

## History of the Texas State Implementation Plan (SIP)

**This document is intended to provide the reader with a broad overview of the SIP revisions that have been submitted to the United States Environmental Protection Agency (EPA) by the Texas Commission on Environmental Quality and its predecessor agencies the Texas Air Control Board and the Texas Natural Resource Conservation Commission. Some sections may be obsolete or superseded by new revisions, but have been retained for the sake of historical completeness. The reader is referred to the body of the SIP for details on the current SIP revision.**

### **1979 – Ozone, Particulate Matter (Total Suspended Particulate) and Carbon Monoxide SIP, March 30, 1979**

Requirements for the SIP specified in 40 CFR Part 51.12 provide that “...in any region where existing (measured or estimated) ambient levels of pollutant exceed the levels specified by an applicable national standard, the plan shall set forth a control strategy which shall provide for the degree of emission reduction necessary for attainment and maintenance of such national standard.” Ambient levels of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>), as measured from 1975 through 1977, did not exceed the national standards set for these pollutants anywhere in Texas. Therefore, no control strategies for these pollutants were included in revisions to the Texas SIP submitted on April 13, 1979. Control strategies were submitted and approved for inclusion in the SIP for areas in which measured concentrations of ozone, total suspended particulate (TSP), or carbon monoxide (CO) exceeded a National Ambient Air Quality Standard (NAAQS) during the period from 1975 to 1977.

### **1979-1980 – Texas SIP Revisions**

Proposals to revise the Texas SIP to comply with the requirements of the FCAA Amendments of 1977 were submitted to EPA on April 13, November 2, and November 21, 1979. On December 18, 1979 (44 FR 75830-74832), EPA approved the proposed revision to the Texas SIP relating to vehicle inspection and maintenance and extended the deadline for attainment of the NAAQS for ozone in Harris County until December 31, 1987. On March 25, 1980, EPA approved and incorporated into the Texas SIP many of the remaining provisions included in the proposals submitted by the state in April and November 1979. The March 25, 1980, *Federal Register* notice also included conditional approval of a number of the proposed SIP revisions submitted by the state.

### **1980 – TSP SIP Revision, July 11, 1980**

Additional proposed SIP revisions were submitted to EPA by Texas on July 25, 1980, and July 20, 1981, to comply with the requirements of the March 25, 1980, conditional approvals. By May 31, 1982, all of the proposed revisions to the Texas SIP submitted to EPA in April and November 1979, July 1980, and July 1981 with the exception of provisions relating to the definition of major modification used in new source review (NSR) and certain portions of the control strategy for TSP in Harris County, had been fully approved or addressed in a *Federal Register* notice proposing final approval. The NSR provisions were approved on August 13, 1984.

### **1981 – Lead SIP, March 21, 1980**

On October 5, 1978, the Administrator of the EPA promulgated a lead ambient air quality standard. The Federal Clean Air Act (FCAA) Amendments of 1977 required that each state submit an implementation plan for the control of any new criteria pollutant. A SIP revision for lead was submitted in March 21, 1980.

#### **1982 – Harris Ozone SIP, December 3, 1982**

The FCAA Amendments of 1977 required SIPs to be revised by December 31, 1982, to provide additional emission reductions for those areas for which EPA approved extensions of the deadline for attainment of the NAAQS for ozone or CO. In 1982, the state submitted a revision to the Texas SIP to comply with the FCAA Amendments of 1977 and EPA rules for 1982 SIP revisions. Supplementary emissions inventory data and supporting documentation for the revision were included in Appendices Q through Z of the 1982 SIP submittal.

#### **1984 – Harris Inspection and Maintenance (I/M) SIP, November 9, 1984**

The only area in Texas receiving an extension of the attainment deadline to December 31, 1987, was Harris County for ozone. A proposal to revise the Texas SIP for Harris County was submitted to EPA on December 9, 1982. On February 3, 1983, EPA proposed to approve all portions of the plan except for the Vehicle Parameter I/M Program. On April 30, 1983, the EPA Administrator proposed sanctions for failure to submit or implement an approvable I/M program in Harris County. Senate Bill 1205 was passed on May 25, 1983, by the Texas Legislature to provide the Texas Department of Public Safety with the authority to implement enhanced vehicle inspection requirements and enforcement procedures. On August 3, 1984, EPA proposed approval of the Texas SIP pending receipt of revisions incorporating these enhanced inspection procedures and measures ensuring enforceability of the program. These additional proposed SIP revisions were adopted by the state on November 9, 1984. Final approval by EPA was published on June 26, 1985.

#### **1985 – Dallas, El Paso, and Tarrant Counties Post 1982 Ozone SIP, September 30, 1985**

Although the control strategies approved by EPA in the 1979 SIP revisions were implemented in accordance with the provisions of the plan, several areas in Texas did not attain the primary NAAQS by December 31, 1982. On February 23, 1983, EPA published a *Federal Register* notice identifying those areas and expressing the intent to impose economic and growth sanctions provided in the FCAA. However, EPA reversed that policy in the November 2, 1983, *Federal Register* deciding instead to call for supplemental SIP revisions to include sufficient additional control requirements to demonstrate attainment by December 31, 1987.

