

REVISIONS TO THE STATE IMPLEMENTATION PLAN (SIP)
FOR THE CONTROL OF OZONE AIR POLLUTION

LIMITED MAINTENANCE PLAN
FOR THE
VICTORIA COUNTY OZONE ATTAINMENT AREA

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CONTENTS

SECTION VI: CONTROL STRATEGY

A. INTRODUCTION

B. OZONE CONTROL STRATEGY

1. *Dallas/Fort Worth* (No change since April 2000 Revision)
2. *Houston/Galveston* (No change since September 2001 Revision)
3. *Beaumont/Port Arthur* (No changes since April 2000 Revision)
4. *El Paso* (No change since July 1996 Revision)
5. *Victoria County* (Revised February 5, 2003)
 - Chapter 1: General
 - Chapter 2: Attainment Emissions Inventory
 - Chapter 3: Maintenance Demonstration
 - Chapter 4: Monitoring Network
 - Chapter 5: Contingency Plan
6. *Regional Strategies* (No change since April 2000 revision)

C. Particulate Matter (No change)

D. Carbon Monoxide (No change)

E. Lead (No change)

F. Oxides of Nitrogen (No change)

G. Sulfur Dioxide (No change)

H. Conformity with the National Ambient Air Quality Standards (No change)

I. Site Specific (No change)

J. Mobile Sources Strategies (No change)

1. *Inspection/Maintenance* (No change since December 2000 revision)
2. *Transportation Control Measures* (No change since May 2000 revision)
3. *Vehicle Miles Traveled* (No change since May 2000 revision)
4. *Clean Gasoline* (No change since June 1999 revision)

**VICTORIA COUNTY LIMITED MAINTENANCE PLAN
TABLE OF CONTENTS**

Chapter 1: General

- 1.1 Background
- 1.2 Public Hearing Information
- 1.3 Social and Economic Consideration
- 1.4 Fiscal and Manpower Resources

Chapter 2: Attainment Emissions Inventory

- 2.1 General
- 2.2 Stationary Point Sources
- 2.3 Area Sources
- 2.4 Non-Road Mobile Sources
- 2.5 On-Road Mobile Sources
- 2.6 Biogenic Sources

Chapter 3: Maintenance Demonstration

- 3.1 General
- 3.2 Regional Strategies

Chapter 4: Monitoring Network

- 4.1 General

Chapter 5: Contingency Plan

- 5.1 Background
- 5.2 Contingency Indicators
- 5.3 Contingency Measures

**VICTORIA COUNTY LIMITED MAINTENANCE PLAN
LIST OF TABLES**

Number	Table Name
1.2-1	Public Hearing Schedule for the Victoria Revised Maintenance Plan
2.1-1	Summary of VOC Emissions in Victoria County by Source Type
2.1-2	Summary of NO _x Emissions in Victoria County by Source Type
2.1-3	Summary of CO Emissions in Victoria County by Source Type
4.1-1	Summary of the Design Value of CAMS87 from 1992-2002

**VICTORIA COUNTY LIMITED MAINTENANCE PLAN
LIST OF FIGURES**

Number	Figure Number
2.1-1	Victoria County VOC Emissions by Major Source Category
2.1-2	Victoria County NO _x Emissions by Major Source Category
2.1-3	Victoria County CO Emissions by Major Source Category

CHAPTER 1: GENERAL

1.1 BACKGROUND

In order to determine the ozone air quality in relation to the national ambient air quality standard (NAAQS) in each nonattainment area, the U.S. Environmental Protection Agency (EPA) required that data from monitoring done in 1975, 1976, and 1977 be examined for the 1979 revisions. Data from 1978 was also considered when it became available. For the 1982 revisions, EPA required that monitoring data collected in 1978, 1979, and 1980 be examined. For Post-1982 revisions, EPA required that data collected in 1981, 1982, and 1983 be examined. Supplemental data collected in 1984 was also used to estimate the concentrations of certain air quality parameters.

The 1990 Federal Clean Air Act (FCAA) Amendments required each Governor to submit a list that designated nonattainment areas in each state. It required that data be collected for three complete years to determine the design values for each area. For the initial nonattainment classification, data was used from 1987, 1988, and 1989.

The primary target of the 1993 Rate-of-Progress (ROP) State Implementation Plan (SIP) was demonstrated by a reduction in the emissions inventories (EIs) for the nonattainment areas. Therefore, monitoring data was not used in the 1993 ROP SIP revision for that purpose.

