TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

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CHIEF CLERKS OFFICE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

AGENDA ITEM REQUEST

Memorandum of Agreement

AGENDA REQUESTED: June 13, 2007

DATE OF REQUEST: May 25, 2007

NAME & NUMBER OF PERSON TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED: Kerry Howard, 239-0556

CAPTION: Docket No. 2007-0613-MIS. Consideration for commission approval of the Corpus Christi Eight-Hour Ozone Flex Plan Memorandum of Agreement (MOA). The MOA would encourage the continuation of voluntary air emission reduction measures to assist in maintaining attainment of the eight-hour ozone national ambient air quality standard in Nueces and San Patricio Counties. Emission reduction measures include, but are not limited to, the Stage I Vapor Recovery Program, the Pollution Prevention Partnership Program, the Ozone Action Day Program, and voluntary actions by local industries and/or the TCEQ to deploy infra-red cameras to detect excess emissions. These reduction measures and projects will be implemented through a voluntary intergovernmental agreement (MOA) between the Texas Commission on Environmental Quality, the City of Corpus Christi, Nueces County, San Patricio County, the Port of Corpus Christi Authority, the Corpus Christi Metropolitan Planning Organization, the Corpus Christi Regional Transportation Authority, and the U.S. Environmental Protection Agency. (Kathy Singleton, Erin Selvera) (Project No. 2007-008-MIS-NR)

Emana Hilchard for DCS
Chief Engineer

S Hilchard
Division Director

Kerry Howard
Agenda Coordinator

Copy to CCC Secretary? NO x YES___

Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Commissioners **Date:** May 25, 2007

Thru: LaDonna Castañuela, Chief Clerk
Glenn Shankle, Executive Director

From: David C. Schanbacher, P.E., Chief Engineer DCS

Docket No.: 2007-0613-SIP

Subject: Commission Approval for Signing of the Corpus Christi Eight-Hour Ozone (Eight- O_3) Flex Memorandum of Agreement (MOA) Plan
Project No. 2007-008-SIP-NR

Reasons for the Memorandum of Agreement:
The Corpus Christi urban airshed, comprising Nueces and San Patricio Counties, is designated attainment by the U.S. Environmental Protection Agency (EPA) under the eight-hour ozone standard. The Corpus Christi urban airshed is considered to be one of several near nonattainment areas in Texas. The current design value, based on 2004-2006, is 72 ppb. Stakeholders in these counties expressed a desire to develop an O_3 Flex program based on the eight-hour ozone standard and sent a letter of intent to do so to EPA from the Mayor of Corpus Christi on October 4, 2004. EPA issued guidelines for the Eight-O_3 Flex Program on May 18, 2006, similar to the previous one-hour ozone flex program. A letter from the Mayor of Corpus Christi, to EPA, dated August 18, 2006, reaffirmed intent to participate in the Eight-O_3 Flex Program.

The purpose of the Eight-O_3 Flex program is to encourage eight-hour ozone attainment areas nationwide to reduce ozone emissions to continue to meet the National Ambient Air Quality Standard (NAAQS) for ozone. The Eight-O_3 FIex program could be considered the third generation of flexible, ozone attainment initiatives, as its predecessors include the Flexible Attainment Region (FAR) and the One-Hour Ozone Flex program, which focused on taking proactive steps to reduce emissions of ozone-generating pollutants to improve an area's air quality. The Corpus Christi area has proactively participated in both over the past several years.

Background information:
Similar to the One-Hour Ozone Flex Program, the Eight-O_3 Flex program will be implemented through a voluntary intergovernmental agreement (Memorandum of Agreement) among EPA, the TCEQ, and the local communities. Areas eligible to participate in the Eight-O_3 Flex program are those designated as attainment or unclassifiable/attainment for the eight-hour ozone standard, as published on April 30, 2004 (69 FR 23858). This revision has been adapted from the previous One-Hour Ozone Flex Plan and will include the elements required by EPA for participation in the Eight-O_3 Flex program. The local entities in Corpus Christi initiated and wrote the Eight-O_3 Flex plan according to writing guidance that may differ in style and format from standard agency SIP document guidelines.

Under what authority are we adopting these changes?
This Agreement will allow the area to maintain compliance with the eight-hour ozone National Ambient Air Quality Standard.

Re: Docket No. 2007-0613-SIP

Effect on the:
There are no proposed rulemaking changes associated with this agreement, therefore, there are no direct effects to any person in Nueces and San Patricio Counties.

- Regulate Community: NA
- Public: Air Quality benefits – Standard maintained
- Agency programs: No new effects, however, the TCEQ will continue air monitoring and emission inventory data gathering activities in support of this Eight-O_3 Flex Plan.

Stakeholder meetings:
Stakeholders involved in this plan are the City of Corpus Christi, Nueces County, San Patricio County, Port of Corpus Christi Authority, Corpus Christi Regional Transportation Authority, Corpus Christi MPO, TCEQ, and EPA.

Key points in the MOA schedule:
Agenda date: June 13, 2007
The Corpus Christi Air Quality Committee proposes a signing ceremony and news media event in Corpus Christi in June 2007 with TCEQ and EPA representatives.

Public comment:
EPA's Eight-Hour Ozone Flex Program guidance does not require public hearings for these types of plans.

Agency contacts:
Kathy Singleton, Project Manager, 239-6098, Air Quality Division
Erin Selvera, Staff Attorney, 239-6033

Attachments

cc: Chief Clerk, 5 copies
Executive Director's Office
David C. Schanbacher, P.E.
Jason Skaggs
Ashley K. Wadick
Office of General Counsel
Kathy Singleton

cc (without attachments):
Dan Long, Staff Attorney
Kerry Howard, Program Office Liaison
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8-O3FLEX MEMORANDUM OF AGREEMENT
PLAN TO MAINTAIN ATTAINMENT
WITH THE 8-HOUR OZONE STANDARD
NUECES COUNTY AND SAN PATRICIO COUNTY IN TEXAS
(THE CORPUS CHRISTI URBAN AIRSHED)

INTRODUCTION

Two adjoining counties, Nueces County and San Patricio County in Texas, contain a large urbanized area with a number of industrial point sources of air emissions and a concentration of mobile sources. The two counties are home to the nation's fifth busiest deep-water port with access to the Gulf of Mexico and the Gulf Intracoastal Waterway, a large industrial and petrochemical complex, two major military bases, and a network of highways including the Interstate Highway System, railroads, and air routes that facilitate commerce and a thriving tourism industry.

Such urbanized areas are referred to as urban airsheds. The Corpus Christi area, comprised of Nueces County and San Patricio County, may be considered an urban airshed in which air emissions from sources in both counties interact to influence the level of ambient air pollution in the community. Control of ambient air quality requires a strategy that considers sources of air emissions in both counties.

The urban airshed of Nueces County and San Patricio County in Texas is an area in which local entities, the Texas Commission on Environmental Quality (TCEQ), and the U.S. Environmental Protection Agency (EPA) are working together to plan and implement voluntary actions appropriate to community needs to improve air quality. This collaboration makes it possible to design common sense strategies that reflect the weather, driving habits, and economy of the region in the creation of a model program. A plan was formalized in 1996 in a Flexible Attainment Region Memorandum of Agreement, and modified and continued in 2002 in an O3FLEX Memorandum of Agreement. The parties to the plans were the following governmental authorities:

City of Corpus Christi
Nueces County
San Patricio County
Port of Corpus Christi Authority
Regional Transportation Authority
Texas Commission on Environmental Quality
U.S. Environmental Protection Agency

Other stakeholders making major contributions to this effort include the following:

Port Industries of Corpus Christi, Inc., and its member companies
Texas A&M University-Corpus Christi, Department of Community Outreach (TAMUCC)
Texas A&M University-Kingsville, Department of Environmental Engineering (TAMUK)
Corpus Christi Metropolitan Planning Organization (MPO)

The policy and guidelines adopted in 2001 governing the O3FLEX program encouraged voluntary air emission reductions that help keep an area in attainment with the 1-hour ozone standard, while contributing positively to achieve the health benefits envisioned under a proposed standard based on 8-hour averages. The O3FLEX Memorandum of Agreement expressly provided that it may also serve regional efforts to meet the Clean Air Act requirements, as appropriate, when the 8-hour ozone guidance was issued. During 2005 the new 8-hour standard was being implemented and the 1-hour standard was withdrawn for the Corpus Christi urban airshed.