On February 24, 1984, the EPA Region 6 Administrator notified the Governor of Texas that such supplemental SIP revisions would be required within one year for ozone in Dallas, Tarrant, and El Paso Counties and CO in El Paso County. The Texas Air Control Board (TACB) requested a six-month extension of the deadline (to August 31, 1985) on October 19, 1984. EPA approved this request on November 16, 1984.

Proposals to revise the Texas SIP for Dallas, Tarrant, and El Paso Counties were submitted to EPA on September 30, 1985. However, the revisions for Dallas and Tarrant Counties did not provide sufficient reductions to demonstrate attainment of the ozone standard and on July 14, 1987, EPA published intent to

invoke sanctions. Public officials in the two counties expressed a strong desire to provide additional control measures sufficient to satisfy requirements for an attainment demonstration.

### **1987 – Dallas and Tarrant Counties Post 1982 Ozone SIP, December 18, 1987**

A program of supplemental controls was taken to public hearings in late October 1987. As a result of testimony received at the hearings, a number of the controls were modified and several were deleted, but sufficient reductions were retained to demonstrate attainment by December 31, 1991. These controls were adopted by the TACB on December 18, 1987, and were submitted to EPA as proposed revisions to the SIP. Supplemental data and supporting documentation are included in Appendices AA through AO of the 1987 SIP submittal.

### **1990**

The FCAA Amendments of 1990 authorized EPA to designate areas failing to meet the NAAQS for ozone as nonattainment and to classify them according to severity. The four areas in Texas and their respective classifications include: Houston-Galveston Area (HGA) – severe; Beaumont-Port Arthur (BPA) – serious; El Paso (ELP) – serious; and Dallas-Fort Worth (DFW) – moderate.

### **1993 – 1990 Adjusted Base Year Emissions Inventory, November 12, 1993**

The 1990 Adjusted Base Year Emissions Inventory (EI) was submitted on November 12, 1993. It is the official inventory of all emission sources (point, area, on-road and non-road mobile) in the four nonattainment areas. There have been several changes to the EI due to changes in assumptions for certain area and non-road mobile source categories. Changes to the baseline EI have affected the target calculations and creditable assumptions made in the 15% and 9% SIPs.

### **1993-1994 – 15% ROP SIP (Phase I – November 15, 1993, and Phase II – May 15, 1994)**

The FCAA Amendments of 1990 required a SIP revision to be submitted for all ozone nonattainment areas classified as moderate and above by November 15, 1993, which described in part how an area intends to decrease VOC emissions by 15%, net of growth, by November 15, 1996. The amendments also required all nonattainment areas classified as serious and above to submit a revision to the SIP by November 15, 1994, which described how each area would achieve further reductions of VOC and/or NO<sub>x</sub> in the amount of 3.0% per year averaged over three years and which includes a demonstration of attainment based on modeling results using the UAM. 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<sub>x</sub> or VOC, of which up to 2.7% may be reductions in NO<sub>x</sub>. Underlying this substitution provision is the recognition that NO<sub>x</sub> controls may effectively reduce ozone in many areas and that the design of strategies is more efficient when the characteristic properties responsible for ozone formation and control are evaluated for each area. The primary condition to use NO<sub>x</sub> controls as contingency measures is a demonstration through UAM modeling that these controls will be beneficial toward the reduction of ozone. These volatile organic compounds (VOC) and/or NO<sub>x</sub> contingency measures would be implemented immediately should any area fall short of the 15% goal.

Texas submitted rules to meet the rate of progress (ROP) reduction in two phases. Phase I consisted of a core set of rules comprising a significant portion of the required reductions. This phase was submitted by the original deadline of November 15, 1993. The Phase II requirements consisted of any remaining

percentage toward the 15% net of growth reductions, as well as additional contingency measures to obtain an additional 3.0% of reductions. Phase II was submitted by May 15, 1994. The complete list of contingency measures was submitted by November 15, 1994. The appropriate compliance date was to be incorporated into each control measure to ensure that the required reductions would be achieved by the November 15, 1996, deadline. A commitment listing the potential rules from which the additional percentages and contingency measures were selected was submitted in conjunction with the Phase I SIP on November 15, 1993. That list of Phase II rules was intended to rank options available to the state and to identify potential rules available to meet 100% of the targeted reductions and contingencies. Only those portions of the Phase II rules needed to provide reasonable assurance of achieving the targeted reduction requirements were adopted by the commission.

#### **1994 – DFW Attainment SIP and 818 El Paso SIP, September 14, 1994**

The DFW and ELP areas achieved sufficient reductions with the 15% ROP SIP to demonstrate attainment by 1996. Attainment Demonstration SIP revisions for these two areas were submitted on September 14, 1994.