The general elements required for maintenance plans in incomplete data areas, such as Victoria County, were stated in a May 17, 1994 EPA letter from Dr. A. Stanley Meiburg, EPA Region 6 Director of the Air, Pesticides, and Toxics Division to Ms. Beverly Hartsock, Deputy Executive Director, Office of Air Quality, TNRCC. The letter stated that incomplete data areas with ozone design values which are less than 85% of the ozone standard exceedance level of 0.125 ppm can be provided with relief from certain maintenance plan requirements. Eighty-five percent of the ozone standard is 0.106 ppm. The Victoria County design value was 0.100 ppm, when redesignation was requested, based on the 36 consecutive months of monitoring data completed on May 2, 1994. On July 27, 1994, TNRCC submitted a redesignation petition and maintenance plan SIP revision to EPA. On May 8, 1995, EPA redesignated Victoria County as attainment of the 1-hour ozone standard.

The FCAA, Section 175A(b) requires the state to submit a subsequent maintenance plan eight years after designation. Therefore, the state is adopting this maintenance plan in order to submit the plan to EPA by May 8, 2003, eight years following the redesignation date.

1.2 PUBLIC HEARING INFORMATION

The commission held a public hearing at the following time and location:

Table 1.2-1: Public Hearing Schedule for Victoria County Revision Maintenance Plan

DATE	TIME	LOCATION
Tuesday January 7, 2003	7:00 p.m.	First Victoria National Bank, Victoria

1.3 SOCIAL AND ECONOMIC CONSIDERATIONS

This revision is a continuation of the existing maintenance plan as required by the FCAA and no new control strategies have been incorporated into this revision. Therefore, it is the commission's position that there are no additional social or economic costs associated with this revision.

1.4 FISCAL AND MANPOWER RESOURCES

The state has determined that its fiscal and manpower resources are adequate and will not be adversely affected through implementation of this plan.

CHAPTER 2: ATTAINMENT EMISSIONS INVENTORY

2.1 GENERAL

The general elements required for maintenance plans in incomplete data areas, such as Victoria County, were stated in a May 17, 1994 EPA letter from Dr. A. Stanley Meiburg, EPA Region 6 Director of the Air, Pesticides and Toxics Division to Ms. Beverly Hartsock, Deputy Executive Director, Office of Air Quality, TNRCC. The EPA letter stated that the EI must be developed from one of the three years during which the area demonstrated attainment; however, no future emissions projections or budgets would be required. The calendar year 1996 EI fulfills the criteria for the attainment EI as described in the July 17, 1994 Victoria County Redesignation Petition and Maintenance Plan Section 7: Maintenance Plan a) General 2) Emissions Inventory.

This EI presents the 1996 base year EI for reactive VOC, NO_x, and CO from stationary point, area, non-road mobile, on-road mobile, and biogenic sources for Victoria County. This EI was compiled by the TCEQ as part of the minimal maintenance plan for Victoria County. It is based upon and consistent with the FCAA Amendments of 1990 requirements for conducting EIs related to the preparation and submissions of ozone SIPs. Summaries of VOC, NO_x, and CO emissions totals by emission source category for Victoria County are provided in Tables 2.1-1 through 2.1-3 respectively. Graphic representation of the 1996 emissions by major category are depicted in Figure 2.1-1 through 2.1-3.

Table 2.1-1 Summary of 1996 VOC Emissions in Victoria County by Source Type

POINT		AREA		NON-ROAD MOBILE	
TPY	TPD	TPY	TPD	TPY	TPD
1120.63	2.91	3059.08	9.09	1324.89	4.74

ON-ROAD MOBILE		BIOGENICS		TOTALS	
TPY	TPD	TPY	TPD	TPY	TPD
NA	5.89	NA	161.11	5504.60	183.74

Table 2.1-2 Summary of 1996 NOx Emissions in Victoria County by Source Type

POINT		AREA		NON-ROAD MOBILE	
TPY	TPD	TPY	TPD	TPY	TPD
8766.83	20.18	1013.93	2.81	1815.85	6.56

ON-ROAD MOBILE		BIOGENICS		TOTALS	
TPY	TPD	TPY	TPD	TPY	TPD
NA	8.72	NA	3.41	11596.61	41.68

Table 2.1-3 Summary of 1996 CO Emissions in Victoria County by Source Type

POINT		AREA		NON-ROAD MOBILE	
TPY	TPD	TPY	TPD	TPY	TPD
2129.02	6.10	349.55	0.84	10245.82	36.29

ON-ROAD MOBILE		BIOGENICS		TOTALS	
TPY	TPD	TPY	TPD	TPY	TPD
NA	49.64	NA	NA	12724.39	92.87

TPY = tons per year

TPD = tons per average ozone season day

On-road mobile and biogenic emissions for 1996 were calculated in tons per day only.