The goal of this agreement is to encourage voluntary air emission reductions that help keep Nueces County and San Patricio County in attainment with the 8-hour ozone standard, thereby achieving the health benefits envisioned.

As the 8-hour ozone standard is being implemented, stakeholders in Nueces County and San Patricio County have expressed their desire to develop a program similar to the Flexible Attainment and O3FLEX programs but based on the 8-hour standard. This intent was expressed in a letter by the Mayor of Corpus Christi dated October 4, 2004, and acknowledged in a reply from the U.S. Environmental Protection Agency Regional Administrator dated December 3, 2004.

Guidelines for the 8-O3Flex Program were approved on May 18, 2006. This Agreement was prepared in accordance with the guidelines. A letter from the Mayor of Corpus Christi dated August 18, 2006, reaffirmed intent to participate in the 8-O3Flex Program.

BACKGROUND

PARTICIPATING STAKEHOLDERS. An active Air Quality Committee was established in 1995 to review the ozone attainment issues for the Corpus Christi urban airshed, comprised of Nueces and San Patricio counties in the Texas Coastal Bend Region (see area map included in Appendix 5). The membership includes local government, business and industry, local universities, the military, and representation from the news media. The meetings are open to the public. The attached Appendix 1 is a list of participants in the Air Quality Committee.

APPLICABLE STANDARDS. This Agreement is applicable under the current National Ambient Air Quality Standard for ozone based on 8-hour averages. The standard is that the average for the past three calendar years of the fourth highest daily maximum 8-hour average ozone level each year may not exceed 0.08 parts per million.

If the current 8-hour standard is withdrawn or is determined by the Environmental Protection Agency to be inapplicable in the Corpus Christi urban airshed at a future date, this agreement may be terminated or revised in accordance with state and federal law.

STATUS OF AIR QUALITY. The Corpus Christi urban airshed, comprised of Nueces and San Patricio Counties, is designated attainment with the National Ambient Air Quality Standard for ozone based on 8-hour averages. The Corpus Christi urban airshed

is considered to be one of several near non-attainment areas in Texas. The current design value is 73 parts per billion (ppb) based on monitoring results (CAMS 4).

SOURCES OF POLLUTANTS. Scientific research performed by Texas A&M University - Kingsville, including emissions inventory activities and backward trajectories for high ozone episodes, indicates the primary sources of ozone precursors:

1. Inbound transport. Cluster analysis of high ozone episodes from 1995 through 2003 showed that a significant majority of the episodes were heavily influenced by inbound transport of ozone and ozone precursors from northeast of the Corpus Christi area. This information is detailed in the Conceptual Model of weather patterns attached as Appendix 2. Progress in reducing ambient ozone and ozone precursors in areas northeast of Nueces County and San Patricio County along and near the Texas coast and in Louisiana is needed to assist in controlling ambient ozone in the Corpus Christi urban airshed.

2. Stationary sources. The 1999 inventory contained in the 2002 Ozone Flex Plan was updated for this plan. Figure 1 represents the updated numbers. Point sources account for 58% of nitrogen oxide emissions and 39% of volatile organic compounds in the two county area. Within this category, electric generating facilities and other industrial facilities are the largest local sources of nitrogen oxide emissions.

3. Mobile sources. The updated calendar year 1999 emissions inventory indicates that on-road and off-road mobile sources produce 39% of nitrogen oxides and 32% of volatile organic compounds in the two county area.

Figure 1: 1999 Summary of Emission Inventory Estimates (Tons / Year)

Nueces County						
Pollutant	**Point**	**Area**	**Non-Road**	**On-Road**	**Biogenic**	**Total**
VOC	11092.3	2891.3	3746.5	6464.8	3110.3	27305.2
NOx	22113.4	277.0	4694.9	10019.4	401.4	37506.1
CO	9428.2	331.3	18768.9	66924.3		95452.8
San Patricio County						
Pollutant	**Point**	**Area**	**Non-Road**	**On-Road**	**Biogenic**	**Total**
VOC	3489.2	880.9	533.8	1455.7	3830.3	10189.8
NOx	4359.4	53.0	789.6	2376.1	347.7	7925.8
CO	2396.0	756.4	2480.3	15075.7		20708.4
Corpus Christi Urban Airshed Total						
Pollutant	**Point**	**Area**	**Non-Road**	**On-Road**	**Biogenic**	**Total**
VOC	14581.5	3772.2	4280.2	7920.4	6940.6	37495.0
NOx	26472.8	330.3	5484.5	12395.5	748.9	45432.0
CO	11824.2	1087.7	21249.2	82000.1		116161.2

Figure 2

VOC Corpus Christi Urban Airshed

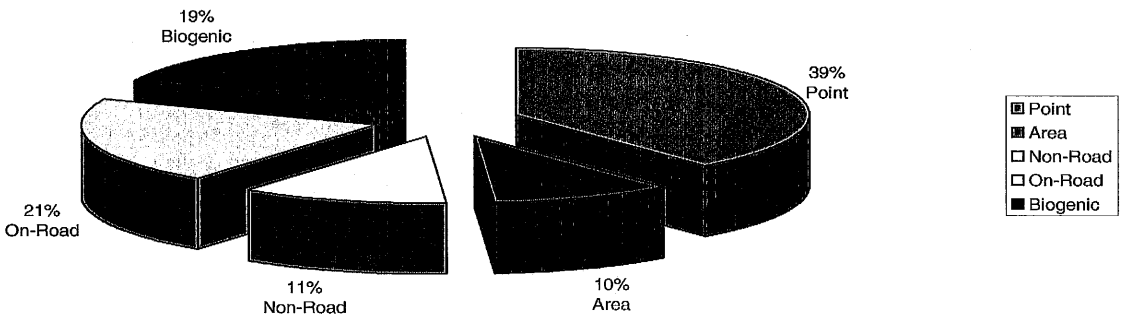
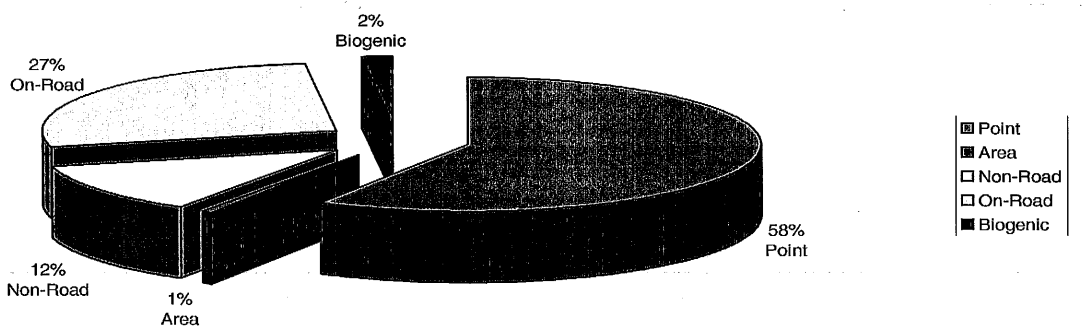