#### **1994 – Post 1996 ROP SIP for BPA/HGB, November 9, 1994**

The FCAA Amendments of 1990 classified the BPA area as a serious nonattainment area for the one-hour ozone standard. The BPA nonattainment area includes Hardin, Jefferson, and Orange Counties. The BPA nonattainment area has an ozone design value of 0.16 ppm, which places the area in the serious classification.

The FCAA Amendments of 1990 required a Post-96 ROP SIP revision and accompanying rules to be submitted by November 15, 1994. According to the FCAA Amendments, this submittal had to contain an Attainment Demonstration based on urban airshed modeling (UAM). Additionally, the revision had to demonstrate how the HGA and BPA nonattainment areas intended to achieve a 3% per year reduction of VOC and/or NO<sub>x</sub> until the year 2007, and additional reductions as needed to demonstrate modeled attainment. The plan was also required to carry an additional 3% of contingency measures to be implemented if the nonattainment area fails to meet a deadline. To use NO<sub>x</sub> reductions for all or part of the Post-96 controls or the contingency measures required a demonstration using UAM showing that NO<sub>x</sub> controls would be beneficial in reducing ozone.

On November 9, 1994, the state submitted a SIP revision designed to meet the 3% per year ROP requirements for the years 1997-1999. This Post-96 ROP SIP revision detailed how the BPA and HGA nonattainment areas intended to achieve these three years' reductions of VOC (or 9% net-of-growth). Most of this amount was achieved by quantifying additional reductions due to existing rules and reductions due to federally-mandated rules. Rules to achieve the further reductions needed to meet the ROP SIP goals were submitted to EPA on January 11, 1995. This submittal included modeling demonstrating progress toward attainment, using a 1999 future year emissions inventory.

#### **1994 – Harris County SO<sub>2</sub> SIP, June 29, 1994**

On June 29, 1994, the commission adopted a revision to the SO<sub>2</sub> SIP regarding emissions in Harris County. The SIP revision was required by EPA because of exceedances of the SO<sub>2</sub> NAAQS in 1986, 1988, and 1990. An EPA study conducted by Scientific Applications International Corporation also

predicted SO<sub>2</sub> exceedances. On April 22, 1991, the EPA declared that portions of Harris County were potentially in nonattainment of the SO<sub>2</sub> NAAQS. Consequently, the HRM Corporation volunteered to find reductions in SO<sub>2</sub> in order to prevent being re-designated to nonattainment. HRM's efforts resulted in finding voluntary SO<sub>2</sub> reductions. These reductions were adopted in 13 commission Agreed Orders and were included as part of the June 29, 1994, SIP revision. The EPA approved the Harris County SO<sub>2</sub> SIP on March 6, 1995 (60 FR 12125).

#### **1994 – Preliminary UAM Modeling Submitted to EPA for HGA and BPA, August 14, 1994**

On August 14, 1994, the state submitted preliminary UAM modeling results for the BPA and HGA nonattainment areas that showed the relationship between emission levels of VOC and NO<sub>x</sub>, and ozone concentrations. This modeling was conducted with a 1999 future year emissions inventory. Based on the results of this preliminary modeling, which showed that NO<sub>x</sub> reductions might increase ozone concentrations, on April 12, 1995, the state received a temporary §182(f) exemption from all NO<sub>x</sub> requirements, including RACT, I/M, NO<sub>x</sub> NSR, and transportation conformity requirements. Permanent §182(f) exemptions from all NO<sub>x</sub> requirements were granted for DFW and ELP, and temporary exemptions until December 31, 1996, for HGA and BPA. The commission subsequently requested that EPA extend this date until December 31, 1997. EPA approved this one-year extension on May 14, 1997.

#### **1995 – Attainment Demonstration Flexibility Memo from EPA Issued, March 2, 1995**

On March 2, 1995, Mary Nichols, EPA Assistant Administrator for Air and Radiation, issued a memo that gave states some flexibility to design a phased Attainment Demonstration. It provided for an initial phase which was intended to continue progress in reducing levels of VOC and/or NO<sub>x</sub>, while giving states an opportunity to address scientific issues such as modeling and the transport of ozone and its precursor pollutants. The second phase was designed to draw upon the results of the scientific effort and design a plan to bring the area into attainment. To constitute Phase I under this approach, the EPA guidance required that states submit the following SIP elements by December 31, 1995:

- Control strategies to achieve reductions of ozone precursors in the amount of 3% per year from the 1990 baseline EI for the years 1997, 1998, and 1999.
- UAM modeling through the year 1999, showing the effect of previously-adopted control strategies which were designed to achieve a 15% reduction in VOCs from 1990 through 1996.
- A demonstration that the state has met the VOC RACT requirements of the FCAA Amendments.
- A detailed schedule and plan for the "Phase II" portion of the attainment demonstration which will show how the nonattainment areas can attain the ozone standard by the required dates.
- An enforceable commitment to:
  - Participate in a consultative process to address regional transport;
  - Adopt additional control measures as necessary to attain the ozone NAAQS, meet ROP requirements, and eliminate significant contribution to nonattainment downwind; and
  - Identify any reductions that are needed from upwind areas to meet the NAAQS.