Figure 2.1-1 Victoria County VOC Emissions by Major Source Category

1996 VOC Emissions - Victoria County

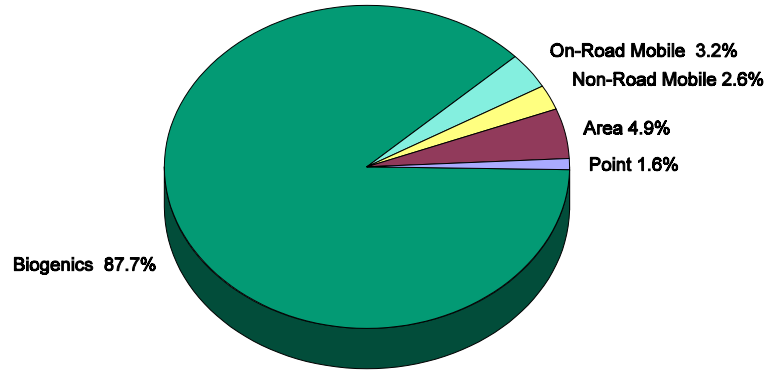


Figure 2.1-2 Victoria County NOx Emissions by Major Source Category

1996 NOx Emissions - Victoria County

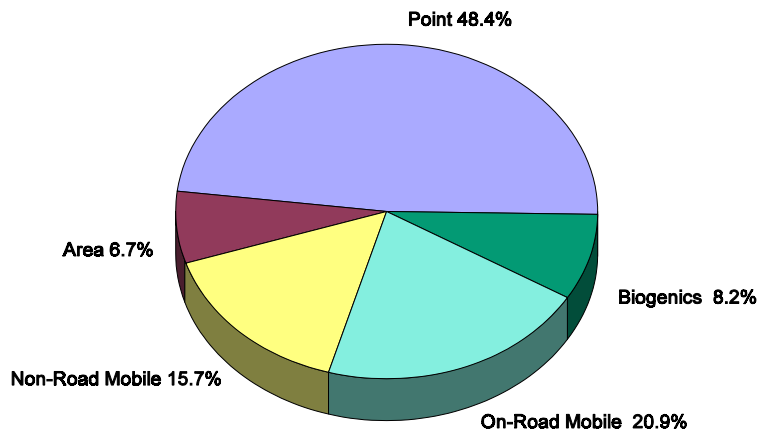
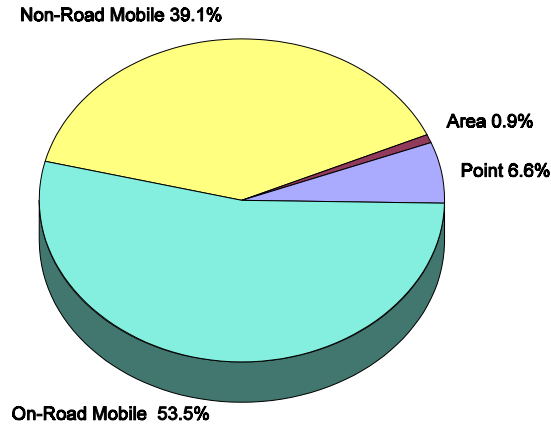


Figure 2.1-3 Victoria County CO Emissions by Major Source Category

1996 CO Emissions - Victoria County



2.2 STATIONARY POINT SOURCES

For the purposes of this emissions inventory, point sources are defined as stationary commercial or industrial operations that emit more than 100 tons per year of VOC, NO_x, or CO. The point source inventory consists of actual emissions for the base year 1996. Each company meeting the emissions criteria submitted complete EI questionnaires which had been designed to obtain site-specific data in conformance with EPA guidance for ozone nonattainment areas.

The TCEQ staff thoroughly reviewed data submitted with all EI questionnaires, especially emissions data. For the ozone nonattainment areas, EPA required the TCEQ to develop a quality assurance (QA) program documenting the methodology implemented in QA procedures. The QA plan was compiled in accordance with EPA's Guidance for Preparation of Quality Assurance Plans for Ozone/ Carbon Monoxide State Implementation Plans. The QA methods include use of checks on emissions calculations using sampling reports, EPA's AP-42, and the TCEQ permitting procedures.