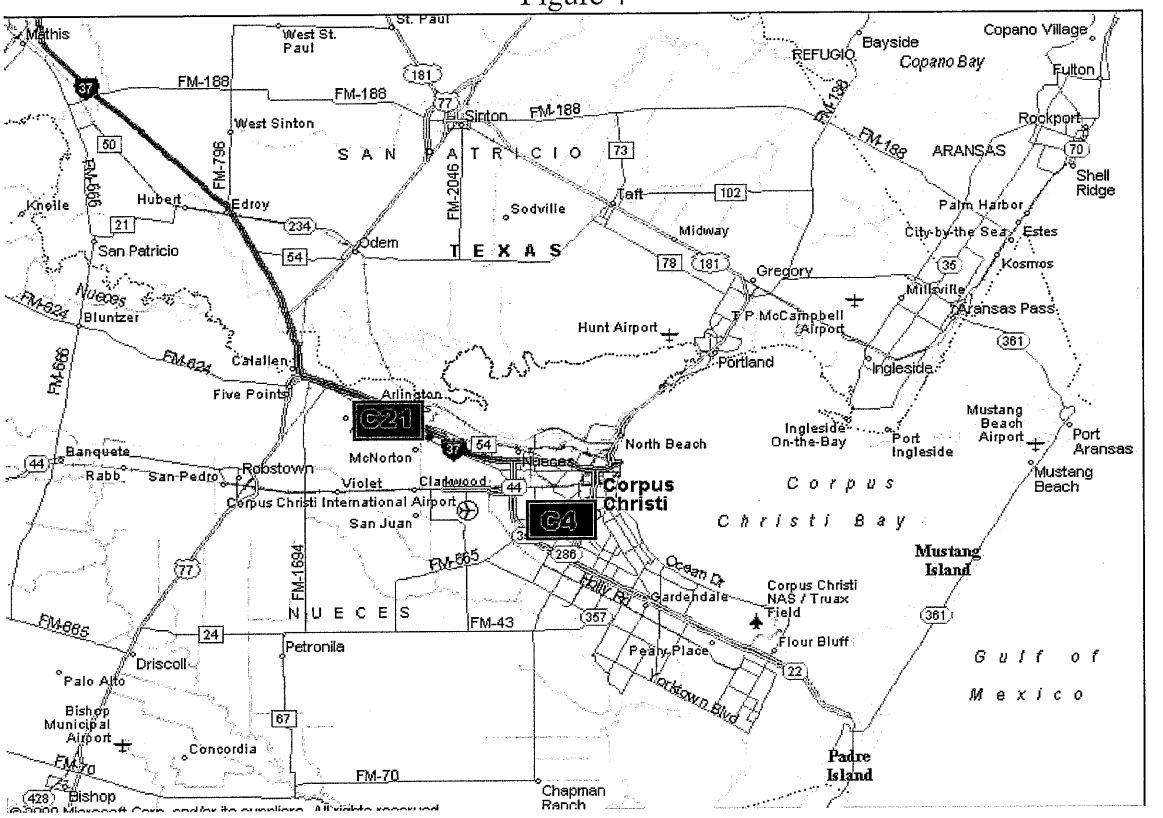
Figure 3

NOx Corpus Christi Urban Airshed



MONITORING. The Texas Commission on Environmental Quality operates two Continuous Air Monitoring Stations (CAMS) in Corpus Christi. CAMS 4 is located at the State School at 902 Airport Road. CAMS 21 is located in West Guth Park at 9866 La Branch St. Ozone levels recorded at these two monitors are used to determine the attainment status of the area.

Figure 4



Additional ozone and meteorological monitors are operated by Texas A&M University-Kingsville in the metropolitan area, along the north shore of Corpus Christi Bay (upwind on high ozone days), and to the west and south (downwind on high ozone days). These monitors are used for research purposes to define the magnitude of the transport problem. Three of these were operated during the 2004 and 2005 ozone seasons and have provided a great deal of useful information. Three more were installed in 2006. (Appendix 5)

A third set of seven monitors was installed for the Corpus Christi Air Quality Project (CCAQS) by TCEQ and the University of Texas-Austin. These monitor the levels of hydrocarbons in the area. Two of them are equipped with continuous gas chromatographs which provide speciated hydrocarbon data on a real-time basis 24 hours a day. These were in operation for the 2005 ozone season and beyond.

MAJOR SOURCES IN ADJACENT AND UPWIND COUNTIES

Major point sources upwind of the Corpus Christi Urban Airshed are included in the database of point sources maintained by the TCEQ. The information from this database is included in the emissions inventory input into the CAMx regional base case model (discussed below) used to simulate ozone production. This model is a tool used for emissions reduction strategy analysis for the airshed.

HIGH OZONE EPISODES. Monitoring has shown that normally low ozone levels in the Corpus Christi area are occasionally elevated to near the National Ambient Air Quality Standard. These episodes are characterized by hot sunny days, cloudless skies, light northeasterly winds, and high background levels of ozone and ozone precursors associated with inbound transport from northeast of the community.

These conditions facilitate buildup of ozone levels from local emissions of ozone precursors. Special events such as holiday weekends and festivals generate additional motor vehicle traffic that increases local sources. High ozone episodes usually span several days and end when the inbound transport from the northeast ends.

REGIONAL PHOTOCHEMICAL MODELING.

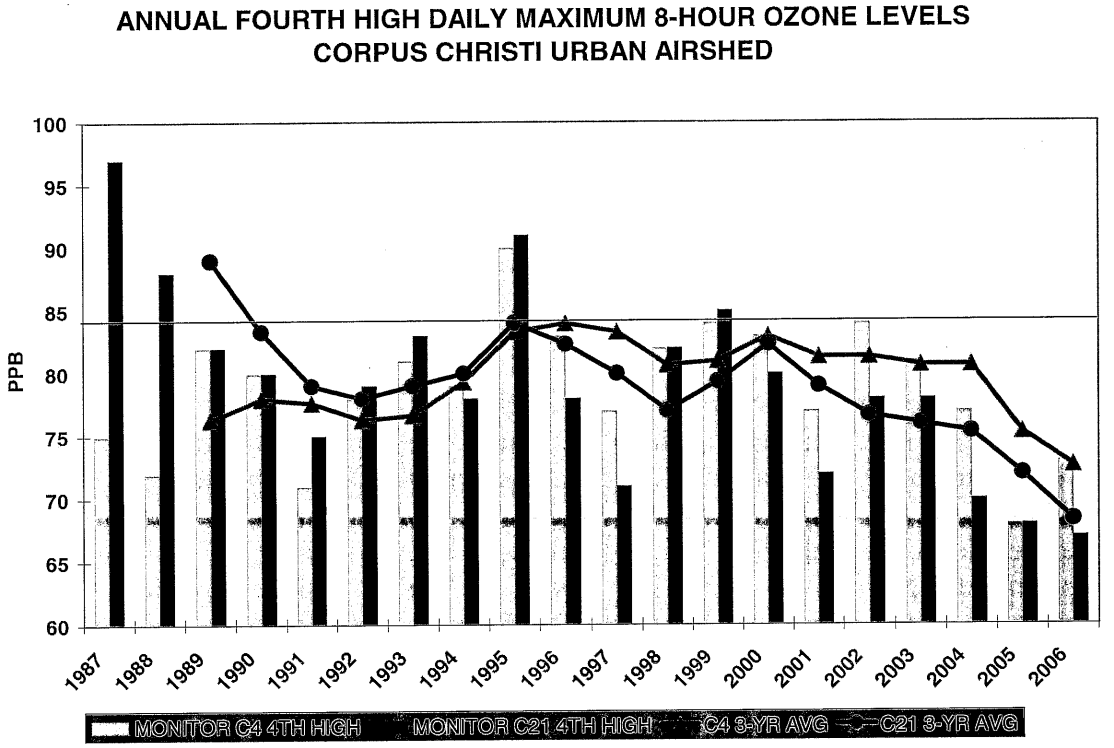
The Corpus Christi Air Quality Committee and Texas A&M University-Kingsville (TAMUK) participated in the development of a base case regional photochemical model simulating the September 1999 ozone episode. This modeling was accomplished with the cooperation of the Texas Commission on Environmental Quality and the communities of San Antonio, Austin, and Victoria. This episode was regional in nature covering most of central and South Texas. The model simulates ozone plume movement down the coast and ozone production from local emissions. The resultant concentration plot compares quite favorably with actual monitor data.

