a television interview regarding ozone season and general measures to reduce pollution; and a number of radio and newspaper interviews on air pollution exceedances, San Antonio's air quality status, and how the public can help improve air quality.

Other efforts to partner with media on the public outreach and educational campaign between January and June, 2006 included the development and distribution of eight press releases, the development of an air quality advertising campaign that will air on four radio stations and one television station through the end of the ozone season, identification of media-sponsored health events where air quality outreach materials can be distributed, and radio/television/newspaper announcements regarding two ozone season kickoff events – the Live Green Fest/Clean Air Drive in San Antonio and the Air Quality Health Fair in Seguin.

2.5.2 Other Outreach Efforts

Non-media related outreach efforts continue. From January through June 2006, a number of governmental, private, school, and/or civic group presentations were provided. Examples include participation at or presentations before Chambers of Commerce meetings, fleet owner/operator workshops, local universities' environmental events, government agency and corporate meetings/events regarding carpool programs, and a variety of civic meetings and events focusing on air quality education. Whenever possible, AACOG coordinates and/or participates in public events. Such events allow AACOG staff to educate citizens on how everyday actions contribute to air pollution and how alternate methods of doing the same tasks can help reduce emissions.

Outreach staff began a health-related campaign in March 2006 to engage the medical community in efforts to increase public awareness of the health consequences of air pollution and ways to avoid prolonged exposure. AACOG partnered with the South Texas Asthma Coalition to develop children's health and safety guidelines during air pollution episodes. Other medical guides developed during early 2006 included English- and Spanish-language AQI posters listing precautions based on the severity of pollution levels and posters depicting the effect of air pollution on the respiratory tract (based on EPA publications). AACOG is in the process of distributing the safety guidelines and posters to school nurses and other appropriate school personnel throughout the San Antonio region. In addition, AACOG has partnered with the San Antonio Metropolitan Health District to distribute materials and posters to other medical personnel including physicians specializing in respiratory illnesses or pediatric care.

To increase awareness of air quality topics among the general public, AACOG distributes thousands of brochures, booklets, flyers, and promotional items developed by AACOG or given to AACOG for distribution by other organizations or agencies. These distributions are listed in Appendix B under the header "Informational Materials and Distributions for All Outreach Efforts through AACOG."

Additionally, AACOG maintains an air quality website, which is updated weekly and provides a wealth of information on air quality issues. All websites relating to air quality issues or containing air quality information in the San Antonio EAC region are listed in Appendix B, under the header: *Websites for Public Viewing*.

Commute Solutions Program

The Commute Solutions program is designed to reduce the number of single occupancy vehicles (SOVs) by promoting alternative forms of transportation, such as RideSharing (carpooling, vanpooling, & SchoolPooling), Bike Buddies, and Walking School Bus (WSB). Below is the current list of organizations participating in the program's RideShare matching services. In parentheses is the number of organizations who have participated. The names in ***italic bold*** indicate those that have made requests for matches within this six-month reporting period.

Carpooling (9)

- CPS Energy
- Northwest Vista College
- Southwest Research Institute
- Bexar County
- AACOG
- Standard Aero
- First Health
- ***Lackland AFB***
- ***San Antonio Water System (SAWS)***

Notes: The city of San Antonio and Harcourt will be participating beginning July 2006.

SchoolPool (12) & Walking School Bus (WSB) where indicated (3)

- Northeast School of Arts
- International School of the Americas
- San Antonio PREP & EDGE (summer only)
- Candlewood Elementary (WSB, too)
- Evers Elementary (WSB, too)

2.5.3 Public Meetings/Clean Air Plan Workshops

In accordance with the EAC, the public has opportunities to participate with the ongoing development of the Clean Air plan in order to familiarize themselves with the process and goals of the project. The regularly scheduled bi-monthly meetings of the AIR Executive Committee, the planning committee for air quality planning under the Early Action Compact in the San Antonio region, are open to the public and always have a Citizens to Be Heard agenda item. Additional exposure to the project is expressly provided to the public through other meetings and workshops. This is achieved through the hosting of Clean Air Plan Workshops, which are called to discuss special topics with dates and times based on feedback from the public and scheduled typically on workweek evenings alternating with Saturday mornings. These workshops, in addition to all the regularly scheduled Air Improvement Resources (AIR) Executive/Advisory Committee meetings, provide a solid basis for public education, process access and comment.

Chapter 3 – Conclusion

The San Antonio EAC region has successfully maintained steady progress in accomplishing EAC milestones and ensuring proper development of the Clean Air Plan. Completion of the milestones included appropriate participation of stakeholders in the air quality planning process, ongoing development and research of potential control strategies (to include voluntary strategies), provisions for public participation in the development of the Clean Air Plan, and continued development of technical activities and testing of model performance. Accomplishing these milestones allowed efficient development of the Attainment Demonstration and enhanced confidence in the validity of its technical data.

The San Antonio EAC region remains compliant with the prescribed milestones as given by the *Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-Hour Ozone Standard*.⁸ The region will continue to comply with the milestones as required.

⁸ The "Protocol for Early Action Compacts Designed to Achieve and Maintain the 8-Hour Ozone Standard" is available online as http://www.epa.gov/ttn/naaqs/ozone/eac/20020619_eac_protocol.pdf

APPENDIX A – OUTREACH EFFORTS

Efforts to Date of June 30

1. Television

Type of Outreach	Subject	Contact Persons w/Organizations	Date	Target Audience
Weather Forecast	Air Quality Health Alert (AQHA)	WOAI TV KENS TV KSAT TV FOX News	05/17,18/2006 06/3, 4, 8, 9, 13, 14, 27, 28, 29, 30/2006	General Public
Interview (KABB)	Ozone Season Kickoff & LiveGreenFest Event	Justin Chamberlain, CPS Energy	4/7/2006	General Public
Interview (KABB)	Carpooling	Heather Willden, AACOG Sylvia Rincon, KABB	4/19/06	Driving Age Public
Interview (KENS)	Air Quality Great Day SA	Brenda Williams, AACOG	6/29/06	General Public

2. Radio

Type of Outreach	Subject	Contact Persons w/Organizations	Date	Target Audience
Interview (KZEP)	Ozone Season & Alternative Fuels	Isabel Martinez, AACOG Virginia Lovelady, KZEP	4/12/2006	General Public
Weather Forecast	AQHA	KTSA-radio WOAI-radio KSYM Radio Texas Public Radio BBN Radio Station KYFS	05/17,18/2006 06/3, 4, 8, 9, 13, 14, 27, 28, 29, 30/2006	General Public
Interview (KISS)	Clean Air Drive	Brenda Williams, AACOG	4/7/2006	General Public
Interview (WOAI)	Ozone Season	Brenda Williams, AACOG Jim Forsyth, WOAI	4/25/2006	General Public
Interview (KISS)	Air Quality	Brenda Williams, AACOG Kelly Kendall, KISS	5/3/2006	General Public
Interview (MAGIC)	Commuting	Heather Willden, AACOG Karen Claus, MAGIC 105.3	6/4/2006	General Public
Interview (KTSA)	Air Quality	Brenda Williams, AACOG	6/27/2006	General Public

3. Newspaper & Internet

Source	Title of article	Contact Persons w/Organizations	Date	Target Audience
Article: San Antonio Express News	Title: "Spotlight on...Socorro Vazquez"	Heather Willden, AACOG Socorro Vazquez, Harlandale ISD Scott Huddleston, SA Express News	1/18/2006	General Public

AACOG Public Outreach Efforts (01/06 - 06/06)

Appendix A: Outreach Efforts

Article: SA Business Journal	"Alamo Area Clean Cities Coalition Recognized for Clean Air Efforts"	Isabel Martinez, AACOG	2/16/2006	Businesses
Article: SA express News	"What's the Ethanol?"	Isabel Martinez, AACOG	4/19/2006	General Public

4. Governmental, Civic, or Private Group

Type of Outreach	Subject	Contact Persons w/Organizations	Date	Target Audience
Presentation	ACAP Membership, Clean Cities	Brenda Williams, AACOG Peter Bella, AACOG Theresa Hahn, LAFB	2/23/2006	Staff from Randolph AFB and Lackland AFB
Presentation	LiveGreenFest Clean Air Drive Event Promotion	Debbie Hooge, TIAA Heather Willden, AACOG	3/16/2006	TIAA Alamo Chapter Members and their families
Presentation	LiveGreenFest Clean Air Drive Event Promotion	Heather Willden, AACOG	3/31/2006	AACOG Staff
Presentation	Walk & Roll Corporate Challenge Project Officer Rally	Brenda Williams, AACOG Isabel Martinez, AACOG Heather Willden, AACOG	5/18/2006	Participants of the Walk & Roll Corporate Challenge
Presentation	Air Quality & ACAP	Brenda Williams, AACOG Reed Pace, SCAC	5/19/2006	Senior Citizen Advisory Council