#### **1992-1995 – Employer Trip Reduction Program SIP, June 30, 1992**

The Employer Trip Reduction (ETR) program revision to the SIP and ETR rule were adopted in October 1992 by the TACB to meet the mandate established in the FCAA Amendments of 1990 [§182 (d)(1)(B)]. This section of the FCAA required states with severe or extreme ozone nonattainment areas to develop and implement ETR programs in those areas. For Texas, the only area affected was the HGA area. The

ETR program required large employers (those with 100 or more employees) to implement trip reduction programs that would increase the average passenger occupancy rate of vehicles arriving at the workplace during the peak travel period by 25% above the average for the area.

Congress amended the FCAA in December 1995 by passing House Rule 325. This amendment allows the state to require an ETR program at its discretion. It also allows a state to “remove such provisions (ETR program) from the implementation plan...if the state notifies the Administrator, in writing, that the state has undertaken, or will undertake, one or more alternative methods that will achieve emission reductions (1.81 tons/day) equivalent to those achieved by the removed...provisions.” As such, large employers will no longer be mandated to implement trip reduction programs. The HGA ozone nonattainment area will, however, through the coordination of the Houston-Galveston Area Council, implement a voluntary regional initiative to reduce vehicle trips.

### **1996 – Phase II Attainment Demonstration for HGA, January 10, 1996**

Texas submitted the first two of the required sections under Phase I in November 1994. The remaining three: a VOC RACT demonstration; the required commitments; and a Phase II plan and schedule were submitted on January 10, 1996, to EPA.

ROP SIP modeling was developed for the HGA nonattainment area in two phases using the UAM. The first phase of ROP modeling was the modeling submitted in January 1995, as described above. The second phase of the ROP modeling was conducted using data obtained primarily from the COAST project, an intensive 1993 field study. The COAST modeling for HGA and the associated SIP were projected to be completed by December 1996 for submittal in May 1997. Control strategies developed in this second phase were planned to be based on a more robust database, providing a higher degree of confidence that the strategies would result in attainment of the ozone NAAQS or target ozone value. A discussion of the schedule for the UAM modeling for the Phase II Attainment Demonstration can be found in Appendix 11-F of the January 10, 1996, submittal.

On January 29, 1996, EPA proposed limited approval/limited disapproval for the Texas 15% ROP SIP revision. EPA proposed a limited approval because the SIP revision would result in significant emission reductions from the 1990 baseline and would, therefore, improve air quality. Simultaneously, the EPA proposed a limited disapproval because it believed that the plan failed to demonstrate sufficient reductions to meet the 15% ROP requirements. It also proposed a limited approval/disapproval of the contingency plans (designed to achieve an additional 3% of reductions if needed because a milestone is missed) along the same lines as the 15% action. EPA stated that some of the control measures submitted along with the SIP revision did not meet all of the requirements of the FCAA Amendments of 1990 and, therefore, cannot be approved. EPA further stated that it was not making a determination at this time about whether the state had met its requirements regarding RACT, or any other underlying FCAA Amendments of 1990 requirements. Finally, EPA proposed approval of the Alternate Means of Control portion of the November 9, 1994, Post-96 SIP submittal, but did not propose action on any other portion of that submittal.

### **1990-1996 – Beaumont/Port Arthur Nonattainment Status**

In December 1990, Texas Governor William Clements requested that the BPA area be reclassified as a "moderate" ozone nonattainment area in accordance with §181(a)(4) of the FCAA Amendments of 1990. That request was denied on February 13, 1991. A recent review of the original request and supporting documentation has revealed that this denial was made in error. As provided by §110(k)(6) of the Act, the

EPA Administrator has the authority to reverse a decision regarding original designation if it is discovered that an error had been made.

Monitoring data from a privately-funded, special purpose monitoring network which was not included in the Aerometric Information Retrieval System database was improperly used to deny this request. Furthermore, subsequent air quality trends demonstrated that BPA is more properly classified as a moderate nonattainment area, and could attain the standard by the required date for moderate areas of November 15, 1996. Therefore, Governor George W. Bush sent a letter and technical support to EPA on July 20, 1995, requesting that the BPA area be reclassified to moderate nonattainment status. BPA planned to demonstrate attainment one of the following ways:

- Monitored values showing attainment of the standard at state-operated monitors for the years 1994-1996, which is the time line the FCAA Amendments of 1990 specifies for moderate areas.
- UAM modeling showing attainment of the standard but for transport of ozone and/or precursors.

EPA Region 6 verified the data submitted in support of this request and concurred that it is valid. On June 3, 1996, the reclassification of the BPA area became effective. Because the area was classified as serious, it was following the SIP submittal and permitting requirements of a serious area, which included the requirements for a Post-96 SIP. With the consolidated SIP submittal, the commission removed the BPA area from the Post-96 SIPs, which became applicable to the HGA nonattainment area only.