Texas A&M University-Kingsville, Department of Environmental Engineering began doing air quality studies for the Air Quality Committee in 1995 using funds contributed by local businesses and government entities. The product of the regional study is a base case Comprehensive Air Quality Model (CAMx) for the region and is used for sensitivity analyses to determine the impact of selected source categories on ozone formation in the area. With sensitivity analyses, emissions reduction strategies are tested for their impact on the region. Use of the model helps to provide a determination of the most effective strategies for ozone control unique to the Corpus Christi urban airshed.

A number of sensitivity analyses have been run. Those would include runs to investigate the impact of emissions from sources and locations upwind from Corpus Christi as well as various source types within the Corpus Christi airshed. A report on that activity is available in the Rider 13 report submitted to TCEQ in January 2005, which may be found on the University's website at http://air.tamuk.edu/rider13-0001/.

TRENDS AND MEASURES OF SUCCESS. Monitoring has shown a slight downtrend in annual fourth high daily 8-hour average ozone levels during the past ten years.

Figure 5: **Fourth High 8-Hour Ozone Levels Observed by Year**



This improvement is attributed to the voluntary measures implemented under the provisions of the Flexible Attainment Region Agreement approved in 1996 and the O3FLEX Agreement approved in 2002. These voluntary measures were selected to stabilize ozone 1-hour averages, but the success of these measures is also reflected in 8-hour monitoring results.

The following Table 1 contains estimates of emissions reductions achieved as a result of the voluntary programs established in the 1996 Flexible Attainment Agreement and the 2002 O3FLEX Agreement that would be continued under this Agreement. Estimates for Stage One Vapor Recovery and Low RVP Gasoline include all reductions. Regulations now require Stage One for larger gasoline retail outlets; but the ongoing voluntary training activities include non-regulated facilities and result in increased compliance by regulated facilities. Low RVP gasoline is now required in summer months but not in October.

Table 1: Emission Reduction Estimates from Voluntary Controls

Voluntary Control Strategy	VOC (Tons/Yr)	NOx (Tons/Yr)
Stage I Vapor Recovery	766	---
7.8 RVP Gasoline April - September	622	
9.0 RVP Gasoline in October	88	
TERP reductions		33.4
Graphic Arts BACT	57	
Dry Cleaning BACT	226	
Furniture Mfg. BACT	170	
Auto Refinishing BACT	11	
Sand blasting/painting BACT	20	
Marine Loading Controls	2538	

Additional reductions resulting from ozone action day alerts and similar educational outreach efforts are much more difficult to quantify. A telephonic community survey was conducted by DeVille and Associates in September 2004. Responses were received from 400 people. A similar survey was conducted by Deville and Associates in 1995. When people were asked what the major sources of air pollution were, 18% stated "auto emissions" compared to 3% in the 1995 survey. 10% associated their activities with air emissions in 2004 compared to 5% in the 1995 survey. When asked what they do to help reduce pollution, 68% stated that they keep their vehicle tuned in the 2004 survey compared to 51% in the 1995 survey. 24% responded that they car pool in the 2004 survey compared to 14% in the 1995 survey. Although it is difficult to assign a measured emission reduction from the improved community education and subsequent emission reduction activities, it can be inferred that the community is realizing reduced emissions as a result of community education and response. Since there is no reliable method to verify results, we have not attempted to associate numbers to those programs.

COMPLETED PLANNING AND EMISSIONS REDUCTION ACTIVITIES. Since 1995 a number of air quality planning measures and voluntary emission reduction measures have been initiated and have been fully implemented.

Planning and Research. Air quality planning measures have afforded the opportunity for scientific research and study. The air quality planning measures for the Corpus Christi urban airshed are sponsored by the near nonattainment area funding program through the TCEQ. The TAMUK Department of Environmental Engineering leads the research effort, which has as its goal a mechanism enabling sound decisions to reduce emissions, especially the types of emissions that affect peak ambient ozone levels more than others.

The contribution of "highly reactive hydrocarbons" to ozone production in the Houston area was identified as a result of the TexAQS 2000 Field Study.

Stationary emission sources, control devices, control procedures. Refineries, petrochemical plants, and other major industries implemented the following actions:

- Marine vapor recovery and control equipment is used at marine tank ship and barge loading facilities for transfer of products that have a vapor pressure higher than 0.5 psi.
- Uncontrolled loading of volatile products that have a vapor pressure higher than 0.5 psi is rescheduled to occur on days other than Ozone Action Days to the extent feasible.
- Industries and the Port of Corpus Christi Authority made specific commitments to voluntarily reduce emissions.

Public awareness, notification and participation programs. The TAMUCC Department of Community Outreach Pollution Prevention Partnership has provided emission reduction recommendations and activities to the community, complementing and building on the public education and outreach activities of the TCEQ. This effort has gained acceptance by small business owners, vehicle owners and operators, and other citizens of emissions reduction recommendations that have contributed to continued attainment of the National Ambient Air Quality Standard for ozone.

- An ozone action day program was initiated by TCEQ. Major participants include the City of Corpus Christi, the TAMUCC, local industries and military installations, the Corpus Christi Regional Transportation Authority, the Port of Corpus Christi Authority, and the Texas Department of Transportation.

Small Business Assistance. The TAMUCC Department of Community Outreach Pollution Prevention Partnership established a program in 1995 to educate small business on methods to reduce emissions and waste streams at their facilities through an ambitious outreach effort. The strategy for the program was based on the assumption that many small businesses use equipment, materials, and processes that could be changed both to benefit the business and to reduce pollution, and that small businesses will voluntarily make changes to reduce emissions if managers believe it is in their company's best interest to do so.

Business sectors were targeted through an analysis of emissions inventory data, and in consultation with TCEQ Region 14 and the TCEQ Local Government and Small Business Assistance Program. Sectors included gasoline retail outlets (stage I vapor recovery), graphic arts, dry cleaners, furniture manufacturing, automobile refinishing, and sand blasting/painting. Pollution Prevention Partnership staff members met with small business representatives and consultants to identify motivations for participation, best practices, pollution prevention possibilities, and applicable environmental regulations. Educational seminars, training sessions, and compliance audits were provided based on a program specifically designed for each small business sector to follow the recommendations from industry representatives who participated in focus groups. Sector advisory groups were recruited and high-credibility consultants in each business sector were used as needed for technical assistance, while leveraging other volunteer resources.

Participants received and display the Pollution Prevention Partnership window decal as part of a community wide recognition effort.

Mobile sources.

- Local refineries have voluntarily provided the Corpus Christi area with gasoline having lower Reid vapor pressure than required by regulation, as a measure to reduce emissions of volatile organic compounds. Beginning in 1996, refineries have provided gasoline having a maximum vapor pressure of 7.8 psi during the months May through September, a reduction from the maximum of 9 psi then allowed by regulation. Subsequently, research and monitoring programs have shown that the ozone season in the Corpus Christi urban airshed extends through the month of October. Therefore, beginning in 2000, refineries have voluntarily provided gasoline during October of each year having a maximum vapor pressure of 9 psi, a reduction from the maximum of 11.5 psi currently allowed by regulation.

- The use of alternative fuels has been encouraged with the assistance of the Clean Cities Program of the U.S. Department of Energy. The City of Corpus Christi, which operates a consumers' natural gas distribution system, has committed to promote the use of compressed natural gas as an alternative fuel for vehicles. The first public fueling station for compressed natural gas located at 4225 South Port Avenue was constructed and placed into operation in 2001.

- Local propane dealers have actively promoted retail sale and use of propane for vehicle fuel. One of the propane dealers installed a consumer accessible fueling station with 24-hour, card reader availability.

- The Corpus Christi Regional Transportation Authority (RTA) has aggressively pursued strategies to utilize clean fuels. Fleet fixed-route services and para-transit services use low emissions vehicles.