5. School - Related Education

Type of Outreach	Subject	Contact Persons w/Organizations	Date	Target Audience
Presentation	Safe Routes to School @ SA ISD (SchoolPool/Walking School Bus)	Heather Willden, AACOG Lydia Kelley, MPO	1/20/2006	UTSA grad class (elementary teachers)
Presentation	Great Decisions 2006 @ St. Mary's Univ.	Isabel Martinez, AACOG Chris Villa, STMU	3/20/2006	Undergraduate Students
Presentation	Air Quality	Heather Willden, AACOG Liza Myer, COSA	3/27/2006	Homeschooling Group

6. Events & Public Meetings

Type of Outreach	Subject	Contact Persons w/Organizations	Date	Target Audience
Workshop	Greening Your Business Seminar	Brenda Williams, AACOG Peter Bella, AACOG Isabel Martinez, AACOG Heather Willden, AACOG Jerry Parker, Greater SA Chamber	2/1/2006	Advisory Committee, area businesses
Event	Arbor Day (Institute of Texan Cultures)	Heather Willden, AACOG	2/4/2006	General Public
Event	Alamo Area Clean Cities Redesignatiopn Ceremony	Isabel Martinez, AACOG	2/14/2006	Clean Cities Stakeholders
Event	Alternative Fuels Bonnie Raitt Concert (Majestic Theater)	Brenda Williams, AACOG Heather Willden, AACOG	2/22/2006	Adults 25 - 65

AACOG Public Outreach Efforts (01/06 - 06/06)

Appendix A: Outreach Efforts

Event	Earthwise Living Day (Leon Valley Community Center)	Georgia Zannaras, Peter Bella, & Heather Willden, AACOG	2/25/2006	General Public
Event	Basura Bash	Georgia Zannaras, AACOG	3/25/2006	General Public
Event	Propane Education & Research Council Roadshow	Isabel Martinez, AACOG Brian Feehan, PERC	3/28/2006	Fleets, School Dist.
Event	LiveGreenFest <i>Clean Air Drive</i>	Heather Willden, AACOG Justin Chamberlain, CPS Energy	4/8/2006	General Public
Event	Earth Day @ SAC	Heather Willden, AACOG Isabel Martinez, AACOG	4/19/2006	SAC Students/Faculty/Staff
Event	Earth Day @NW Vista College	Isabel Martinez, AACOG Alison Young, AACOG	4/20/2006	NW Vista Students/Faculty/Staff
Event	Earth Day @ Woodlawn Lake Park	Heather Willden, Parviz Nazem, Travis Nedrich, & Donna Hessong, AACOG	4/22/2006	General Public
Event	Earth Day @ UTSA	Brenda Williams, AACOG Heather Willden, AACOG	4/26/2006	UTSA Students/Faculty/Staff
Event	Clean Cities Congress	Isabel Martinez, AACOG	5/6-10/2006	General Public Fleets
Event	Walk & Roll Rally	Heather Willden, AACOG Lydia Kelley, MPO	5/12/2006	Downtown Businesses
Workshop	Waterfest & Weather Quest	Heather Willden, AACOG Greg Wukasch, SAWS	5/13/2006	General Public
Event	Walk & Roll Fest (Maverick Park)	Heather Willden, AACOG Lydia Kelley, MPO	5/13/2006	General Public
Event	Air Quality Health Fair	Heather Willden, Isabel Martinez, Isabel Gonzales, Parvis Nazem, & Brenda Williams AACOG	5/20/2006	General Public
Harcourt, Inc.	Environmental Fair (Transportation Theme)	Heather Willden, AACOG Isabel Martinez, AACOG Monical Sayler, Harcourt	6/5/2006	Harcourt Employees

7. Press Items and Proclamations

Type of Outreach	Subject	Contact Persons w/Organizations	Date	Target Audience
Press Conference	Ozone Season 2006 SCAN USA	Brenda Williams, AACOG Liza Meyer, COSA Gwen Schuler, COSA	3/24/2006	General Public
News Release	Ozone Season 2006 - Driving Towards Cleaner Air	Brenda Williams, AACOG	3/28/2006	General Public
Press Conference	AQHA Banners	Brenda Williams, AACOG Liza Meyer, COSA Gwen Schuler, COSA	3/31/2006	General Public
News Release	LiveGreenFest <i>Clean Air Drive</i> Event to Kickoff Ozone Season	Heather Willden, AACOG	3/31/2006	General Public

AACOG Public Outreach Efforts (01/06 - 06/06)

Appendix A: Outreach Efforts

News Release	Health Alert: Ozone Season 2006 Begins April 1, 2006	Brenda Williams, AACOG	3/31/2006	General Public
News Release	LiveGreenFest Clean Air Drive Event to Kickoff Ozone Season	Heather Willden, AACOG	4/6/2006	General Public
News Release	Walk & Roll Corporate Challenge—Start Your Logging June 1	Heather Willden, AACOG	5/26/2006	Driving Age Public
News Release	Walk & Roll Corporate Challenge—Start Logging Your Smart Miles	Heather Willden, AACOG	5/30/2006	Driving Age Public
Press Conference	GM Tour	Isabel Martinez, AACOG Brenda Williams, AACOG Heather Willden, AACOG	6/15/2006	Fleet Managers
News Release	Ozone Levels Unhealthy for Sensitive Groups During Air Quality Health Alerts	Heather Willden, AACOG	6/15/2006	General Public

3. Website for Public Viewing

Agency/Company	Site Name	How It Relates	URL
AACOG	Air Quality	AQ Info	http://www.aacog.com/air/
AACOG	Commute Solutions	Reducing SOVs	http://www.aacog.com/commutesolutions/
AACOG	Adopt-a-School Bus	Reduce pollution from school buses	http://www.aacog.com/schoolbus/
AACOG	TERP	Grants for use of pollution reduction technologies	http://www.aacog.com/terp/
AACOG	ACAP	Buisness community commitment to AQ	http://www.aacog.com/acap/
AACOG	Walk & Roll Challenge	Month-long challenge promoting walking, biking, carpooling/vanpooling, and busing	http://www.walkandrollchallenge.com/
AACOG	Clean Cities	Promotes alternative fuels	http://www.aacog.com/cleancities
AACOG	Kids Zone	Links and fun activites about AQ for kids	http://www.aacog.com/aboutaacog/kidszone/
AACOG	Clean Air Plan	Posting of the Clean Air Plan for SA region	http://www.aacog.com/cap/
AACOG	Cleaner Texas Cleaner World		http://www.aacog.com/air/cleantexas/cleantexas.asp
AACOG	Conceptual Model	Posting of report	http://www.aacog.com/naturalresources/cm/042705_ConcM odel2004.pdf
AACOG	Emission Inventories	Posting of San Antonio region air EI for 1996	http://www.aacog.com/naturalresources/1996%20Emission s%20Inventory/1996EI_TOC.html
		Posting of San Antonio region air EI for 1999	http://www.aacog.com/naturalresources/1999%20Emissior s%20Inventory/AACOG1999EI_OnlineIndex.html
		Posting of San Antonio region air EI for 2002	http://www.aacog.com/naturalresources/2002_NET_EI/
AACOG	Emissions Trend Analysis 2005	Posting of report	http://www.aacog.com/naturalresources/pdffiles/082405_T endAnalysis_Sept05.pdf

AACOG Public Outreach Efforts (01/06 - 06/06)

Appendix A: Outreach Efforts

AACOG	Clean Air Pan	Posting of plan for San Antonio Region	http://www.aacog.com/cap/
AACOG	AACOG regional newsletter	Newsletter informing the region of events, happenings, etc.	http://www.aacog.com/newsletter/
AFP	AQ & Trees	Information on trees in regards to AQ	http://www.alamoforestpartnership.org/
MPO	Ozone/AQ	General information on ozone and AQ	http://www.sametroplan.org/pages/Air_Quality/MPOozone.html
MPE	Homepage	Energy Efficiency	http://www.mp4e.info/
Build SA Green	Homepage	Building energy efficient homes in San Antonio	http://www.buildsagreen.org/
Solar San Antonio	Homepage	Solar Energy	http://www.solarsanantonio.org/
COSA	Environmental Services		http://www.sanantonio.gov/enviro/
CPS	Rebates and Programs	Programs to conserve energy, preserve the environment and save money on utility bills	http://www.citypublicservice.com/content_listInternet.asp?emt_id=13
WOAI	Air Quality	General information on AQ, ozone, & AQHA days	http://www.woai.com/weather/story.aspx?content_id=B9E06E29-059F-4DAD-ACFA-9DF72655970F