#### **1996 – Inspection/Maintenance SIP, May 26, 1996**

On November 29, 1995, President Clinton signed the National Highway Systems Designation Act, which, among other things, prohibited EPA from discounting the creditable emissions from a decentralized vehicle I/M testing program if an approvable conditional I/M SIP revision was submitted to EPA within 120 days of the bill's signature. EPA's Office of Mobile Sources issued guidance stating that it would accept an interim I/M SIP proposal and Governor's letter 120 days after signature of the bill in lieu of an adopted SIP revision. The SIP proposal and letter was submitted to the EPA prior to the March 27, 1996, deadline to meet the 120-day time frame. The final I/M SIP revision (Rule Log No. 96104-114-AI), commonly referred to as the "Texas Motorist's Choice Program," was adopted by the commission on May 29, 1996, and submitted to the EPA by the state on June 25, 1996. On October 3, 1996, EPA proposed (61 FR 51651-51659) conditional interim approval of the Texas Motorist's Choice Program based upon the state's good faith estimate of emission reductions and the program's compliance with the Clean Air Act.

Part of EPA's determination that the new I/M SIP is approvable depends on the program's ability to achieve sufficient creditable VOC reductions so that the 15% ROP can still be achieved. The commission designed the revised I/M program to fit in with the other elements of the 15% SIP to achieve the full amount of creditable reductions required. The I/M program also achieves creditable reductions for the Post-96 ROP SIP.

Changes to the I/M program have had an impact on the ELP §818 Attainment Demonstration as well. This demonstration was predicated on the assumption that the I/M program would be implemented as adopted for the 15% SIP. An addendum to the §818 Demonstration shows that the basic underlying assumptions of the modeling still pertain despite the revisions to the I/M program.

### **1993-1996 – Super SIP, July 24, 1996; Vehicle Miles Traveled SIP, October 27, 1993, and October 12, 1994**

The FCAA Amendments of 1990 required that, for severe and above ozone nonattainment areas, states develop SIP revisions that include specific enforceable TCMs, as necessary, to offset increases in motor vehicle emissions resulting from growth in VMT or the number of vehicle trips. This SIP revision would also satisfy reductions in motor vehicle emissions consistent with the 15% ROP and the Post-1996 ROP SIPs. Therefore, the commission developed and submitted to EPA a committal SIP revision for the HGA nonattainment area on November 13, 1992, and VMT Offset SIP revisions on November 12, 1993, and November 6, 1994, to satisfy the requirements of the 15% ROP SIP revision. The former SIP revision laid out a set of TCMs and other mobile source controls which reduced emissions below the modeled ceiling. Additional TCMs were included: high occupancy vehicle lanes, park and ride lots, arterial traffic management systems, computer transportation management systems, and signalization. These TCMs were part of the “Super SIP” submitted to EPA on July 24, 1996.

### **1996 – Texas Clean Fleet SIP, July 24, 1996**

In a committal SIP revision submitted to EPA on November 15, 1992, Texas opted out of the Federal Clean Fuel Fleet program in order to implement a fleet emission control program designed by the state. In 1994, Texas submitted the state’s opt-out program in a SIP revision to the EPA and adopted rules to implement the TAFF program. In 1995, the 74th Texas Legislature modified the state’s alternative fuels program through passage of SB 200. In response to SB 200, the commission adopted regulations modifying the TAFF program to create the TCF program. Since adoption on July 24, 1996, and subsequent submission to EPA of the TCF SIP revision, the 75th Texas Legislature modified the state’s alternative program once again through passage of SB 681. Staff modified the TCF program, now called the TCF Low Emission Vehicle program, to reflect changes mandated by SB 681.

### **1997 – Harris County SO<sub>2</sub> SIP, May 14, 1997**

On May 14, 1997, the commission adopted an additional revision to the Harris County SO<sub>2</sub> SIP to incorporate modifications to two of the 13 commission Agreed Orders. The remaining sections of the SIP remained the same. While on the scale of "minor technical corrections," the modified orders were submitted as a SIP revision because the new emission rates differ from what EPA had previously approved. The two Agreed Order modifications concerned grandfathered units at Simpson Pasadena Paper Company and Lyondell-Citgo Refining Company, Ltd. The commission approved changes to both Agreed Orders on July 24, 1996.

### **1997 – Regional Strategy**

In January 1997, the commission proposed a program that, for the first time in Texas’ air pollution control history, extended beyond the confines of the urbanized areas. The concept of the regional strategy was developed as a result of several major occurrences. These events include the COAST Study, participation in the OTAG process, deployment of intensive aircraft monitoring by Baylor University, and the development of regional photochemical modeling. While Texas was not involved in the OTAG SIP call requiring mandatory statewide NO<sub>x</sub> reductions, the commission realized the importance of the role of transported ozone and/or its precursors and the need for a statewide comprehensive plan in order to assist the areas that are struggling to attain the ozone standard. The impact on several states from the smoke and haze episodes from fires in Central America during the summer of 1998 helped reinforce the fact that air pollution is capable of traveling hundreds of miles.