2.3 AREA SOURCES

Area sources are those considered too small to meet the requirements for submitting point source EI questionnaires. Individually they are insignificant, but collectively for a given area their significance becomes noteworthy. There are two major categories of area sources in Victoria County: evaporative and combustion. Examples of evaporative sources include gasoline stations, dry cleaners, small print and paint shops, asphalt applications, bakeries, and waste disposal sites. Combustion sources include structure and forest fires, open burning of refuse, and home and industrial heating units. Some categories may be considered both point and area sources. Calculation of area source emissions of VOC, NO_x, and CO were performed in accordance with EPA's Procedures for the Preparation of Emissions Inventories for Precursors of Carbon Monoxide and Ozone Volume I and AP-42. Methodology in emissions calculation

of area sources varies. In some categories activity data such as fuel use or production rates are available. With others, an EPA emission factor may be applied to the total county population to acquire a county-wide emission rate. The QA of area sources relies upon the acquisition of valid activity data to provide accurate calculations of emissions. These procedures include comparing those categories that are considered both point and area sources to ensure that emissions are not double counted.

2.4 NON-ROAD MOBILE SOURCES

Non-road mobile sources are all mobile vehicles other than those considered highway vehicles. They include aircraft, locomotives, marine vessels, recreational vessels, boats, recreational vehicles, and lawn mowers. Also included are agricultural, commercial, and industrial equipment such as tractors and forklifts. As with area sources, emissions of VOC, NO_x, and CO from non-road mobile sources are considered as a county-wide total. Emissions from aircraft, locomotives, and vessels were calculated using methodology recommended in EPA's Procedures for Emission Inventory Preparation, Volume IV: Mobile Sources and the Emission & Dispersion Modeling System. For all other non-road mobile categories emissions were based upon EPA's Nonroad Engine and Vehicle Emission Study. The QA, as with area sources, is dependent upon the accuracy of fuel use and other activity data for each category.

2.5 ON-ROAD MOBILE SOURCES

On-road vehicles are those light and heavy duty gasoline and diesel automobiles and trucks that travel primarily on public highways. Emissions of VOC, NO_x, and CO were calculated for the county with emission factors developed using EPA's MOBILE5a computer model. The Texas Transportation Institute (TTI) developed the 1996 emissions inventory for Victory County. Vehicle miles of travel (VMT) were acquired from the Texas Department of Transportation (TxDOT). Vehicle registrations were obtained from TxDOT as well. TTI developed roadway speeds for each roadway classification and VMT mix allocation for the eight vehicle classifications. Other inputs included maximum, minimum, and ambient temperature data and a RVP of 8.2 psi. Emission totals were obtained by applying the MOBILE5a emission factors to the VMT for each roadway and vehicle type.

2.6 BIOGENIC SOURCES

Biogenic sources include vegetation types which produce significant VOC emissions that are reactive in ozone formation. Although many species may be included, the largest contributors are pine and deciduous forests. Biogenic emissions are calculated using EPA's computer model PC-Biogenic Emissions Inventory System (PC-BEIS). Biogenic emissions calculations differ from the other four major categories in that the emissions are based upon a day which measured a monitored high ozone reading rather than a total annual emission rate or daily average. For this reason no annual rate of VOC or NO_x emissions is reported. Also, there are no CO emissions associated with these biogenic emissions. The data input into PC-BEIS includes individual county vegetation types and local meteorological information such as temperature, wind speed, and cloud cover for the "high ozone day" identified. PC-BEIS totals the VOC emissions for all plant species and reports them in a ton-per-day rate.

CHAPTER 3: MAINTENANCE DEMONSTRATION

3.1 GENERAL

The Meiburg letter stated that incomplete data areas with ozone design values which are less than 85% of the ozone standard exceedance level of 0.125 ppm can be provided with relief from certain maintenance plan requirements. Eighty-five percent of the ozone standard is 0.106 ppm. The Victoria County design value is 0.97 ppm, which was based on the 36 consecutive months of monitoring data completed on December 31, 2001. The general elements required for incomplete data areas that meet the design value criteria, such as Victoria County, include the following:

- **New Source Review Program**
The nonattainment NSR requirements would be replaced with the provisions of the PSD program for stationary sources. As soon as EPA approves the maintenance plan, the TCEQ will then process all new stationary source construction or modification projects in Victoria County, which are received after the approval date, under the PSD program rules.
- **Emissions Inventory**
An EI must be submitted for the area, providing an account of VOC and NO_x levels, and must be developed from one of the three years during which the area demonstrated attainment. However, no future emissions projections or emissions budgets would be required.
- **Conformity**
By not requiring an emissions budget for stationary sources or for mobile sources, EPA effectively exempts these areas from the transportation conformity requirements.
- **Continued Monitoring**
Areas which submit a minimal maintenance plan must commit to continue monitoring to detect any future violations of the ozone standard and to provide triggers for any contingency measures developed. The TCEQ commits to continue the monitoring effort throughout the entire maintenance period.
- **Contingency Measures**
The minimal maintenance plan must list and describe any contingency measures deemed necessary to provide for prompt correction of an exceedance of the ozone standard, along with a schedule of adoption. These contingency measures could be measures already contained in the SIP. Furthermore, if the area violates the ozone standard, the contingency plan must provide for the submittal of a full maintenance plan with emissions projections and budgets, along with a schedule for adoption.

3.2 REGIONAL STRATEGIES

As a result of the significant air quality concerns under the one-hour ozone NAAQS and the potential challenges imposed by the proposed new eight-hour ozone NAAQS, Texas developed a regional strategy to provide improved control of ozone air pollution. This strategy has five elements: 1) support of the NLEV program, which brought cleaner cars to Texas by model year 2001; 2) Stage I vapor recovery for larger gas stations; 3) cleaner gasoline; 4) HB 2912, grandfathered facility provisions; and 5) reduction in NO_x emissions from larger point sources. Additionally, the state has adopted statewide regulations which will result in emission reductions for all areas of the state. The following are descriptions of each of the regional/statewide strategies.

3.2.1 NATIONAL LOW EMISSION VEHICLE PROGRAM

Automobile manufacturers made a commitment through the NLEV program to introduce cleaner cars. This commitment along with improvements in gasoline quality, combined with the advanced vehicle technology, should assist areas in achieving their overall air quality goals by reducing NO_x emissions. The Tier 2 cars and trucks, which will have tighter emission standards than NLEVs, will begin to phase in with the 2004 model year. In this same time frame a federally required low-sulfur fuel will be implemented.

3.2.2 STAGE I VAPOR RECOVERY

The commission adopted the Stage I vapor recovery rules on June 30, 1999 to reduce VOC emissions. These rules already applied to approximately 7,000 gasoline stations in the BPA, ELP, HGA, and DFW ozone nonattainment areas, and now also apply to 95 counties in east and central Texas. The vapor recovery rules regulate the filling of gasoline storage tanks at gasoline stations by tank trucks. To comply with Stage I requirements, a vapor balance system is typically used to capture the vapors from the gasoline storage tanks which would otherwise be displaced to the atmosphere as these tanks are filled with gasoline. The captured vapors are routed to the gasoline tank truck and processed by a vapor control system when the tank truck is subsequently refilled at a gasoline terminal or gasoline bulk plant. The effectiveness of Stage I vapor recovery rules depends on the captured vapors being: (1) effectively contained within the gasoline tank truck during transit; and (2) controlled when the transport vessel is refilled at a gasoline terminal or gasoline bulk plant. Otherwise, the emissions captured at the gasoline station will simply be emitted at a location other than the gasoline station, resulting in no reduction in VOC emissions despite the Stage I requirements.

3.2.3 CLEANER GASOLINE

Texas and other states have used low Reid vapor pressure (RVP) fuels for a number of years as an effective ozone control strategy. Because the low-sulfur fuel requirements promulgated by EPA do not limit RVP, the commission believes it is important to implement low-RVP fuels in East Texas. Starting in late 1997, the commission began to evaluate different types of cleaner burning fuels like gasoline and diesel as part of an overall regional strategy. The commission eventually settled its focus on a cleaner gasoline. Of the cleaner gasolines under consideration, four were evaluated thoroughly: 1) federal RFG; 2) a gasoline with equal emissions performance to federal Phase II RFG; 3) a formula-based fuel with low RVP, low-sulfur fuel; and 4) California RFG. The low-RVP/low-sulfur fuel was settled upon for the following reasons: 1) emissions performance; 2) effect on advanced technology cars; 3) impacts on non-road emissions; and 4) low production costs. The state low-sulfur requirements have been repealed, and only the federal low-sulfur gasoline standards currently apply. Thus, the present state rule sets a lower RVP for gasoline in the region, but does not regulate its sulfur content.