9. Informational Materials and Distributions for All Outreach Efforts through AACOG

Type of Outreach	Subject / Title	Description	Quantity	Target Audience
Brochure	DCAT Asthma/Health	Information highlighting connection between asthma and air quality	122	School Parents/Nurses
Brochure	When You Care for Your Car, You Care for the Air	TCEQ brochure, reward for participating in program	150	Driving-age public
Brochures/Form	CARE	Promote and recruit CARE program participants	33	Carpoolers (those who have matched in program)
Card	Business Cards	Point-of-Contact material	76	General Public
Childrens Item	DCAT Stickers	Encourages the maintenance of vehicles and protecting one's own health	434	Children, families, teachers, parents, grandparents
Childrens Item	DCAT Stickers	Encourages RideSharing	420	Children, families, teachers, parents, grandparents
Childrens Item	DLAT Tattoos	Temporary tatoos with "Drive Clean Across Texas" on them	576	Children
Childrens Item	Tex & Dot & the Clean Air Crew	DCAT/TCEQ activity/coloring book for children, newest edition	20	Elementary-age children
Flag	Air Quality Health Alert Flag	Flag for organizations to purchase and then hang during AQHA days	115	Business/Organizations
Flyer	AQHA Instructions	Instructions to join SCAN USA	627	Adult 18+
Flyer	AQHF	Promoted Event	402	General Public
Flyer	AQI	Informational hanfout (Eng/Span) on Air Quality Index	460	General Public
Flyer	Arbor Day	Promoted Event	17	General Public
Flyer	LGF/Clean Air Drive	Promoted Events	71	General Public
Flyer	Do Your Share...	10 tips for improving air quality	89	General Public

AACOG Public Outreach Efforts (01/06 - 06/06)

Appendix A: Outreach Efforts

Flyer	Spring Tips	"It All Adds Up to Cleaner Air" - quick tips to reduce air pollution during the spring	20	General Public
Flyer	Upcoming Events	Promoted Events	487	General Public
Flyer	We'd Love To Visit...	Promotes AACOG program presentations	640	General Public, organization members
Flyer/Form	School Commute Solutions	Participation form to join program	12	K-12 parents/Teachers/Principals
Form	Carpool/Bike Buddies Sign-Up	Participation form to join program	30	General Driving-age public
Poster	Air Pollution Gremlins	TCEQ poster - 6 Gremlin characters with the six primary air pollutants (e.g. Odious Ozone), English & Spanish	92	Teachers, Elementary-age to Middle School age children
Poster	Air Quality Health Alert sign	Laminated AQHA logo sign, to alert passersby of AQHA	20	Nurses, Educators
Promotional Item	Adopt-a-School Bus Bookmark	Encourage cleaner school buses	320	Elementary-age children
Promotional Item	Air Care Kit	DCAT promotional item, reward for participating in program	36	Driving-age public
Promotional Item	AQHA Magnet	AQHA contact information	637	General Public
Promotional Item	Clean Air Drive Fans	Hand fan with Air Quality tips	851	General Public
Promotional Item	Commute Solutions Lanyards	Incentive item to encourage program participation (e.g. reward for carpoolers)	26	Driving-age general public
Promotional Item	Commute Solutions Lunch Sacks	Incentive item to encourage program participation (e.g. reward for carpoolers)	6	Driving-age general public
Promotional Item	Commute Solutions Squeeze Car	Incentive item to encourage program participation (e.g. reward for carpoolers)	4	Driving-age general public
Promotional Item	Commute Solutions Travel Mug	Incentive item to encourage program participation (e.g. reward for carpoolers)	4	Driving-age general public
Promotional Item	DCAT Notepads	Provides quick tips to improve air quality	459	General Public
Promotional Item	No Idle Pledge Pens	Reminds public to avoid idling	69	General Public
Promotional Item	Key Ring with Tire Pressure Gauge	Encourages tire pressure maintenance and improved gas mileage	921	General public, driving age
Flyer	Alamo Area Clean Air Partnership	Program Description & Promotion		Businesses
Video	DCAT Clean Air Crew	DCAT cartoon, 6 minute video featuring Tex & Dot & the Clean Air Crew	1	Elementary-age Children & Teachers

APPENDIX B – TERMS

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
1	Sidewalk	TxDOT	Acme Road	Old Highway 90		1999	2001	0.069	0.058
2	Sidewalk	TxDOT	Gevers St	IH 10	Southcross	2000	2001	0.242	0.204
3	Sidewalk	TxDOT	Henderson Pass	Thousand Oaks	Gold Canyon	2000	2001	0.202	0.170
4	Sidewalk	TxDOT	IH 410	Bertetti	Marbach	2000	2000	0.050	0.042
5	Bike/Ped	TxDOT	Mission Trails (Phase 3)	E. Southcross	Mitchell St.	2000	2001	0.712	0.600
6	Bike/Ped	TxDOT	Mitchell St.	Probandt to	Roosevelt	2000	2003	0.104	0.088
7	Bike/Ped	TxDOT	Nogalitos (LP 353)	Zarzamora / New Laredo Hwy	Surrey	2000	2003	0.235	0.198
8	Bike/Ped	TxDOT	Probandt St.	US 90	Mitchell	2000	2003	0.014	0.012
9	Bike/Ped	TxDOT	Prue Rd	Laureate	Fredericksburg	2000	2002	0.065	0.054
10	Bike/Ped	TxDOT	Rittiman	Austin Hwy (LP 368)	Harry Wurzbach	2000	2002	0.124	0.105
11	Bike/Ped	TxDOT	Timber Path Bikeway	Les Harrison	Grissom Rd.	2000	2001	0.166	0.140
12	Bike/Ped	TxDOT	Bitters Rd	Broadway	Nacogdoches Rd.	2001	2003	0.282	0.237
13	Bike/Ped	TxDOT	Callaghan	Hemphill	Culebra	2001	2003	0.266	0.225
14	Bike/Ped	TxDOT	Coliseum Rd.	East Houston St.	Gembler Rd.	2001	2004	0.123	0.104
15	Bike/Ped	TxDOT	East Houston St.	Walters	Onslow	2001	2003	0.054	0.045
16	Bike/Ped	TxDOT	East Houston St.	Onslow St.	Salado Creek	2001	2002	0.084	0.071
17	Bike/Ped	TxDOT	Pearsall Rd (FM 2536)	Loop 13 (Military Drive)	IH 410	2001	2003	2.630	2.216
18	Bike/Ped	TxDOT	Pecan Valley Dr	J St. to	IH 10	2001	2003	0.049	0.041
19	Bike/Ped	TxDOT	Pleasanton	Moursund	Gillette	2001	2003	0.027	0.023
20	Bike/Ped	TxDOT	Southcross	WW White (LP 13)	Loop 410	2001	2003	0.209	0.176
21	Bike/Ped	TxDOT	Uhr Lane	Higgins	Thousand Oaks	2001	2004	0.210	0.177
22	Bike/Ped	TxDOT	New World	Crestway	Montgomery	2004	2004	0.050	0.042
23	Sidewalk	TxDOT	New World	Montgomery Dr	Walzem Rd (FM 1976)	2004	2004	0.050	0.042
24	Sidewalk	Federal	Alamo	Cedar	San Antonio River	2003	2003	0.031	0.026
25	Sidewalk	TxDOT	W.W. White Rd. (Loop 13)	Seale Road	IH-10	2004	2005	0.336	0.283
26	Sidewalk	TxDOT	Grissom/Culebra (FM 471)	SH 16	Loop 1604	2003	2004	2.040	1.719
27	Sidewalk	TxDOT	Southcross Blvd.	S. New Braunfels to S. Presa St.	S. Presa St.	2005	2004	0.107	0.090
28	Sidewalk	TxDOT	Hunt Lane	Marbach to US 90	US 90	2004	2004	0.273	0.230
29	Sidewalk	Federal	Isom	Ramsey	US 281	2004	2004	0.084	0.071
30	Sidewalk	COSA	Roland (US 87)	IH 10	Rigsby Avenue	2004	2005	0.100	0.084
31	Sidewalk	COSA	SH 218 (Pat Booker Road)	Loop 1604	FM 78	2004	2005	0.998	0.841
32	Sidewalk	COSA	Sunset	Jones Maltsberger	Teak	2004	2005	0.135	0.114
33	Sidewalk	Bexar Co.	Kitty Hawk Rd	Miller Rd.	Converse City Limits	2004	2005	0.070	0.059
34	Bikeway	COSA	UTSA to OLLU Corridor	Houston St.	24th St.	2004	2005	0.507	0.427
35	Bikeway	Bexar Co.	Crestway	Miller Road	New World	2004	2005	0.070	0.059
36	Sidewalk	Bexar Co.	New World	Crestway	Miller Road	2004	2005	0.026	0.022
37	Bike racks	COSA		Various Locations		2004	2005	0.000	0.000
38	Sidewalk	Bexar Co.	Crestway Drive	New World	Windcrest City Limits	2004	2005	0.060	0.051
39	Sidewalk	COSA	E. Houston	Pine	Walters	2004	2006	0.060	0.050
40	Bike Lane	Univ City	SH 218	Loop 1604	FM 78	2004	2004	0.928	0.782
41	Sidewalk	COSA	Flores, S	0.6 Mi N of Malone	Octavia	2005	2006	0.191	0.161
42	Bike Lane	COSA	SAC to CBD	Howard	4th	2001	2001	0.082	0.069