The purpose of the regional strategy was to reduce ozone causing compounds in the eastern half of the state in order to help reduce background levels of ozone in both nonattainment areas as well as those areas close to noncompliance for the new eight-hour ozone standard. Components of the regional strategy included support for the National Low-Emission Vehicle (NLEV) program, cleaner burning gasoline and Stage I vapor recovery, voluntary involvement in the permitting of grandfathered facilities, and reductions from major stationary sources.

#### **1997 – Inspection/Maintenance SIP, May 14, 1997**

On May 14, 1997, the commission also adopted a revision to the SIP modifying the vehicle I/M program. This revision removed the test-on-resale component that had been included in the vehicle I/M program, as designed in July of 1996. Test-on-resale required persons selling their vehicles in the I/M core program areas to obtain an emissions test prior to the title transfer of such vehicles. Test-on-resale was not required to meet the FCAA Amendments of 1990 and did not produce additional emissions reduction benefits. The SIP revision also incorporated into the SIP the Memorandum of Understanding between the commission and the Department of Public Safety, adopted by the commission on November 20, 1996.

#### **1997 – Vehicle Miles Traveled SIP, August 6, 1997**

The 1994 SIP revision did not require additional TCMs. As a result of changes in I/M and the ETR programs, it was necessary to do the 1997 VMT Offset SIP revision for the HGA area, which was adopted on August 6, 1997.

#### **1997 - NO<sub>x</sub> Waivers**

Texas did not reapply for an extension of the NO<sub>x</sub> §182(f) waivers for HGA and BPA. Therefore, on December 31, 1997, the waivers expired. The state is now required to implement several NO<sub>x</sub> control programs. Among them is a requirement for all major NO<sub>x</sub> sources within the area to implement RACT. The state has adopted a revised compliance date of November 15, 1999, for this program.

#### **1998 – EPA’s Attainment Date Extension for Downwind Transport Areas**

On July 16, 1998, EPA issued a guidance memorandum titled “Extension of Attainment Dates for Downwind Transport Areas.” The guidance, referred to hereinafter as the “transport guidance,” provides a means for EPA to extend the attainment date for an area affected by transported air pollution, without reclassifying (“bumping up”) the area to a higher classification. The transport guidance is particularly relevant to BPA, which is downwind of the HGA area and is affected by transport from HGA. If EPA approved such a determination for BPA, the area would have until no later than November 15, 2007, the attainment date for HGA, to attain the one-hour ozone standard. There is also mounting technical data which suggests that the DFW area is impacted by transport and high regional background levels of ozone. A modeling demonstration has been developed and shows that the air quality in the DFW area is influenced at times from the HGA area. This demonstration, if approved by the EPA, would allow EPA to determine that the area should not be bumped up from serious to severe under the conditions of the July 16, 1998, transport guidance. If approved by the EPA the new attainment date for the DFW area would be no later than November 15, 2007, the attainment date for HGA.

### **1998 – Inspection/Maintenance SIP, June 3, 1998**

The commission, in a committal SIP revision adopted on June 3, 1998, and submitted to EPA on June 23, 1998, agreed to implement on-board diagnostic (OBD) checks as part of the I/M program by the federal deadline of January 1, 2001.

### **1998 – Texas Clean Fleet SIP, July 29, 1998**

On July 29, 1998, the commission adopted regulations and a revision of the TCF SIP to set forth the low-emission vehicle (LEV) requirements for mass transit fleets in each of the serious and above nonattainment areas, and for local government and private fleets operated primarily within the serious and above nonattainment areas. These rules satisfy the state requirements to adopt rules to implement SB 681.

### **1999 – Dallas-Fort Worth Attainment SIP, February 24, 1999**

The DFW area was classified as a moderate ozone nonattainment area in accordance with the FCAA Amendments of 1990. As a moderate nonattainment area, DFW was to demonstrate, through monitoring, attainment of the one-hour ozone standard by November 15, 1996, or face being “bumped up” to the serious classification. Air quality data from DFW ambient air quality monitors for the years 1994-96 show that the one-hour NAAQS for ozone has been exceeded more than one day per year over this three-year period. On February 18, 1998, the EPA issued a final notice in the *Federal Register* that the DFW area was being reclassified to the serious classification for failing to attain the NAAQS for ozone. As a result of this reclassification, the EPA required that a new SIP demonstrating attainment of the ozone standard in DFW be submitted by March 20, 1999. The state submitted a SIP for DFW that included photochemical modeling showing the level of reductions needed to attain the standard by 1999, a 9% ROP target calculation for the years 1997-99, VOC RACT rules in Chapter 115 applicable to sources meeting the 50 tpy major source level, NO<sub>x</sub> RACT rules in Chapter 117 applicable to major sources of NO<sub>x</sub>, and amendments to Chapter 116 reinstating nonattainment new source review for NO<sub>x</sub>. The governor submitted this SIP to EPA on March 16, 1999. Because there was not enough time to implement the rules to achieve necessary reductions of ozone precursor emissions in the DFW area by the required attainment date of November 15, 1999, the state proposed to submit in March 2000 a full attainment demonstration including a complete rule package necessary to attain the one-hour ozone standard.