3.2.4 HB 2912, GRANDFATHERED FACILITY PROVISIONS

The 77th Texas Legislature (2001) passed House Bill 2912, which prescribes specific requirements for the permitting or shutdown of grandfathered facilities. This includes the requirement for permits for existing facilities, pipelines, small business stationary sources, and electric generating facilities. Grandfathered facilities in east and central Texas that do not apply for a permit by September 1, 2003 must cease emitting air contaminants by that date, and compliance with the provisions of the permit must be achieved by March 1, 2007. The required level of control in existing facility permits is 10-year-old BACT. Small business stationary sources that are not required by rule to report to the commission's emission inventory, must apply for a permit by September 1, 2004 or cease emitting air contaminants on or after March 1, 2008. Pipeline facility permits apply to grandfathered reciprocating internal combustion engines that are part of a gathering or transmission pipeline.

3.2.5 ELECTRIC GENERATING FACILITIES (EGFs)

The commission adopted rules on April 19, 2000 which required NO_x emission reductions from all electric utility boilers and gas turbines located in east and central Texas. For EGFs, the rule sets the NO_x emission limit at 0.165 lb/MMBtu for coal or lignite-fired units. Many permitted EGFs are currently authorized to operate at an emission rate in excess of 0.165 lb/MMBtu. Specifically, current average NO_x emission rates for permitted EGFs in attainment counties in east Texas are estimated at approximately 0.3 lb/MMBtu. A reduction to 0.165 lb/MMBtu would accomplish the goal of a 50% reduction generally considered necessary to achieve regional reductions in ambient ozone. For gas-fired electric power boilers the NO_x emission limit is at 0.14 lb/MMBtu, while for stationary gas turbines the NO_x emission limit is 0.15 lb/MMBtu (or alternatively, 42 ppmv NO_x, adjusted to 15% oxygen). The purpose of the strategy was to reduce overall background levels of ozone to assist in keeping ozone attainment areas and near-nonattainment areas in compliance with federal ozone standards. The strategy is also necessary to help the BPA, DFW, and HGA ozone nonattainment areas move closer to reaching attainment with the one-hour NAAQS. The strategy takes into account scientific evidence showing that regional approaches may provide improved control of air pollution. In particular, staff has conducted photochemical grid modeling indicating that elevated point source NO_x controls in east and central Texas reduced peak one-hour ozone between 14 and 27 ppb at specific locations in the region, depending on the modeling day. The one-hour ozone benefits extended across the east and central Texas counties, and averaged 6-7 ppb.

3.2.6 ELECTRIC GENERATING UNITS (SB 7, 76TH LEGISLATURE, 1999)

The 76th Legislature, 1999, passed Senate Bill 7, the electric deregulation bill, which included the requirement that EGFs apply to the commission for air permits by September 1, 2000, or cease operations by May 1, 2003. Grandfathered EGFs in the east and central Texas counties were required to reduce emissions of NO_x by 50% and, for coal-fired EGFs, to reduce SO₂ by 25%.

3.2.7 GAS-FIRED WATER HEATERS, SMALL BOILERS, AND PROCESS HEATERS

This statewide rule reduces NO_x emissions from new natural gas-fired water heaters, small boilers, and process heaters sold in Texas beginning in 2002. The rules apply to each new water heater, boiler, or process heater with a maximum rated capacity of up to 2.0 MMBtu/hr.

3.2.8 CALIFORNIA SPARK-IGNITION ENGINES

This rule implements the control requirements for non-road, large spark-ignition engines statewide. The rule is necessary to attain the ozone NAAQS, and to establish a single standard for the state. A single statewide standard would help to prevent the incompatibility and expense that may arise from the distribution of equipment with different emission standards. These amendments are adopted in order to control ground-level ozone in the state by requiring model year 2004 and subsequent non-road, large spark-ignition engines 25 hp and larger to be certified under Title 13, California Code of Regulations, Chapter 9, concerning Off-Road Vehicles and Engines Pollution Control Devices. The rule incorporates the California non-road, large spark-ignition engine rules by reference.

CHAPTER 4: MONITORING NETWORK

4.1 GENERAL

The method chosen to verify continued attainment was the ambient air monitoring method. The ambient air monitoring site will remain active at its present location during the entire length of the maintenance plan period. This data will be quality controlled and submitted to EPA AIRS on a monthly basis. A set of indicators and trigger levels, based on monitoring data, is specified in Section VI.B.10.a.7)e), Contingency Plan.