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
43	Bike Lane	COSA	Montana/Nevada	Cherry	Meerscheidt	2001	2001	0.040	0.034
44	Bike Lane	COSA	N.Zarzamora	Nogalitos	Theo	2001	2001	0.158	0.133
45	Bike Lane	COSA	N. St. Mary's	Lexinton	Huisache	2001	2001	0.199	0.168
46	Bike Lane	COSA	Callaghan	Old Highway 90	New HWY 90	2001	2001	0.128	0.108
47	Bike Lane	COSA	S. Zarzamora	SW Loop 410	IH 35	2001	2001	0.338	0.285
48	Bike Lane	COSA	Caliza	Encino Rio	Evans Rd.	2001	2001	0.061	0.052
49	Bike Lane	COSA	UTSA to SAC	Buena Vista	San Pedro	1999	1999	0.299	0.252
50	Bike Lane	COSA	Les Harrison	Culebra	Dover Ridge	2000	2000	0.313	0.264
51	Bike Lane	COSA	Josephine Grayson	Broadway	New Braunfels	2000	2000	0.085	0.072
52	Bike Lane	COSA	Walters	Fair Ave.	Rigsby Avenue	2000	2000	0.235	0.198
53	Bike Lane	COSA	Villaret	Zarzamora	Hwy 16	2000	2000	0.074	0.062
54	Sidewalk	COSA	Rice Reconstruction	W. W. White	Semlinger	2004	2005	0.033	0.028
55	Sidewalk	Comal Co.	New Braunfels	LP 337	0.8 KM N of Walnut Ave.	2004	2005	0.197	0.166
56	Side walk	COSA	Gen McMullen	Roselawn	Commerce	1999	1999	0.664	0.560
57	Bike Path	COSA	Avenue B (Bicycle Lanes)	Mulberry	Brackenridge	2000	2000	0.095	0.080
58	Bike Path	COSA	Montana Street Bike Lane	Alamodome	Walters	2001	2001	0.018	0.016
59	Bike Path	COSA	Villaret Bicycle Transportation	W. Villaret	E. Villaret	2001	2001	0.107	0.090
60	Bike Path	COSA	Zarzamora Bike Lane	IH 35	Loop 410	2001	2001	0.000	0.000
61	Sidewalk	COSA	Mckay	(400 Block)	(500 Block)	2001	2001	0.008	0.006
62	Sidewalk	COSA	Harvard Terrace	Yale	University	2001	2001	0.001	0.001
63	Side walk	COSA	Dell Place Drainage Project	North Freeman	(dead end)	2001	2001	0.000	0.000
64	Sidewalk	COSA	Hardeman St Sidewalks	Mesquite	Hackberry	2001	2001	0.002	0.002
65	Sidewalk	COSA	Gevers-IH 10	Gevers	Southcross	2001	2002	0.131	0.110
66	Sidewalk	COSA	New Braunfels	Rigsby	Southcross/IH 37	2001	2001	0.278	0.234
67	Sidewalk	COSA	Henderson Pass Sidewalks	Thousand Oaks	Gold Canyon.	2001	2001	0.818	0.689
68	Sidewalk	COSA	Danbury Sidewalks:	Nacogdoches	Broadway	2002	2002	0.021	0.018
69	Sidewalk	COSA	Ray Bon Drive Sidewalks	Eisenhauer	Village Haven	2002	2002	0.031	0.026
70	Sidewalk	COSA	New Braunfels	IH 35	Grayson	2002	2002	0.068	0.057
71	Sidewalk	COSA	Pedestrian Bridge	War Horse	Trading Post	2002	2002	0.001	0.000
72	Sidewalk	COSA	Hoover Street	Nogalitos	Charlotte	2003	2003	0.003	0.002
73	Sidewalk	COSA	2003 NAMP Sidewalk	Mccullough	Mulberry	2004	2004	0.595	0.502
74	Sidewalk	COSA	Navajo Area Streets	(Navajo/Hutchins/Barlite)	(Navajo/Hutchins/Barlite)	2004	2004	0.159	0.134
75	Sidewalk	COSA	McCarty Sidewalks & Curbs	Lorene	Blanco	2004	2004	0.031	0.026
76	Sidewalk	COSA	Harris Storm Drainage	Alvarez	(Glass/Cass/Halstead)	2004	2005	0.038	0.032
77	Sidewalk	COSA	Kono	Gemblar	Belgium	2005	2006	0.026	0.022
78	Sidewalk	COSA	Octavia	#63 Phase II	Part B	2005	2005	0.103	0.087
79	Sidewalk	COSA	Cincinnati	Fredericksburg	IH 10	2007	2005	0.019	0.016
80	Signal	Bexar Co.	Foster Road	Candlemeadow	4C	2005	2005	0.253	0.155
81	Signal	Bexar Co.	Foster Road	Summer Fest	4C	2005	2005	0.059	0.036
82	Signal	Comal Co.	SH46	HEB driveway		2001	2002	0.052	0.041
83	Signal	Comal Co.	FM 725	County Line Rd		2001	2002	1.003	0.788
84	Signal	Comal Co.	FM 3009	FM 2252 in Garden Ridge		2001	2002	0.575	0.452

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
85	Signal	New Braun.		Union	Common	2004	2004	0.075	0.059
86	Signal	Guadalupe Co.	FM 3009	Savana/Verde Dr.		2001	2004	2.097	1.488
87	Signal	Guadalupe Co.	FM 3009	IH 35E	0.21 Mi SE of IH 35	2004	2004	1.010	0.717
88	Intersection	TxDOT	Hunt Lane	Marbach	US 90	2004	2004	2.790	1.674
89	Intersection	TxDOT	Bitters	East of West Ave (W.of US 281)		2005	2005	5.529	3.317
90	Intersections	COSA	West Ave	Larkspur	Silver Sands, Rhapsody and N	2000	2000	15.325	9.195
91	Intersections	COSA	Tezel	Tezel	Timber Path	2000	2000	3.168	1.901
92	Intersections	COSA	Broadway	Broadway	Wetmore Rd	2001	2001	2.044	1.227
93	Intersections	COSA	Southwest Craft Cntr	Navaro	Augusta	2004	2004	0.842	0.505
94	Park & Ride	VIA	Crossroads	IH-10W & Loop 410		1988	1988	2.039	1.718
95	Park & Ride	VIA	Ellis Alley	Chestnut & Center Street		1998	1998	4.166	3.511
96	Park & Ride	VIA	University	IH 10 W & Loop 1604		1993	1993	15.150	12.767
97	Park & Ride	TxDOT	Elmendorf	US 181 S. & Loop 1604		1981	1981	2.573	2.168
98	Park & Ride	privately owned	St. Hedwig	FM 1346 & Pittman Rd.		1988	1988	0.529	0.446
99	Park & Ride	VIA	Randolph Blvd	IH 35 N & Crestway		1980	1980	3.038	2.560
100	Transit CT.	VIA	Ingram	Ingram Road & Northwestern		1988	1988	0.547	0.461
101	Transit CT.	VIA	Kel-Lac	US 90 W. & Military Dr.		2004	2004	1.558	1.313
102	Grade Sep	TxDOT	Loop 1604	0.52 KM N of FM 471 (Culebra Rd.)	0.98 KM S of FM 471 (Culebra	2001	2003	17.896	10.738
103	Traffic Flow	TxDOT	Acme Road	Old Highway 90		1999	2001	0.622	0.207
104	Traffic Flow	TxDOT	Evers Rd.	N. of Glen Ridge	Daughtry Dr.	1999	2000	1.335	0.445
105	Traffic Flow	TxDOT	FM 2522 (Perrin Beitel)	IH 410		1999	2000	0.526	0.175
106	Traffic Flow	TxDOT	FM 78	Bexar Co. Ln.	FM 3009	1999	2002	2.653	0.884
107	Traffic Flow	TxDOT	Houston (FM 1346)	Pop Gunn		1999	2000	2.002	0.667
108	Traffic Flow	TxDOT	SH 151	Callaghan Rd		1999	2004	0.335	0.112
109	Traffic Flow	TxDOT	Tezel	Timber Path		1999	2000	0.609	0.203
110	Traffic Flow	TxDOT	US 281	0.590 KM N of LP 1604	0.746 KM N of LP 1604	1999	2000	6.398	2.133
111	Traffic Flow	TxDOT	West Avenue	FM 1535 (NW Military Hwy)	IH 410	1999	2002	2.646	0.882
112	Traffic Flow	TxDOT	Wurzbach Parkway	Lockhill-Selma	FM 1535 (NW Military Hwy)	1999	2002	0.460	0.153
113	Traffic Flow	TxDOT	24th	Commerce	Culebra	2000	2001	2.353	0.784
114	Traffic Flow	TxDOT	Ackerman Rd.	IH 10	Dietrich	2000	2002	0.190	0.063
115	Traffic Flow	TxDOT	Hildebrand	IH-10	Breeden	2000	2003	2.767	0.922
116	Traffic Flow	TxDOT	Hildebrand	Hwy. 281		2000	2001	0.454	0.151
117	Traffic Flow	TxDOT	Huebner Road	Evers Road	Redbird Lane (E of city limit)	2000	2001	1.288	0.429
118	Traffic Flow	TxDOT	Lockhill Selma	George Road	Whisper Path	2000	2003	0.846	0.282
119	Traffic Flow	TxDOT	O'Connor Rd	Crosswinds	IH 35	2000	2003	3.418	1.139
120	Traffic Flow	TxDOT	Wetmore	At Broadway		2000	2001	0.203	0.068
121	Traffic Flow	TxDOT	Wurzbach Rd	0.6 Mi East of Ingram Rd	Leon Valley WCL	2000	2001	1.945	0.648
122	Traffic Flow	TxDOT	Coliseum Rd.	Belgium Rd.	IH 35	2001	2002	0.712	0.237
123	Traffic Flow	TxDOT	IH 410	Jackson-Keller Road	Honeysuckle Lane	2001	2005	42.811	14.270
124	Traffic Flow	TxDOT	IH 410	Honeysuckle Lane	Blanco Rd	2001	2005	25.183	8.394
125	Traffic Flow	TxDOT	Loop 345	Cinnamon Creek	USAA Blvd	2001	2002	0.136	0.045
126	Traffic Flow	TxDOT	Wurzbach Road	Crystall Hill	Crystall Hill	2001	2003	1.361	0.454