On February 24, 1999, the commission adopted a SIP revision for the DFW area which was submitted to EPA on March 16, 1999. This SIP was not only intended to demonstrate how the DFW area would attain the standard through the submission of an updated emissions inventory and photochemical modeling, but to also include a 9% ROP target calculation in order to satisfy EPA’s requirement of reasonable further progress in emission reductions for the DFW area for the years 1997-99. The reductions toward ROP were short of the 9% target and the SIP lacked required modeled control strategies; therefore, a follow-up SIP was developed. More information about the follow-up submittal is addressed later in this introduction.

### **1999 – Northeast Texas Flexible Attainment Region (FAR) SIP, May 12, 1999**

On May 12, 1999, the commission adopted a revision to the SIP for the Northeast Texas region which would make certain local ozone precursor emission reductions federally enforceable. This revision was submitted to EPA on June 4, 1999. Four affected companies (Norit Americas, Inc.; La Gloria Oil and Gas

Company; Eastman Chemical Company, Texas Eastman Division; and ARCO Permian) in the Northeast Texas region voluntarily agreed to be subject to the implementation of enforceable emission reduction measures pursuant to Part A, Sections 2-5 of the Northeast Texas Flexible Attainment Region (FAR) Memorandum of Agreement. The FAR approach allows time for the area's control program to work, similar to contingency measures in a post-1990 maintenance agreement, prior to EPA issuing a call for a SIP revision or nonattainment re-designation. The MOA required the immediate implementation of control measures through the use of Agreed Orders, which are included in the SIP revision to make them federally enforceable.

#### **1999 – Gasoline SIP, June 30, 1999**

On June 30, 1999, the commission adopted a revision to the SIP in order to incorporate cleaner gasoline rules. The cleaner gasoline is required to have a lower RVP outside the DFW and HGA areas, and a limit on the amount of sulfur in each gallon of gasoline. The RVP required in this SIP revision is 7.8 psi starting May 1, 2000. The RVP limit would be in effect every summer from May 1st through October 1st. A 7.8 psi RVP fuel is expected to reduce evaporative emissions from automobiles, off-highway gasoline powered equipment, and all gasoline storage and transfer operations. Evaporative VOC emissions from automobiles will be reduced by at least 14%. The sulfur cap requirement is 150 ppm per gallon of gasoline, starting January 1, 2004. Low sulfur gasoline is expected to reduce NO<sub>x</sub> emissions from today's cars by 8.5% according to the EPA complex model. The rules would further provide for counties or large cities to opt into these regulations earlier than required provided that certain conditions are met. If EPA were to adopt sulfur regulations to require compliance by January 1, 2004, the commission's rules would no longer apply, allowing the federal sulfur rules to take precedence. However, areas that choose to opt-in early would continue to follow the sulfur requirements of their early compliance plan until EPA actually implemented its regulations, unless otherwise specified in the commission order.

#### **1999 – Collin County Lead SIP, July 28, 1999**

On July 28, 1999, the commission adopted a site-specific revision to the SIP which provides for the re-designation to attainment of that portion of Collin County currently designated as nonattainment for the lead NAAQS. The revision also provides a maintenance plan for the area to ensure continued compliance. As part of the maintenance plan, the revision establishes a new contingency plan through an agreed order and replaces Agreed Board Orders 92-09(k) and 93-12 and Board Order 93-10. The revision also provides for a commitment by the commission to keep the existing monitoring network in place until the end of the maintenance period.

#### **1999 – Dallas-Fort Worth One-Hour Ozone 9% Technical Review SIP, October 15, 1999**

On October 15, 1999, the commission adopted a revision to the SIP for the DFW ozone nonattainment area. This SIP was developed in order to address the shortfall in the reductions towards the 9% ROP target and the lack of modeled control strategies from the February 24, 1999, revision. Potential emission reduction credits were reviewed that were not claimed in the February 1999 SIP in order to make up the ROP shortfall. The focus was on VOC reductions because fewer VOC reductions would be needed to make up the shortfall compared to NO<sub>x</sub> emission reductions. The ROP lacked about 20% of the VOC reductions needed, which amounted to 5.87 tpd. Making complete the 9% ROP portion of the SIP should allow certain transportation projects to avoid being put on hold. Elements have been identified that were not previously considered that would bring SIP emission reduction credits in order to complete the 9%

ROP requirements for the years 1996-99. These technical corrections were included in the October 1999 revised SIP.