The Victoria County monitoring network consists of two ambient air monitors. The first monitor is located in the City of Victoria(CAMS 87) and was used to determine the area's design value. The second monitor located southeast of the City of Victoria (CAMS 602) became operational on July 19, 2000 and therefore, has not been recording ozone concentrations for the required three years to determine a design value. Both of these monitors are managed in accordance with 40 CFR Part 58, to verify the attainment status of the county. The TCEQ commits to keep the monitors in place until the end of the maintenance period, which will be used to detect whenever appropriate levels have been exceeded for contingency measure triggering purposes.

The ozone design value for the period was determined to be 0.97 parts per million (ppm) based upon data that was collected from 1999-2001 at the CAMS 87 monitor. The design value was less than 85% of the ozone standard exceedance level of 0.125 ppm, which is 0.106 ppb. Table 4.1-1 summarizes the design value of the CAMS 87 monitor from 1992-2001.

Table 4.1-1: Summary of the Design Value of CAMS 87 from 1992-2001

1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
103ppb	102ppb	99ppb	100ppb	98ppb	95ppb	92ppb	97ppb	98ppb	96ppb

CHAPTER 5: CONTINGENCY PLAN

5.1 BACKGROUND

The FCAA Amendments require all ozone nonattainment areas classified as moderate and above to submit a SIP revision by November 15, 1993 which described in part how an area intended to decrease VOC emissions by 15% from the 1990 Base Year, net-of- growth, by November 15, 1996. In addition to the 15% reduction, states were also required to prepare contingency rules that would result in an additional 3.0% reduction of either NO_x or VOC, of which up to 2.7% could be reductions in NO_x. Underlying this substitution provision was the recognition that NO_x controls could effectively reduce ozone in many areas and that the design of strategies was more efficient when the characteristic properties responsible for ozone formation and control were evaluated for each area. The primary condition to use NO_x controls as contingency measures was a demonstration through Urban Airshed Model modeling that these controls would be beneficial toward the reduction of ozone. These contingency measures would be implemented immediately should any area fall short of the 15% goal.

There were no additional emissions reductions required in Victoria County as a result of the redesignation and maintenance plan or the revised maintenance plan.

The FCAA Amendments of November 15, 1990, §181(a)(1), concerning Classification and Attainment Dates for 1989 Nonattainment Areas, established a schedule for attainment of the ozone NAAQS for nonattainment areas classified as marginal and above. FCAA §182, concerning Plan Submissions and Requirements, does not specify the submittal dates for nonattainment areas classified as transitional, submarginal, or with incomplete/no data.

The General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990 (General Preamble) published in the Federal Register (57 FR 13510) stated that for areas with incomplete or no data, the EPA interpretation of the FCAA §172 requirement is that applicable revisions to the ROP SIP are to be submitted three years from designation under FCAA §107(d)(4)(A)(ii). Victoria County was originally designated nonattainment for ozone in the Federal Register dated March 3, 1978 (43 FR 8962). As a result of the FCAA Amendments of 1990, Victoria County was designated as an "Incomplete or No Data Ozone Nonattainment Area" on November 15, 1990; therefore, the county retained its prior ozone nonattainment designation by operation of law. The Victoria ROP SIP revision was then due three years later, or November 15, 1993. The Victoria ROP SIP revision was adopted on November 10, 1993, as part of the 1993 Rate-of-Progress SIP for Dallas/Fort Worth, El Paso, Beaumont/Port Arthur, and Houston/ Galveston Ozone Nonattainment Areas, Appendix A. The Victoria ROP SIP revision was entitled Victoria Ozone Nonattainment Area Commitment to Petition for Redesignation After Successful Completion of Attainment Monitoring Period. The General Preamble further stated that the attainment date for Victoria is five years after designation, i.e., November 15, 1995.

As stated further in the General Preamble, EPA believes that some FCAA requirements do apply at least in part as listed below:

Contingency measures are not required as part of the ROP SIP submitted by November 15, 1993; however, contingency measures will be required as part of the redesignation and maintenance plan. These contingency measures are discussed in detail in the July 27, 1994 Victoria County Redesignation Petition and Maintenance Plan Section 7: Maintenance Plan, f) Contingency Plan.