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
127	Traffic Flow	TxDOT	IH 35	Coliseum & Walters		2002	2004	0.053	0.018
128	Traffic Flow	TxDOT	IH 410	SH 151		2002	2006	0.009	0.003
129	Traffic Flow	TxDOT	Pleasanton	Southcross	Mayfield	2002	2004	0.981	0.327
130	Traffic Flow	TxDOT	Ralph Fair Rd. (FM 3351)	Fawn Mountain, Pimlico, Dietz-Elkhorn	Fair Oaks Parkway	2002	2003	4.243	1.414
131	Traffic Flow	TxDOT	SH 151	0.22 Mi W of Callaghan Rd.	0.3 Mi E of IH 410	2004	2005	17.904	5.968
132	Traffic Flow	TxDOT	SH 151	0.3 Mi E of IH 410	1.0 Mi E of Loop 1604	2004	2004	19.142	6.381
133	Traffic Flow	TxDOT	Zarzamora	IH 410	Applewhite Road	2004	2005	1.999	0.666
134	Traffic Flow	TxDOT	Applewhite Road	Zarzamora	Watson Road	2004	2005	1.999	0.666
135	Traffic Flow	TxDOT	Loop 1605	FM 1937	IH 37	2004	2005	1.243	0.414
136	Traffic Flow	TxDOT	Military Dr., S.E. (LP 13)	Padre	Mission Rd 4C	2005	2006	0.486	0.162
137	Traffic Flow	Comal Co.	LP 337	0.16 KM N of BI 35-H	0.48 KM N of UPRR	2001	2002	3.446	1.378
138	Traffic Flow	Guadalupe Co.	SH 46	2.2 Mi S of FM 758 New Braunfels	Camp Willow Rd. (0.2 Mi S of F	2002	2002	5.878	2.177
139	Traffic Flow	Guadalupe Co.	FM 78	Bexar Co. Ln.	FM 3009	2002	2002	4.299	1.592
140	Traffic Flow	Wilson Co.	FM 1346	US 87 W of Lavernia	FM 775	2001	2002	1.400	0.560
141	Traffic Flow	Guadalupe Co.	SH 46	0.2 Mi S of FM 758	Comal Co line	2004	2004	4.219	1.562
142	Traffic Flow	COSA	Wurzbach Parkway Phase IV	Military Highway	Blanco Road	2002	2002	17.353	5.784
143	Traffic Flow	COSA	Wurzbach Rd:	Ingram Rd	Leon Valley	2002	2002	4.649	1.550
144	Traffic Flow	COSA	Hamilton	Guadalupe	Laredo	1999	1999	0.582	0.194
145	Traffic Flow	COSA	Wurzbach Rd @ Vance Jackson			1999	1999	2.227	0.742
146	Traffic Flow	COSA	Mitchell Street	Probandt	Presa	1999	1999	0.336	0.112
147	Traffic Flow	COSA	Valley Hi Drive	IH 410	Ray Ellison	1999	1999	0.412	0.137
148	Traffic Flow	COSA	Chipinque Drainage	General McMullen	Escuela	1999	1999	1.297	0.432
149	Traffic Flow	COSA	Zarzamora	Culebra	Commerce	1999	1999	2.705	0.902
150	Traffic Flow	COSA	Calaveras	Saunders	Guadalupe	1999	1999	0.568	0.189
151	Traffic Flow	COSA	Courtland Street	Mccullough	St. Mary's	1999	1999	0.424	0.141
152	Traffic Flow	COSA	Guadalupe Gardens Phase II			1999	1999	1.241	0.414
153	Traffic Flow	COSA	Chico/Knox/Margil			1999	1999	0.024	0.008
154	Traffic Flow	COSA	Folyn/Jersey/Custer/Orange			1999	1999	0.280	0.093
155	Traffic Flow	COSA	Travis	Zarzamora	Hamilton	1999	1999	0.566	0.189
156	Traffic Flow	COSA	Villa Coronado Streets, Phase III A			1999	1999	0.097	0.032
157	Traffic Flow	COSA	Mayfield	Somerset	Laredo Hwy	1999	1999	0.122	0.041
158	Traffic Flow	COSA	Hazel Drainage	Zarzamora	Brazos	1999	1999	0.751	0.250
159	Traffic Flow	COSA	Lillita	Gen. McMullen	Las Palmas	1999	1999	0.108	0.036
160	Traffic Flow	COSA	Advance & Brice			1999	1999	0.045	0.015
161	Traffic Flow	COSA	calle morelia drainage			1999	1999	0.095	0.032
162	Traffic Flow	COSA	Emory / Kentucky			1999	1999	0.120	0.040
163	Traffic Flow	COSA	26th Street	Travis	Culebra	1999	1999	0.147	0.049
164	Traffic Flow	COSA	Wurzbach Parkway Phase II			1999	1999	11.623	3.874
165	Traffic Flow	COSA	Keitha Area Streets Phase II			1999	1999	0.645	0.215
166	Traffic Flow	COSA	Muskogee	Acme	40th	1999	1999	0.080	0.027
167	Traffic Flow	COSA	Boehmer	Burbank Loop	S. Flores	1999	1999	0.014	0.005
168	Traffic Flow	COSA	Dewitt	IH 10	Fairmont	1999	1999	0.028	0.009