- The Texas Legislature created and funded the Texas Emissions Reduction Plan to provide grants and other incentives for improving air quality throughout the state. The plan is being administered by the Texas Commission on Environmental Quality, in cooperation with the following participants: the Texas Emissions Reduction Plan Advisory Board, the Public Utility Commission of Texas, the Comptroller of Public Accounts, the Texas Department of Transportation, the Energy Systems Laboratory of Texas A&M University, the Texas Council of Environmental Technology, and the State Energy Conservation Office. The plan has been implemented in the Corpus Christi urban airshed to accomplish the following:

    - Provide funding for cleaner on- and off-road engines.
    - Provide funding for energy efficiency programs.
    - Provide funding for cleaner fuels and other infrastructure programs.

- Provide funding for research and development of new technologies.
- Replace rules that would have restricted operation of construction equipment and also would have required early purchase of cleaner off-road diesel equipment in certain counties in Texas.
- The following projects in the Corpus Christi urban airshed have been approved:

Table 2

App. Number	Applicant	Approved Amount	Total Projected NOx Reduction	Tons per Day NOx Reduced	Projected cost per ton	Category	Equipment or Vehicles
20042044	**Gulf Marine Fabricators**	$973,000	139.12	0.1113	$6,994	Repower	Equipment
20042159	**Terminal Transportation, Inc.**	$33,000	4.72	0.0038	$6,992	Repower	Equipment
20042371	**Kiewit Offshore Services, Ltd.**	$175,365	26.30	0.0210	$6,668	Repower	Equipment
20042376	**Berry Contracting, LP dba Bay Ltd.**	$726,631	105.21	0.0842	$6,906	Repower	Equipment
	CORPUS CHRISTI AREA	**$1,907,996**	**275.35**	**0.22**	**$6,929**		

- Other control measures adopted by TCEQ that include Corpus Christi in their scope include:
  - Texas Low Emission Diesel (TxLED)
  - Low Reid Vapor Pressure (RVP) Gasoline (required)
  - Large Non-Road Spark-Ignition Engine Standards
  - California NTE Heavy-Duty Diesel Engine Emission Standards
  - Vehicle Anti-Tampering Restrictions
  - Vehicle Gas Cap Testing (Dept. of Public Safety Rules)
  - Portable Fuel container Rule
  - Water Heaters, Small Boilers, and Process Heaters
  - Voluntary Energy Efficiency/Renewable Energy

ACTION PLAN

PLANNING MEASURES. Air quality planning measures will be carried out by TAMUK with near nonattainment funding provided by the Texas Legislature through TCEQ and the City of Corpus Christi. Scientific research and study will enable appropriate and effective control measures to be identified, prioritized, and selected as necessary through the process established in this agreement. A proposed work plan for two-years is attached as Appendix 3. A summarized scope of work follows:

Monitoring air pollution levels

- Operate and maintain three air-quality monitoring sites – Holly Road, Violet, and Aransas Pass – within San Patricio and Nueces counties for ozone concentration and meteorological parameters.
- Maintain an additional three monitoring sites in San Patricio County funded through a grant from the Texas Environmental Education Program and TCEQ (Appendix 5).
- Conduct continuous monitoring of nitrogen oxides (NOX) concentrations at the

Holly Road site during the ozone season.

- Upgrade air monitoring equipment at the three Texas A&M University-Kingsville (TAMUK) monitoring sites.
- Conduct simultaneous monitoring of volatile organic compounds (VOC) at an urban site, a downwind site and at an upwind site within the Corpus Christi urban airshed and perform speciation analysis at the TAMUK hydrocarbon research laboratory.
- Compare TAMUK monitoring data to those obtained from the TCEQ sites in Corpus Christi during the ozone season.

Inventorying sources of emissions of ozone precursors

- Develop an Inventory Preparation Plan document for the emissions inventories that will be submitted to the TCEQ for comment and approval. TCEQ staff will be available for consultation regarding U.S. Environmental Protection Agency (EPA) guidance.
- Enhance the 1999 emissions inventory for several categories of sources that needed further investigation. These include minor point sources, construction equipment, and key non-road sources. These source categories will be addressed through surveys and/or other means to obtain an accurate inventory.
- Develop a refined 2002 emissions inventory for the Corpus Christi urban airshed. Activity data representing 2002 will be collected when available in order to develop a 2002 inventory. A methodology to grow the other categories from the 1999 inventory will also be evaluated.
- Conduct survey from Permit by Rule (PBR) filings at TCEQ Region 14 for minor point sources over Corpus Christi urban airshed to update the emission inventories for 1999 and 2002 emissions inventory.
- Develop an updated point source database with speciated hydrocarbons for air quality modeling activities for 1999 and 2002 emissions inventory.
- Investigate NOx and VOC hot spots along roadways where high values of emissions are observed based upon real-world data. Develop quantifiable estimates of emissions from major hot-spots for 1999 and 2002 emissions inventory. Use the Texas A&M University-Corpus Christi (TAMU-CC) remote-sensing project to evaluate tailpipe emissions from on-road mobile sources and inter-compare with MOBILE6 estimates for the Corpus Christi urban airshed.
- Use GIS tools to spatially disaggregate county wide emissions into an equally spaced mesh structure (1x1km), which develops a high resolution data to be used for modeling purposes, which also enables visual analysis of the EI over the appropriate geographical region.
- Submit all area, on-road, non-road, and biogenic emissions data in the EPA NIF, version 3.0, format for input into the National Emissions Inventory submitted to TCEQ.
- Submit all point source emissions data in NIF format linked with MS Access 2003 to TCEQ.

Analyzing air quality data:

- Continue the study of historical ozone concentration data obtained from TCEQ's air monitoring stations, CAMS04 and 21, and data from additional research stations, CAMS 659, 660, and 664.
- Utilize information gathered from the Corpus Christi Air Quality Study continuous gas chromatographs to gauge the levels of "highly reactive hydrocarbons" in the Corpus Christi urban airshed and determine their effect on local ozone production using the CAMx Base Case Regional Model.
- Develop a conceptual model for the Corpus Christi urban airshed by using more enhanced analyses to select a representative set of modeling episodes exceeding the eight-hour ozone NAAQS for the South Texas region with updated 2003/2004 air quality data.
- Develop web-based real-time air quality data dissemination tools easy for public and research users to access for analyzing and interpreting air quality data. This will provide user-friendly interface via the use of real-time online analysis tools including active data retrieval system and graphical data analysis tools for air quality planners and researchers.

Modeling air quality:

- Improve the September 1999 episode modeling performance generated by the joint Near NonAttainment modeling project by refining emissions and meteorological inputs and test model performance along the coastal regions.
- Test photochemical model sensitivity to variations in meteorological parameters and emissions estimates as defined in the TCEQ approved Rider 8 Workplan (Appendix 3) and its successor agreements.
- Test model sensitivity to changes in emissions input due to changes/revisions/updates in emissions factors, emissions models, and/or emissions processing techniques.
- Update on-road estimates using MOBILE6 and compare with estimates using MOBILE5a. Evaluate photochemical model predictions based on the two sets of on-road emissions estimate.
- Evaluate the impact of Corpus Christi sources on other near non-attainment areas as well as evaluate the impact of upwind source regions on Corpus Christi.
- Develop an online support tool using a series of existing photochemical model runs and Geographical Information Systems (GIS) for ambient air quality analysis and planning.
- Improve the modeling of highly reactive volatile organic compounds (HRVOC) in the creation of ozone based on the latest technological developments to better understand the contribution and sensitivity of volatile organic compounds (VOC) to ozone formation.
- Simulate photochemical model sensitivity runs to assess effective control strategies and identify alternatives beneficial to Corpus Christi.
- Use the conceptual model developed and updated for the Corpus Christi urban airshed for identifying additional high ozone episodes for modeling. Additional

episodes will be identified in conjunction with other near nonattainment areas for potentially additional joint modeling activities.