Section 175A of the FCAA requires that a maintenance plan include contingency provisions, as necessary, to promptly correct any violation of the NAAQS that occurs after redesignation of the area to attainment. These contingency measures are distinguished from those generally required for nonattainment areas under FCAA §172(c)(9) and those specifically required for ozone nonattainment areas under FCAA §182(c)(9). An EPA memorandum dated September 4, 1992, from John Calcagni, Air Quality Management Division Director, to the EPA Regional Air Division Directors, stated that a State is not required to have fully adopted contingency measures that will take effect without further action by the State in order for the maintenance plan to be approved. However, the contingency plan is considered to be an enforceable part of the SIP and should ensure that the contingency measures are adopted expeditiously once they are triggered. The plan should clearly identify the measures to be adopted, a schedule and procedure for adoption and implementation, and a specific time limit for action by the State. Finally, as a necessary part of the plan, the State should also identify specific indicators and triggers which will be used to determine when the contingency measures need to be implemented. These triggers should allow the State to take early action to address violations of the NAAQS before they occur. By taking early action, the State may be able to prevent any actual violations of the NAAQS and, therefore, prevent EPA from redesignating the area back to nonattainment.

An EPA memorandum, dated June 1, 1992, from G. T. Helms, Ozone/ Carbon Monoxide Programs Branch Chief, to the EPA Regional Air Branch Chiefs, stated that a maintenance contingency plan should include the following items. The plan should include several potential indicators and trigger levels which could require implementation of the contingency plan. The plan should identify various levels of contingencies and should be structured to the severity of the triggering levels. Finally, to ensure promptness, the plan should identify the procedure to be used to adopt and implement the contingency measure.

5.2 CONTINGENCY INDICATORS

The contingency indicator for Victoria County will be the ambient air quality monitor data. The other possible indicator, an actual emissions level which is compared to an emissions budget, is not feasible at this time for Victoria because EPA guidance does not require an emissions budget for the Victoria County minimal maintenance plan. The contingency indicator data will be taken from the most recent three calendar years (current year plus previous two complete calendar years) of monitoring data.

Trigger Levels

Three basic trigger levels are specified for the activation of the various contingency measures as stated below. An ozone exceedance is a one-hour period of monitoring time during which the average ozone concentration exceeds 0.125 ppm. An ozone violation is four exceedances over a continuous three-year period at any one monitor. The ozone design value is the fourth highest recorded one-hour average of ozone concentration during a continuous three-year period at any one monitor. The three trigger levels that would activate contingency measures are as follows:

- (a) a monitor shows one exceedance of the NAAQS during a three-year period;
- (b) a monitor shows two or three exceedances of the NAAQS during a three-year period; or
- (c) a monitor shows the fourth exceedance, and therefore a violation, of the NAAQS during a three-year period.

5.3 CONTINGENCY MEASURES

5.3.1 FORMAL OZONE ADVISORY PANEL

At any time during the period of the maintenance plan, if the Victoria County air quality monitor records an exceedance of the NAAQS (exceedance level = 0.125 ppm), Victoria County, the city of Victoria, and the MPO for Victoria County will establish a formal ozone advisory program. This advisory program will be established through formal city and county resolutions and will be staffed sufficiently to manage the program on a daily basis during the prime ozone season (May 1 - September 30). The ozone advisory staff will coordinate with the TCEQ regarding ozone advisory predictions, candidate voluntary compliance measures on specific ozone advisory days, and public information and notification matters. The ozone advisory program will be established and functional within six months of notification by the TCEQ that the ozone design value has reached the trigger level.

5.3.2 INDUSTRIAL CURTAILMENT

At any time during the period of the maintenance plan, if an Victoria County air quality monitor records two exceedances of the NAAQS (exceedance level = 0.125 ppm) within a three-year period, the ozone advisory staff will institute a voluntary program with industry to reschedule, revise, or curtail activities for the ozone advisory days. This program will be developed and available for use within 30 days after notification by TCEQ that the contingency measure will be required.

5.3.3 FULL MAINTENANCE PLAN

At any time during the period of the minimal maintenance plan, if the Victoria County air quality violates the NAAQS (exceedance level = 0.125 ppm), the TCEQ will develop a full maintenance plan to include a complete baseline emissions inventory, grown to the end of the period of the maintenance plan, and an emissions budget for VOCs. This full maintenance plan will be taken through public hearing and submitted by the TCEQ to EPA no later than twelve months after the NAAQS violation occurs.