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
169	Traffic Flow	COSA	Claremont/Eleanor/Natalen, Ph I&Mahncke Ph IV			1999	1999	0.234	0.078
170	Traffic Flow	COSA	Lake Blvd/Woodlawn/Streets	Around Woodlawn Lake		1999	1999	2.077	0.692
171	Traffic Flow	COSA	S. Flores Drn #70-70a, Ph. II--Part 2			2000	2000	0.000	0.000
172	Traffic Flow	COSA	34th Street	Hwy 90	Castroville	2000	2000	0.064	0.021
173	Traffic Flow	COSA	27th	Culebra	Rivas	2000	2000	0.052	0.017
174	Traffic Flow	COSA	21st Street	Salinas	Poplar	2000	2000	0.268	0.089
175	Traffic Flow	COSA	Eastlawn Neighborhood Streets Phase II			2000	2000	0.435	0.145
176	Traffic Flow	COSA	Southlawn	Merida	Castroville	2000	2000	0.089	0.030
177	Traffic Flow	COSA	Madrid	Merida	Castroville Rd	2000	2000	0.025	0.008
178	Traffic Flow	COSA	Grandview Neighborhood Streets Ph. IIIA		(K Street)	2000	2000	0.047	0.016
179	Traffic Flow	COSA	Wurzbach Parkway Phase III			2000	2000	0.391	0.130
180	Traffic Flow	COSA	Glenmore		Kentucky	2000	2000	0.047	0.016
181	Traffic Flow	COSA	Villa Coronado Streets Phase IIIB			2000	2000	0.043	0.014
182	Traffic Flow	COSA	Arbor	Trinity	San Marcos	2000	2000	0.083	0.028
183	Traffic Flow	COSA	Fairdale	Rittiman	Bloomdale	2000	2000	0.323	0.108
184	Traffic Flow	COSA	Stahl Rd. #1038 Phase I	Fairway Oaks	Bulverde	2000	2000	0.273	0.091
185	Traffic Flow	COSA	Babcock & Hillcrest Intersection			2000	2000	1.364	0.455
186	Traffic Flow	COSA	Apple Valley	Haven Valley	Ray Ellison	2000	2000	0.141	0.047
187	Traffic Flow	COSA	Las Palmas	Charben	26th	2000	2000	0.129	0.043
188	Traffic Flow	COSA	Contour Dr / El Monte St			2000	2000	1.697	0.566
189	Traffic Flow	COSA	Evers Rd	Glenridge	Daughtry	2000	2000	1.424	0.475
190	Traffic Flow	COSA	Baylor St	San Pedro Ck.	Flores St.	2000	2000	0.010	0.003
191	Traffic Flow	COSA	Culebra Area Streets Phase II			2000	2000	0.901	0.300
192	Traffic Flow	COSA	Hildebrand @ 281			2000	2000	1.040	0.347
193	Traffic Flow	COSA	Lone Oak/Latimer:	F St	Brice	2001	2001	0.020	0.007
194	Traffic Flow	COSA	Rip Rap 69-Phiic Part 3			2001	2001	0.105	0.035
195	Traffic Flow	COSA	Ackerman	IH 10	Dietrich	2001	2001	0.216	0.072
196	Traffic Flow	COSA	Carson Street	Walters	Frank	2001	2001	0.077	0.026
197	Traffic Flow	COSA	Starcrest	Stuntman	Jones Maltsberger	2001	2001	0.081	0.027
198	Traffic Flow	COSA	Bobolink 96A	Storeywood	Deneice	2001	2001	1.828	0.609
199	Traffic Flow	COSA	Mahncke Area Streets, Phase II			2001	2001	0.752	0.251
200	Traffic Flow	COSA	Creswell	Houston	Deadend	2001	2001	0.024	0.008
201	Traffic Flow	COSA	Thorain	Buckeye	S.P. Railroad	2001	2001	0.039	0.013
202	Traffic Flow	COSA	Fred. Rd	Sandoval	Woodlawn	2001	2001	1.472	0.491
203	Traffic Flow	COSA	Hobart Street	Acme Rd	40th St	2001	2001	0.023	0.008
204	Traffic Flow	COSA	Lawton / Sw 41st Street			2001	2001	0.019	0.006
205	Traffic Flow	COSA	Orr	Suzette	Winkle	2001	2001	0.019	0.006
206	Traffic Flow	COSA	Fleming	Mayfield	Peabody	2001	2001	0.016	0.005
207	Traffic Flow	COSA	Evers Rd @ Wurzbach Rd Intersection			2001	2001	0.102	0.034
208	Traffic Flow	COSA	Capitol	Basse	San Angelo	2001	2001	0.010	0.003
209	Traffic Flow	COSA	Grandview Neighborhood Sts Ph IIIB	Pecan Valley	Amanda	2001	2001	0.020	0.007
210	Traffic Flow	COSA	Pace	Elmendorf	Brazos	2001	2001	0.139	0.046

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
211	Traffic Flow	COSA	Texas / Waverly Streets			2001	2001	0.527	0.176
212	Traffic Flow	COSA	Basse Road & San Pedro Intersection			2001	2001	1.625	0.542
213	Traffic Flow	COSA	Monterrey	36th	San Joaquin	2001	2001	0.467	0.156
214	Traffic Flow	COSA	Blueridge	Gen McMullen	27th	2001	2001	0.143	0.048
215	Traffic Flow	COSA	Rip Rap 69 - Ph IIC Part 3A			2001	2001	0.166	0.055
216	Traffic Flow	COSA	Callaghan:	Old Hwy 90	Commerce	2001	2001	1.021	0.340
217	Traffic Flow	COSA	Duval/Seguin:	Pierce	Walters	2001	2001	0.223	0.074
218	Traffic Flow	COSA	24th St:	Commerce	Culebra	2001	2001	0.236	0.079
219	Traffic Flow	COSA	Claremont/Eleanor/Natalen, Ph II			2001	2001	0.175	0.058
220	Traffic Flow	COSA	Strech	Chavaneaux	Malley Blvd	2001	2001	0.128	0.043
221	Traffic Flow	COSA	Indianola	Garfield	Camargo	2001	2001	0.008	0.003
222	Traffic Flow	COSA	Elsmere	Michigan	Capitol	2002	2002	0.021	0.007
223	Traffic Flow	COSA	Arbor	Trinity	San Marcos Ph II	2002	2002	0.029	0.010
224	Traffic Flow	COSA	Escalon St. #1008			2002	2002	0.051	0.017
225	Traffic Flow	COSA	S. Flores Drn #70-70A, Ph. II--Part 3			2002	2002	11.316	3.772
226	Traffic Flow	COSA	Octavia #63 Phase 1			2002	2002	0.678	0.226
227	Traffic Flow	COSA	Leonhardt Road @ Low Water Crossing			2002	2002	0.299	0.100
228	Traffic Flow	COSA	St. Marys Street -	Pereida	Roosevelt	2002	2002	0.841	0.280
229	Traffic Flow	COSA	Lockhill-Selma:	George	Whisper Path	2003	2003	0.731	0.244
230	Traffic Flow	COSA	39th Street #58m, Phase II A			2003	2003	0.871	0.290
231	Traffic Flow	COSA	Quintana Road Drainage #64 Extension			2003	2003	0.648	0.216
232	Traffic Flow	COSA	S. Flores:	Durango	Franciscan	2003	2003	1.269	0.423
233	Traffic Flow	COSA	Monticello:	S. Gevers	Hillje	2003	2003	0.095	0.032
234	Traffic Flow	COSA	Higgins Road:	Nacogdoches	Stahl	2003	2003	1.551	0.517
235	Traffic Flow	COSA	Hi Lions 80 Mod PIII & V			2004	2004	11.176	3.725
236	Traffic Flow	COSA	Bee Street:	Walters	Frank	2004	2004	0.030	0.010
237	Traffic Flow	COSA	Aransas:	Meerscheidt	Walters	2004	2004	0.077	0.026
238	Traffic Flow	COSA	Flores/Breeden/Beacon, Phase II			2004	2004	0.417	0.139
239	Traffic Flow	COSA	Mockert Street Area	Mockert, Forest,	(W. Lambert, Kline, Cass)	2004	2004	0.435	0.145
240	Traffic Flow	COSA	Pleasanton Road	Gillette	Loop 410	2004	2005	0.000	0.000
241	Traffic Flow	COSA	Northington	S.W. 36th	S.W. 35th	2004	2004	0.075	0.025
242	Traffic Flow	COSA	Fay Street / St Joseph:	Creighton	New Laredo Hwy, Part 1	2005	2005	0.264	0.088
243	Traffic Flow	COSA	Fay Street / St. Joseph:	Creighton	New Laredo Hwy, Part 2	2005	2005	0.000	0.000
244	Traffic Flow	COSA	Belgium:	Picarde	Sbc Parkway	2005	2005	0.137	0.046
245	Traffic Flow	COSA	El Monte	Blanco	San Pedro, Phase II	2005	2005	0.045	0.015
246	Traffic Flow	COSA	Lanark Drainage #92A, Phase 1			2005	2006	0.383	0.128
247	Traffic Flow	COSA	Larkspur	West Ave	Baltic	2005	2006	0.260	0.087
248	Traffic Flow	COSA	Sunset Ph I	Jones Maltsberger	Teak	2005	2006	1.014	0.338
249	Traffic Flow	COSA	Howard Drainage	Wildwood	El Monte	2006	2006	0.018	0.006
250	Traffic Flow	COSA	Ozark	Erskine	Williamsburg	2006	2006	0.064	0.021
251	Traffic Flow	COSA	Semlinger Road	Lord	Rigsby	2006	2005	0.434	0.145
252	Traffic Flow	COSA	Redland Road Improvements	Redland Woods	Jones Maltsberger	2007	2006	2.516	0.839