- The CCAQS continuous GCs will provide information to gauge the levels of VOCs in Corpus Christi air. This information will be used with the CAMx Base Case Regional Model to determine their effect on ozone production locally.
- Perform base case photochemical modeling for the Corpus Christi urban airshed using the CAMx model for the 2002 high ozone episode and conduct a detailed model performance evaluation.
- Identify emissions control strategies beneficial for the Corpus Christi urban airshed using optimization techniques applied to the model simulations for both the 1999 and 2002 episode.
- Notify TCEQ technical staff of file download location of any modeling files generated that were not originated by TCEQ. Such file transfer site and files will be available for download for at least two years. Additionally, TCEQ staff may ask that modeling files be submitted. Modeling files shall be made available in EPS3 and CAMx-ready input formats, with message files and summaries.

VOLUNTARY EMISSIONS REDUCTION MEASURES. Employers and citizens in the Corpus Christi urban airshed will implement the following voluntary control measures to reduce emissions of ozone precursors:

Stationary emission sources, control devices, control procedures.

- Industries and the Port of Corpus Christi Authority will make specific commitments to voluntarily reduce emissions, as indicated in letters included as Appendix 6.
- Local industries, other local entities, and/or TCEQ will deploy infra-red cameras as needed to assist in detecting VOC emissions for the purpose of identifying voluntary emissions reductions in the Corpus Christi urban airshed.

Public awareness, notification and participation programs. Implementing voluntary emissions reduction measures requires identifying measures or changes in behavior that will result in reduced air emissions, and communicating with people engaged in those behaviors to inform them of what they can do and why they should do it. Public awareness, notification and participation programs are critical to achieving the goal of this Agreement – to maintain attainment of the ozone standard. Activities will be planned and implemented in coordination with the TCEQ Region 14 Office and Small Business and Local Government Assistance Program.

- Air quality curricula for area schools for all grade levels.
- A new digital presentation that can be modified for various audiences with an accompanying hand-out.
- Contributions to newsletters and trade journals of local civic and business groups.
- Annual Clean Air Fairs.
- Clean Air High School Science Fairs.
- Clean Air bus wrap.

- Completion of an EPA funded research project investigating public health impact of local air quality on children and promotion of findings with emission reduction recommendations.
- Implementation of the *"Statewide Transportation Air Quality Public Outreach and Education Program"* in partnership with the Texas Transportation Institute, Texas Department of Transportation, and Texas Commission on Environmental Quality using television spots, billboards, and radio spots to encourage Texans to "Drive Clean across Texas" through car-pooling, proper vehicle maintenance and alternative transportation options.
- Employment of TCEQ's world-wide-web-based "Today's Air Quality Forecast" extending over four days, giving participants more advance notice enabling better planning of ozone action day activities.
- Implementation of ozone action day messages, alternate route, and congestion minimization messages on TxDOT intelligent message system highway signs.
- Implementation of ozone action day messages and recommendations on National Weather Service telephone recordings, web site, television weather information channels, and weather radio announcements.

Small Business Assistance. The TAMUCC Department of Community Outreach Pollution Prevention Partnership will initiate a program to educate small businesses on methods to reduce emissions focusing on mobile sources. Vehicle fleet operators and fleet maintenance facilities will be trained to reduce emissions from fleet vehicles. Owners of commercial and fleet vehicles will be identified, contacted, and baseline information collected. Viable pollution prevention strategies including alternate fuels and installation of pollution prevention equipment will be promoted. Technical support will include assisting with the identification and quantification of potential emission reductions, equipment and fuel selection and implementation, identification of funding assistance sources, and assisting with the submission of funding proposals such as the Texas Emissions Reduction Program (TERP). Analysis of fleet & commercial vehicle emissions reduction will include potential participating companies or agencies contacted, training materials, TERP or other funding applications submitted, data on pollution prevention strategies implemented, vehicles converted to alternative fuels, and additional research, data, and lessons learned. Similar programs will be delivered to fleet maintenance facilities.

Mobile sources.

- Vehicle exhaust emissions. The TAMUCC Department of Community Outreach Pollution Prevention Partnership will fully implement the remote vehicle exhaust emissions sensor known as the AutoCheck program.
    - Identify high polluting vehicles through the use of remote vehicle exhaust emissions monitoring equipment and car care clinics where automotive mechanics provide free advice to those with poor tailpipe emissions.
    - Assist owners of high polluting cars and trucks in getting repair assistance, and gather pre-repair and post-repair data to accurately measure the reductions.

- Educate the public about the importance of voluntary reduction of emissions through car maintenance and changes in the way cars and trucks are used.
- TAMUCC and TAMUK will collaborate to analyze and publish data gathered by AutoCheck to serve as the basis of publishable research that will further validate emissions measurement and reduction efforts

- Trip reduction.
  - TAMUCC is developing a campus-wide clean-commute program coordinated by the Pollution Prevention Partnership. The University serves 8,000 students and faculty and staff make up another 1,200, all of which are potential commuters. The program entails geographic information system (GIS) coding of the residence of each student, faculty and staff member as well as existing bus routes. Gaps in bus service, recommendations about revised service to fill gaps, preferred parking for car-poolers, bicycle racks on campus serving buses and a privacy protected on-line data base of all campus commuters willing to car-pool with their associated GIS codes will be available to the campus community.
  - The Corpus Christi Metropolitan Planning Organization (MPO) will assist other local government agencies in implementing the Regional Bicycle and Pedestrian Plan with the objective of improving the facilities available to encourage the use of bicycle and pedestrian trip alternatives.

<u>Emissions Reductions from New Legislation/Rules</u>.

- TERP. The Texas Legislature created and funded the TERP to provide grants and other incentives for improving air quality throughout counties affected by the associated fee increases, including Nueces County and San Patricio County. The plan is being administered by the TCEQ. Numerous on-going and future projects lend themselves well to TERP funding such as retrofits for oil and gas compressors, construction equipment retrofitting and other associated equipment projects.

<u>Other voluntary measures that could be considered</u>

- Substantially increase the number of businesses notified on Ozone Action Days.
- Increase the number of public announcements about ozone.
- Post air quality information on business signs and marquees.
- Set up an ozone hotline.
- Implement an employee commute options awareness program for businesses with twenty-five or more employees, including telecommuting, car-pooling, and trip reduction
- Develop a pilot project for truck stop electrification to reduce truck idling time.
- Promote participation in Texas A&M University-Corpus Christi's small business Pollution Prevention Partnership by additional business sectors.
- Expand the provision of bus service to special events.

- Incorporate in public purchasing and construction contracts incentives for vendors and contractors to use the various benefits of the Senate Bill 5 Texas Emissions Reduction Plan.

IMPLEMENTATION OF ONE NEW MEASURE WITHIN ONE YEAR. The Air Quality Committee will select and implement one or more voluntary control measures within one year after this Agreement is signed. The measures selected may be quantifiable reduction measures not yet implemented from the VOLUNTARY EMISSIONS REDUCTION MEASURES listed above, or any other quantifiable measure identified through the program of scientific research described in "Planning Measures" consisting of inventorying emissions, monitoring ozone levels, assessing relative effectiveness of control strategies, and evaluating specific control strategies that will significantly affect ozone levels.

The following quantifiable control measure is proposed to be implemented within one year after this Agreement is signed:

<u>"AutoCheck" On-Road Mobile Source Vehicle Exhaust Emissions Reduction Project.</u>

The TAMU-CC Department of Community Outreach, Pollution Prevention Partnership, will fully implement the vehicle exhaust emissions project known as the AutoCheck program.

- Identify high polluting cars and trucks through the use of exhaust emissions monitoring equipment and car care clinics.
- Support owners of high polluting cars and trucks in receiving repair assistance, and gather pre-repair and post-repair data to accurately measure and validate the reductions.
- Educate the public about the importance of voluntary reduction of emissions through car maintenance and changes in the way cars and trucks are used (driving habits).
- TAMU-CC and TAMU-K will collaborate to analyze and publish data gathered by AutoCheck to serve as the basis of publishable research that will further validate emissions measurement and reduction efforts.