I. TERMS projects already completed

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
253	Traffic Flow	Bexar Co.	Lakeview Drive	Woodlake Parkway	Foster Road	2006	2005	0.460	0.150
254	Traffic Flow	Bexar Co.	Wiseman Road	Loop 1604 west	Talley Road.	2004	2006	5.350	1.780
255	Traffic Flow	Bexar Co.	Applewhite Road	Watson Road	Loop 1604.	2004	2005	9.473	3.158
256	TMS	TxDOT	IH 35	FM 1976 (Walzem Road)	New Braunfels Ave.	1999	1999	151.37	50.46
257	TMS	TxDOT	US 90	0.8 Mi W. of IH 410	Loop 353 Nogalitos	1999	1999	89.898	29.966
258	TMS	TxDOT	IH 35	Guadalupe County Line NE	1.77 KM N of FM 1976 (Frat In	2000	2000	41.339	13.780
259	TMS	TxDOT	IH 36	1.77 KM N. of FM 1976 (Fratt int.)	FM 1976 (Walzem)	2000	2000	30.396	10.132
260	TMS	TxDOT	IH 37	Loop 13	1.3 Mi S of US 181	2000	2000	9.089	3.030
261	TMS	TxDOT	IH 410	Callaghan Road	Fredericksburg Road	2000	2000	37.141	12.380
262	TMS	TxDOT	Loop 1604	0.8 KM W of Babcock Road	SH 16(N)	2000	2000	14.741	4.914
263	ITS	TxDOT	Loop 1604	On N and S frontage roads FM 1535	Bitters Rd	2001	2001	6.079	2.026
264	ITS	TxDOT	Loop 1604	3.21 KM E. of US 281 N.	1.61 KMN of FM 2252	1999	1999	52.434	17.478
265	ITS	COSA	Houston - Walters To Onslow	Onslow	New Braunfels	2003	2003	2.085	0.695

II. TERMS projects anticipated to complete by end of 2007, with given anticipated date of completion

	Project Type	Agency	Project Name	From	To	Let Date	Anticipated Completion	VOC (lbs/day)	NOx (lbs/day)
1	Traffic Flow	Bexar Co.	Braun Road	Loop 1604	FM 1560	2004	2007	1.600	0.530
2	Traffic Flow	Bexar Co.	Borgfeld Road	Hwy 281	Timberline	2004	2007	2.750	0.920
3	Traffic Flow	Bexar Co.	Foster Road	I-10	Binz-Engleman	2004	2007	2.160	0.720
4	Traffic Flow	Bexar Co.	Kriewald Road	Hwy 90	Pue Road	2006	2007	0.140	0.050
5	Traffic Flow	Bexar Co.	Pue Road	Kriewald Road	Sunset Place	2006	2007	0.660	0.220
6	Traffic Flow	Bexar Co.	Smith Road	Hwy 16		2006	2007	0.900	0.300
7	Traffic Flow	Bexar Co.	Woodlake Parkway	Binz-Engleman	FM 78	2006	2007	1.580	0.530

III. TERMS projects anticipated complete by end of 2007, completion date not yet given

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
1	Bikeway	COSA	Cincinnati	St. Mary's University	Navidad	2004	TBDL	0.189	0.159
2	Bikeway	COSA	Cincinnati / Ashby	Navidad	North St. Mary's St.	2004	TBDL	0.189	0.159
3	Bikeway	COSA	Alamo / Broadway Corridor	Josephine	The Alamo	2004	TBDL	0.297	0.251
4	Sidewalk	COSA	Clark	Southcross	Hot Wells	2004	TBDL	0.073	0.062
5	Sidewalk	COSA	Hot Wells	IH 37	New Braunfels	2004	TBDL	0.016	0.013
6	Bike Lane	COSA	Ingram	Callaghan	Benrus	2004	TBDL	0.215	0.181
7	Sidewalk	COSA	Blanco Road (FM 2696)	Lockhill Selma	West Avenue	2004	TBDL	0.421	0.355
8	Sidewalk	COSA	Mayfield	Commercial	Zarzamora	2005	TBDL	0.024	0.020
9	Sidewalk	COSA	McCullough	Basse	RR Tracks	2005	TBDL	0.087	0.073
10	Sidewalk	COSA	Nakoma	@ US 281	4C	2005	TBDL	0.256	0.216
11	Sidewalk	COSA	Woodlawn	Bandera	Maiden 4C	2005	TBDL	0.104	0.087
12	Sidewalk	COSA	Sunset	Teak	Broadway 4C	2005	TBDL	0.103	0.086
13	Sidewalk/bike	COSA	Callaghan	Bandera	Horseshoe Bend	2007	TBDL	0.414	0.349
14	Bike path	COSA	Malone / Theo	Quintana	Concepcion Park	2004	TBDL	0.655	0.552
15	Bike Path	COSA	Eagleland/Riverwalk Link	Eagleland Drive	Guenther Street Bridge	2006	TBDL	0.021	0.018
16	Sidewalk	COSA	La Manda	West Avenue	Buckeye	2006	TBDL	0.006	0.005
17	Sidewalk	COSA	Rosabell Street	Culebra	Inez	2006	TBDL	0.006	0.005
18	Sidewalk	COSA	Cornell	Brazos	Colorado	2007	TBDL	0.009	0.007
19	Signal	TxDOT	US 281	At Borgfeld, Bulverde, Wilderness O	and Stone Oak Roads	2003	TBDL	3.797	2.327
20	Signal	Guadalupe Co.	SH46	US 90		2004	TBDL	1.165	0.827
21	Signal	Guadalupe Co.	SH46	US 90		2004	TBDL	0.272	0.193
22	Intersection	TxDOT	Wurzbach	Ironside	IH 10	2004	TBDL	6.251	3.751
23	Intersection	TxDOT	IH 10	IH 10 West at Huebner Road		2004	TBDL	4.664	2.798
24	Intersection	TxDOT	Loop 1604	SH 16	FM 1937	2004	TBDL	0.173	0.104
25	Intersection	TxDOT	Loop 1604	IH 35	SH 16	2004	TBDL	3.731	2.239
26	Intersections	COSA	James Park Development	Rittiman and Holbrook.		2005	TBDL	2.292	1.375
27	Grade Sep	TxDOT	IH 410	SH 16	UPRR	2004	TBDL	3.722	2.233
28	Grade Sep	TxDOT	US 281	Borgfeld Dr		2006	TBDL	17.896	10.738
29	Traffic Flow	TxDOT	IH 10	0.2 mile South of Callaghan Road	0.2 mile South of N. Crossroad	1999	TBDL	27.854	9.285
30	Traffic Flow	TxDOT	IH 410	Interchange at US 281 Fr: US 281	Nacogdoches	1999	TBDL	6.472	2.157
31	Traffic Flow	TxDOT	Culebra Rd (FM 471)	Loop 1604		2001	TBDL	4.097	1.366
32	Traffic Flow	TxDOT	Loop 1604	0.6 KM N of Military Dr	US 90	2001	TBDL	10.960	3.653
33	Traffic Flow	TxDOT	Loop 1604	1.6 KM N. of FM 471 (Culebra Rd)	0.6 KM N of Military Dr.	2001	TBDL	10.818	3.606
34	Traffic Flow	TxDOT	Ironside	Wurzbach		2004	TBDL	0.326	0.109
35	Traffic Flow	Bexar Co.	Mission Rd.	N. of SA River Mission Pkwy		2004	TBDL	0.070	0.023
36	Traffic Flow	TxDOT	Thousand Oaks	Broken Oak, Ledge View, Turkey Po	Pebble Forest & Oak View	2004	TBDL	2.118	0.706
37	Traffic Flow	Guadalupe Co.	SH 123	Fr US 90 Kingsbury St	IH 10	2004	TBDL	1.193	0.442
38	Traffic Flow	COSA	36th ST.	US 90	Growdon	2007	TBDL	2.792	0.931
39	Traffic Flow	COSA	Blanco Road	Blanco Road - Hildebrand	Summit Phase 1	2006	TBDL	3.602	1.201
40	Traffic Flow	COSA	Alamo	Durango	Cedar	2005	TBDL	0.328	0.109
41	Traffic Flow	COSA	Wurzbach Rd @ IH 10 Intersection			2005	TBDL	2.128	0.709
42	Traffic Flow	COSA	St. Marys Street	Alamo	Pereida	2005	TBDL	0.202	0.067

III. TERMS projects anticipated complete by end of 2007, completion date not yet given

Appendix B: TERMS

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
43	Traffic Flow	COSA	Ansley Blvd Drainage #1091			2006	TBDL	0.139	0.046
44	Traffic Flow	COSA	Duke Area Streets, Phase I			2006	TBDL	0.275	0.092
45	Traffic Flow	COSA	Culebra Area Streets Phase IV			2006	TBDL	0.288	0.096
46	Traffic Flow	COSA	Ave Maria Drainage			2006	TBDL	0.056	0.019
47	Traffic Flow	COSA	Goliad Rd	Pecan Valley	Military Drive	2006	TBDL	0.329	0.110
48	Traffic Flow	COSA	W. Craig	Elmendorf	Josephine Tobin	2006	TBDL	0.027	0.009
49	Traffic Flow	COSA	Woodlawn Ave:	San Antonio	Lake	2006	TBDL	0.199	0.066
50	Traffic Flow	COSA	Florida	IH 37	St Marys	2006	TBDL	0.380	0.127
51	Traffic Flow	COSA	Sunset Ph II	Teak	Broadway	2006	TBDL	0.538	0.179
52	Traffic Flow	COSA	Woodlawn	Bandera	Maiden	2006	TBDL	0.114	0.038
53	Traffic Flow	COSA	Stahl Road	O'connor	Judson	2007	TBDL	1.147	0.382
54	Traffic Flow	COSA	Marbach Phase I	Military	Pinn	2007	TBDL	0.654	0.218

TBDL: To Be Determined Later

IV. TERMS projects anticipated to complete post 2007

	Project Type	Agency	Project Name	From	To	Let Date	Completion Date	VOC (lbs/day)	NOx (lbs/day)
1	Intersection	TxDOT	IH 10	Callaghan Road		2004	2010	4.664	2.798
2	Intersection	TxDOT	IH 10	DeZavala Road		2004	2008	4.961	2.977
3	Traffic Flow	Bexar Co.	Shaenfield Road	Loop 1604	FM 1560	2006	2008	0.180	0.060
4	Traffic Flow	Bexar Co.	Bulverde Road	Smithson Valley	Hwy 281	2006	2008	0.300	0.100
5	ITS	TxDOT	US 281	0.6 Mi N of Loop 1604	2.5 Mi N of Loop 1604	2004	TBDL	26.445	8.815
6	TMS	TxDOT	410 Upgrade to 10 lanes	Ingram Road	Callaghan Road	2006	TBDL	103.350	34.449

TBDL: To Be Determine Later

**APPENDIX C – MAJOR NEW PERMITS THAT COULD IMPACT THE SAN ANTONIO
REGION ATTAINMENT STATUS**

Major Permits which could impact San Antonio attainment status

Principal Name (Plant)	Location	County	Permit Number	Type of Facility	Mailed Date	Status	Operation Start Date	Net Capacity	Air Contaminants	NOx Emission Rate
CPS (Spruce2)	9599 Gardner Road, San Antonio, Texas	Bexar	70492, 103042	Powder River Basin (PRB) Coal Power Plant	11/24/2003	ISSUED	2009	750 MW	VOC, NOx, CO and PM	0.05
Chemical Line	3550 APG Lane, New Braunfels, Texas, 78132	Comal	not submitted	Portland Cement Manufacturing Facility	not submitted	not submitted	?	?	VOC, NOx, CO and PM	
TXI OPERATIONS LP	Hunter Cement Plant located at 7781 FM 1102, New Braunfels, Texas	Comal	5933, 5933A, 5933D, CS0018B, PSDTX63M3	Dry-Process Preheater/Precalciner Kiln and Finish Mill	2/9/2006	PENDING	2009	1.25 million tons of clinker	VOC, NOx, CO and PM	
CEMEX CEMENT OF TEXAS LP	2580 Wald Road, New Braunfels, Texas 78132-4983	Comal	6048	Portland Cement Manufacturing Facility	6/9/2005	COMPLETED	2008 or later	1.25 million tons of clinker	VOC, NOx, CO and PM	
The Calhoun County Navigation District (E S Joslin 2)	135 County Road 319, Point Comfort, Texas	Calhoun	45586, PSDTX1055	Coal Power Plant	2/28/2006	PENDING	2009	300 MW	VOC, NOx, CO and PM	0.07
Formosa Plastics Corp., TX	P. O. Box 700, Point Comfort, Texas 77978	Calhoun	76305, PSDTX1058	Specialty PVC (polyvinyl chloride) Plant	5/31/2005	PENDING	2009	300 MW	VOC, NOx, and CO	0.07
Sandow 5 (replaces ALCOA units)	Rockdale	Milan	48437	Coal Power Plant	11/1/2002	ISSUED	2007	434 MW	VOC, NOx, CO and PM	
Oak Grove Mgmt. Co. LP (TXU)	12 miles north of Franklin, Texas, off of FM 979, Franklin	Robertson	76474, P1056	Lignite Coal Power Plant	7/27/2005	PENDING	2009	1,600 MW	VOC, NOx, CO and PM	0.07
Sandy Creek En. Assocs., LP	Rattlesnake Road, Riesel	McLennan	70861, P1039	PRB Coal Power Plant	7/13/2005	PENDING	2008	600 MW	VOC, NOx, CO and PM	0.05
Twin Oaks Power III, LP (Semptra)	eight miles north of Calvert on Highway 6 in Calvert	Robertson	76381, P1054	Lignite Coal Power Plant	5/6/2005	PENDING	2010	600 MW	VOC, NOx, CO and PM	0.08
Safeguard Security Services, Ltd.	5926 Corridor Parkway, Schertz	Guadalupe	74195	Fiberglass	3/6/2006	PENDING	2007 ?		VOC and PM	
City of Victoria (assumed at Joslin 2 emissions)		Victoria	No permit yet	Powder River Basin (PRB) Coal Power Plant	not submitted	Unlikely	Already Constructed	?	VOC, NOx, CO and PM	

Appendix C: Major New Permits

Principal Name (Plant)	Location	County	Permit Number	Type of Facility	Mailed Date	Status	Date of construction	Net Capacity	Air Contaminants	
Coleta Creek	Fannin	Goliad	No permit yet	PRB Coal Power Plant	not submitted	not submitted	After 2007	?	VOC, NOx, CO and PM	
Big Brown 3	Fairfield	Freestone	78759	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Lake Creek 3	Riesel	McLennan	78751	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Martin Lake 4	Tatum	Rusk	78750	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Monticello 4	Mount Pleasant	Titus	78744	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Morgan Creek 7	Colorado City	Mitchell	78761	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Tradinghouse 3	Waco	McLennan	78762	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Tradinghouse 4	Waco	McLennan	78762	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	
Valley 4	Savoy	Fannin	78763	Powder River Basin (PRB) Coal Power Plant	4/20/2006	PENDING	2009	800 MW	VOC, NOx, CO and PM	

In the 4 county EAC RegionCombined Impact

Principal Name (Plant)	Modeled in 2007 or 2012 Base Case	VOC Emissions (tons/day)	NOx Emissions (tons/day)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)			
CPS (Spruce2)	YES	0.07	5.93	?	0.200	0.168									
Chemical Line	NO	?	?	?	?	?									
TXI OPERATIONS LP	NO	0.17	4.20	2.683	0.009	0.042				2.702	0.030	0.031			
CEMEX CEMENT OF TEXAS LP	NO	Emissions are offset	Emissions are offset	0.000	0.000	0.000									
The Calhoun County Navigation District (E S Joslin 2)	NO	0.18	2.23				0.553	0.008	0.009						
Formosa Plastics Corp., TX	NO	0.36	4.03												
Sadow 5 (replaces ALCOA units)	NO	0.36	7.10												
Oak Grove Mgmt. Co. LP (TXU)	NO	1.13	20.64	0.117	-0.005	-0.005									
Sandy Creek En. Assocs., LP	NO	0.35	6.88												
Twin Oaks Power III, LP (Semptra)	NO	0.36	8.16												
Safeguard Security Services, Ltd.	NO	not a significant source?	0.00												
City of Victoria (assumed at Joslin 2 emissions)	NO	0.18	2.23	?	?	?									

Appendix C: Major New Permits

Principal Name (Plant)	Modeled in 2007 or 2012 Base Case	VOC Emissions (tons/day)	NOx Emissions (tons/day)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)
Coleta Creek	NO	0.21	12.76	0.877	0.039	0.074						
Big Brown 3	NO	0.46?	6.41?									
Lake Creek 3	NO	0.46?	6.41?									
Martin Lake 4	NO	0.46?	6.41?									
Monticello 4	NO	0.46?	6.41?									
Morgan Creek 7	NO	0.46?	6.41?									
Tradinghouse 3	NO	0.46?	6.41?									
Tradinghouse 4	NO	0.46?	6.41?									
Valley 4	NO	0.46?	6.41?									

For sources that are not modeled (i.e. not including CPS)	VOC Emissions (tons/day)	NOx Emissions (tons/day)	Maximum 8-hour Ozone Impact	Impact near Monitors (C23)	Impact near Monitors (C58)
All New Sources (besides TXI)	6.81	115.31	6.925	0.010	0.011
All New Sources	6.98	119.51	6.935	0.040	0.042

119.505205