The University of Denver deployed its Smart Sign emissions information system in Corpus Christi, and the results showed that a small number of cars and trucks produce a large portion of the total amount of tailpipe emissions from all vehicles sampled. Subsequently, Supplemental Environmental Project funding and near nonattainment area funding has provided for the procurement of exhaust emissions monitoring equipment and operational expenses. The project, called AutoCheck, is capable of measuring the exhaust emissions of vehicles. When used as the basis of ongoing Car Care Clinics, high polluting vehicles can be located regularly and all participating drivers can receive feedback on their car's performance. The testing and evaluation phase of AutoCheck has indicated that the program will be successful in lowering pollution levels from vehicle emissions by helping the drivers of high polluting cars and trucks get repair assistance. Pre- and post-repair data was gathered to accurately measure the reductions in ozone-

related emissions (see Appendix 7). The average emissions per vehicle when first tested and after repair were as follows:

	NOx	HC	CO
Pre-Repair (ppm)	192	341	0.65
Post-Repair (ppm)	44	60	0.36
Reduction (ppm)	148	281	0.29

An estimated 12,000 vehicles will be screened annually, and high polluting vehicles will be identified. Based on the results from testing and evaluation, it is estimated that fully implementing the AutoCheck program during the first year after this Agreement is signed will result in the owners of 160 identified high polluting vehicles volunteering to participate in the repair and retesting program, yielding average measured reductions of 148 ppm NOx, 281 ppm HC, and 0.29 ppm CO.

CONTINGENCY MEASURES. The aforesaid measures are expected to be sufficient to minimize exceedances and prevent violations of the 8-hour ozone standard, but if exceedances or violations occur, then the region will be expected to voluntarily implement some control measures that may be required in nonattainment areas in addition to other control measures the community may select.

Definitions. For the purpose of this agreement, two-year average, exceedance and violation are defined as follows:

> Two-year average: The average for the current and previous calendar years of the fourth highest daily maximum 8-hour average each calendar year.
>
> Exceedance: A daily maximum 8-hour average exceeding 0.08 parts per million.
>
> Violation: An average exceeding 0.08 parts per million of the fourth highest daily maximum 8-hour average each calendar year for three consecutive calendar years.

Action Level. If there is deterioration in air quality evidenced by a two-year average of 84 parts per billion or higher and occurrence of four exceedances at CAMS 4 in the current calendar year, or a two-year average of 84 parts per billion or higher and occurrence of four exceedances at CAMS 21 in the current calendar year, then the cause of the exceedances will be evaluated. Additional voluntary control measures will be implemented. Within sixty days following the fourth exceedance, the Air Quality Committee will review and select from the list of available control measures one or more additional voluntary control measures which will prevent violations. Within ten days following the action of the Air Quality Committee, a report of such action will be submitted to the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency. Implementation of selected voluntary control measures will proceed in a timely manner to reduce ozone precursors as soon as practicable.

1. The measures selected may be a reduction measure not yet implemented from the VOLUNTARY EMISSIONS REDUCTION MEASURES listed above, or any other measure identified through the program of scientific research described in "Planning Measures" consisting of inventorying emissions, monitoring ozone levels, assessing relative effectiveness of control strategies, and evaluating specific control strategies that will significantly affect ozone levels.

2. On the occasion of a fifth or subsequent exceedance, then the cause of the exceedances will be evaluated. Additional voluntary control measures will be implemented. Within sixty days following the fifth or subsequent exceedance, the Air Quality Committee will review and select from the list of available control measures one or more additional voluntary control measures which will prevent violations. Within ten days following the action of the Air Quality Committee, a report of such action will be submitted to the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency. Implementation of selected voluntary control measures will proceed in a timely manner to reduce ozone precursors as soon as practicable.

Violations. If there is a deterioration of air quality as evidenced by recorded violations of the 8-hour ozone standard, then the cause of the violations will be evaluated and additional control measures needed will be identified. Within sixty days of a violation of the 8-hour ozone standard, the Air Quality Committee will:

(1) review and evaluate control measures currently being used and the monitoring results through an open, participative process,
(2) review modeling to evaluate the results of photochemical simulation of select emissions control strategies, and identify measures through the program of scientific research described in "Planning Measures" consisting of inventorying emissions, monitoring ozone levels, assessing relative effectiveness of control strategies, and evaluating specific control strategies that will significantly affect ozone levels, and
(3) develop a recommendation to implement one or more additional control measures, in consultation with the Texas Commission on Environmental Quality and the U.S. Environmental Protection agency, for consideration by the local governments.

Within sixty days following submission of the recommendation to the local governments, the recommendation will be forwarded to the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency requesting that such control measures are made enforceable as appropriate in accordance with the following procedure:

1. If a violation occurs, the City of Corpus Christi will request the Texas Commission on Environmental Quality to:
    a. Prepare and submit an updated emissions inventory to the U.S. Environmental Protection Agency within two-years; and

b. Amend, within one year of the recommendation being sent to the State and EPA, the State Implementation Plan to enforce one or more of the following additional control measures:

(1) Stage one vapor recovery systems at all gasoline retail outlets (current regulations only apply to the larger outlets);

(2) Vehicle inspection and maintenance, including one or more of the following elements:

- Two-speed idle emissions test
- On-board diagnostic system
- Dynamometer Acceleration Simulation Node 2 (ASM2) test
- Remote sensing program

(3) Fugitive volatile organic compound emissions control for valves at the leak detection level of 500 parts per million VOC, and utilization of infrared technology or the regulatory reference method to conduct periodic surveys of process units for VOC sources outside the standard refinery leak detection and repair programs.

(4) Additional generally accepted nitrogen oxides reductions or controls for point sources to levels predicted by local modeling necessary to achieve the 8-hour ozone standard.

(5) Incentives to encourage accelerated turnover of vehicle fleets.

(6) A reduction measure selected from the VOLUNTARY EMISSIONS REDUCTION MEASURES listed above provided that the measure is quantifiable, enforceable, surplus, and permanent.

(7) Any other measure identified through the program of scientific research described in "Planning Measures" consisting of inventorying emissions, monitoring ozone levels, assessing relative effectiveness of control strategies, and evaluating specific control strategies that will significantly affect ozone levels.

Implementation of selected enforceable control measures will proceed in a timely manner to reduce ozone precursors as soon as practicable but no longer than 24 months from the date of violation. Following complete implementation of selected enforceable control measures, a period of one year will be granted to evaluate the effectiveness of selected measures. No additional enforceable measures will be required during the one-year evaluation period. During the evaluation period, an updated emissions inventory will be incorporated into the program of scientific research described in "Planning Measures" to provide updated assessments of the relative effectiveness of control strategies, and ongoing evaluations of specific control strategies, including the selected enforceable control measures.

2. If, after the measures in item 1 above have been implemented, another violation occurs following the evaluation period, then the City of Corpus Christi

will request the Texas Commission on Environmental Quality to amend the State Implementation Plan to enforce one or more additional control measures selected from the list of measures in the foregoing subparagraph 1 not yet implemented, or from the following list:

a. A regulation that reduces the maximum allowable Reid vapor pressure of gasoline during selected months of the ozone season.
b. A regulation that requires stage two vapor recovery at retail gasoline outlets.

SEMI ANNUAL REVIEW. During the term of this agreement the Air Quality Committee will voluntarily continue meeting to oversee the program of scientific research described in "Planning Measures" and to monitor progress. On an annual basis, the Air Quality Committee during November through March will assess the effectiveness of voluntary or mandatory control measures in conjunction with improved technical understanding of the ozone problem. As part of the annual review the Committee will consult with the Texas Commission on Environmental Quality and the U.S. Environmental Protection Agency to consider whether to recommend any mid-course corrections to the action plan. The Air Quality Committee will provide semiannual reports for US EPA Region 6, TCEQ, and local stakeholders containing the latest information on implementation of control measures, ozone monitoring data, and the success of current measures.

CORPUS CHRISTI URBAN AIRSHED AGREEMENT

This Agreement is between the local governments representing the City of Corpus Christi, Nueces County, San Patricio County, Port of Corpus Christi Authority, Corpus Christi Metropolitan Planning Organization, and Corpus Christi Regional Transportation Authority (herein referred to as the local governments), the Texas Commission on Environmental Quality (TCEQ), and the United States Environmental Protection Agency (EPA) for the purpose of reducing ground-level ozone concentrations in the Corpus Christi Urban Airshed (Airshed) using locally selected control measures that account for the unique character of the region and accommodate the region's social and economic needs.

This agreement emphasizes local flexibility in selecting and implementing emissions reduction measures. Given the varied emissions contributions and socioeconomic characteristics of the entities in the Airshed, not all measures can or should be implemented by all entities. Rather, each entity will implement the measures that work for its specific jurisdiction and, when added together, work for the region as a whole.

I. GENERAL PROVISIONS

A. The signatory parties commit to develop, implement and maintain this Agreement according to applicable EPA guidelines and adhere to all terms and conditions stated in the guidelines.

II. EPA AND TCEQ RESPONSIBILITIES

A. Regulations that apply to an area would still apply under the 8-O3Flex program. The 8-O3Flex program does not shield an area from being redesignated nonattainment for the 8-hour ozone standard if the area is in violation of that standard. Should a violation occur, EPA would consider factors in section 107(d)(3)(A) of the Act. These include "air quality data, planning and control considerations, or any other air quality-related considerations the Administrator deems appropriate," including time to allow the implemented contingency measures to work. As long as the 8-O3Flex agreement and control measures in the MOA are being fully implemented, EPA would consider that circumstance in exercising its discretion in making a decision to redesignate the area to non-attainment.

B. The signatories' intent in entering into this Agreement is to proactively implement and sustain air quality improvement strategies that are tailored to local conditions and are effective, practical and measurable in reducing ground-level ozone concentrations. This Agreement should in no way be construed as a strategy to avoid or to defer a nonattainment designation under the 8-hour ozone standard.

C. EPA and TCEQ commit to informing the Air Quality Committee of all available options and flexibility, to the extent allowed by the Federal Clean Air Act, in the event that the area, or any portion of the area, is determined to be non-attainment for the 8-hour ozone standard for the duration of this agreement.

D. EPA supports flexible approaches that account for the complex nature of ozone formation and has provided SIP credit for communities that adopt quantifiable measures for ozone reduction plans that may be required in the future. EPA will, consistent with the Federal Clean Air Act, do all it can do to allow the Airshed appropriate State Implementation Plan credit for strategies implemented under the terms of this Agreement.

E. This Agreement's terms do not abrogate any state or federal legal requirement. The TCEQ and the EPA enter this Agreement solely for the purpose of their responsibilities under Section 107(d)(3)(A) through (D) of the Federal Clean Air Act.

III. LOCAL GOVERNMENT RESPONSIBILITIES

A. This Agreement developed by the Air Quality Committee contains an introduction and sections describing the region's background, action plan, other potential measures, contingency measures, coordination and public participation process, schedules and reporting mechanism. These sections and associated appendices further define the local governments and participating entities commitments and actions.

B. The local interests will continue to conduct air dispersion modeling and design through the Corpus Christi Air Quality Committee with funding provided by the Texas Legislature through the TCEQ.

C. The Air Quality Committee will continue to develop and regularly update area emissions inventories with funding from the Legislature through the TCEQ.

D. The Air Quality Committee will implement contingency measure(s) that will be effective if a violation of the 8-hour ozone standard occurs.

1. The contingency measure(s) will be selected from those listed in the "Contingency Measures" section of this document and will be submitted to TCEQ within 120 days of the date of the 8-hour ozone standard violation for adoption into the State Implementation Plan.

2. The selected contingency measure(s) will be implemented within 24 months of the date of violation.

IV. EXPECTED AGREEMENT DURATION

A. The signature date of this Agreement is the start date of the agreement's term. This agreement remains in effect for five years. By mutual agreement, the parties may extend the term of this Agreement at the end of its term and at the end of each successive term.

V. CONDITIONS FOR MODIFICATION OR EARLY TERMINATION

A. This agreement may be modified or terminated by mutual consent of all signatory parties.

B. Any signatory party may withdraw from the agreement if provisions of the agreement are not carried out by the other signatory parties. As a voluntary program, the area can choose to end it's participation at any time.

C. Failure to abide by the terms of the agreement, should violation of the 8-hour standard occur, could lead to redesignation as nonattainment for the 8-hour standard.

VI. ADDITIONAL TERMS OF THIS AGREEMENT

A. This Agreement creates no cause of action against any party beyond those, if any, that may already exist under state or federal law. In addition, all parties agree that this Agreement cannot be used against one another or by a third party as an enforceable order in any court proceedings. This Agreement will be reviewed and modified as needed.

Executed in multiple copies by the signatory parties to this Agreement. The representatives of the signatory parties executing this Agreement represent their authority to sign the Agreement and to bind the signatory party they represent to the terms of this Agreement.

City of Corpus Christi
George K. Noe, City Manager

By:_____ Approved by City Attorney:_____

Date:_____ Date:_____

Nueces County
Samuel L. Neal, County Judge

By:_____

Date:_____

San Patricio County
Terry A. Simpson, County Judge

By:_____

Date:_____

Port of Corpus Christi Authority
John LaRue, Executive Director

By:_____

Date:_____

Corpus Christi Metropolitan Planning Organization
Tom Niskala, Transportation Planning Director

By:_____

Date:_____

Corpus Christi Regional Transportation Authority
Ricardo Sanchez, General Manager

By:_____

Date:_____

Texas Commission on Environmental Quality
Kathleen Hartnett White, Chairman

By:_____

Date:_____

U.S. Environmental Protection Agency
Mayor Richard E. Greene,
Regional Administrator

By:_____

Date:_____

Appendices are available upon request.

Contact:
Kathy Singleton
Air Quality Division, TCEQ
(512) 239-6098
ksinglet@tceq.state.tx.us

ORDER APPROVING EIGHT-HOUR OZONE (EIGHT- O_3)
FLEX MEMORANDUM OF AGREEMENT PLAN

Docket No. 2007-0613-MIS

On June 13, 2007, the Texas Commission on Environmental Quality (Commission), during a public meeting, considered approval for signing of the Corpus Christi Eight-Hour Ozone (Eight- O_3) Flex Memorandum of Agreement (MOA) Plan. The Commission approved for signing this Memorandum of Agreement. This plan has been adapted from the previous One-Hour Ozone Flex Plan and will include the elements required by EPA for participation in the Eight-O_3 Flex program. The purpose of the Eight-O_3 Flex program is to encourage eight-hour ozone attainment areas nationwide to reduce ozone emissions to continue to meet the National Ambient Air Quality Standard (NAAQS) for ozone. Under Tex. Health & Safety Code Ann. §§ 382.011, 382.012, and 382.023 (Vernon 2001), the Commission has the authority to control the quality of the state's air and to issue orders consistent with the policies and purposes of the Texas Clean Air Act, Chapter 382 of the Tex. Health & Safety Code.

IT IS THEREFORE ORDERED BY THE COMMISSION that the Memorandum of Agreement incorporated by reference to this Order is hereby approved. The approved Memorandum of Agreement is incorporated by reference in this Order as if set forth at length verbatim in this Order.

If any portion of this Order is for any reason held to be invalid by a court of competent jurisdiction, the invalidity of any portion shall not affect the validity of the remaining portions.

Date issued:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

_____
Kathleen Hartnett White, Chairman