### **1999 – Houston-Galveston Area One-Hour Ozone Attainment SIP Part II, October 27, 1999**

In November 1998, the HGA SIP revision submitted to EPA in May 1998 became complete by operation of law. However, EPA stated that it could not approve the SIP until specific control strategies were modeled in the attainment demonstration. EPA specified a submittal date of November 15, 1999, for this modeling. As the HGA modeling protocol evolved, the state eventually selected and modeled seven basic modeling scenarios. As part of this process, a group of HGA stakeholders worked closely with commission staff to identify local control strategies for the modeling. This modeling showed a gap in reductions necessary for attainment of the one-hour ozone standard. The commission adopted these revisions to the SIP on October 27, 1999.

### **2000 – Houston-Galveston Area One-Hour Ozone Attainment SIP, April 19, 2000**

In the April 2000 SIP revision for HGA, the state made the following enforceable commitments : 1) to quantify the shortfall of NO<sub>x</sub> reductions needed for attainment; 2) to list and quantify potential control measures to meet the shortfall of NO<sub>x</sub> reductions needed for attainment; 3) to adopt the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000, and to adopt the rest of the rules as expeditiously as practical, but no later than July 31, 2001; 4) to submit a Post-99 ROP analysis by December 31, 2000; 5) to perform a mid-course review by May 1, 2004; and 6) to perform new mobile source modeling, using MOBILE6, within 24 months of the model's release. In addition, if a transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE 6 release, transportation conformity will not be determined until Texas submits a motor vehicle emissions budget (MVEB) which is developed using MOBILE 6 and which the EPA finds adequate. Finally, if any of the measures adopted in the SIP pertain to motor vehicles, the commission commits to recalculate and resubmit a MVEB by December 31, 2000.

### **2000 – Beaumont-Port Arthur One-Hour Ozone Attainment SIP, April 19, 2000**

The BPA area is classified as moderate, and therefore was required to attain the one-hour ozone standard by November 15, 1996. The BPA area did not attain the standard by that date, and also did not attain the standard by November 15, 1999, the attainment date for serious areas. In determining the appropriate attainment date for an area, EPA may consider the effect of transport of ozone or its precursors from an upwind area which interferes with the downwind area's ability to attain. On April 16, 1999, EPA proposed in the *Federal Register* to allow BPA to take advantage of the transport guidance if an approvable attainment demonstration is submitted by November 15, 1999. The SIP revision, adopted by the commission on October 27, 1999, and submitted to EPA by November 15, 1999, contained results of photochemical modeling demonstrating transport from HGA to BPA. Following EPA's transport guidance, it was demonstrated that BPA attained the one-hour ozone standard. In addition, the November 1999 SIP revision contained adopted rules for IWW and batch process sources to ensure that VOC emission limits for these sources meet EPA's guidelines for RACT. Furthermore, the SIP revision included adopted rules establishing NO<sub>x</sub> RACT emission limits for gas-fired, lean-burn stationary internal combustion engines. These NO<sub>x</sub> rules represented "Phase I" of a two-part revision to the BPA attainment demonstration SIP.

The April 2000 SIP revision represented “Phase II” of the BPA attainment demonstration SIP, and contained adopted rules specifying NO<sub>x</sub> emission limits for electric utility boilers, industrial boilers, and industrial process heaters. In accordance with EPA guidance, implementation of these NO<sub>x</sub> emission limits represented a reasonable level of control, necessary for an approvable attainment demonstration. Modeling of these Phase II reductions showed that the BPA area attains the one-hour ozone standard, using WOE analyses.

#### **2000 – Dallas-Forth Worth One-Hour Ozone Attainment SIP, April 19, 2000**

The DFW area’s attainment deadline as a serious ozone nonattainment area was November 15, 1999. In March 1999, the state submitted an attainment demonstration to EPA, however this SIP submittal did not contain the necessary rules to bring the DFW area into attainment by the November 1999 deadline. As a result, EPA issued a letter of findings that the March 1999 submittal was incomplete. This finding triggered an 18-month sanctions clock effective May 13, 1999.

The state now has mounting technical data which suggests that DFW is significantly impacted by transport and regional background levels of ozone. The reductions from the strategies needed for the HGA area and the regional rules discussed are a necessary and integral component in the strategy for DFW’s attainment of the one-hour ozone standard. The April 2000 SIP contained a modeling demonstration which showed that the air quality in the DFW area is influenced at times from the HGA area. This demonstration, if approved by EPA, would allow EPA to determine that the DFW area should not be bumped up to a more severe classification. It would also allow DFW to have until no later than November 15, 2007, the attainment date for HGA, to reach attainment.

In order to develop local control strategy options to augment federal and state programs, the DFW area established a North Texas Clean Air Steering Committee made up of local elected officials and business leaders. Specific control strategies were identified for review by technical subcommittee members. In addition, the NCTCOG hired an environmental consultant to assist with the analysis and evaluation of control strategy options. The consultant was responsible for presenting the findings of the technical subcommittees to the NCTCOG air quality policy and steering committees for final approval prior to being submitted to the state. A WOE argument was developed for DFW which consisted of several elements which, taken together, formed a compelling argument that attainment will be achieved by 2007.

#### **2000 - Northeast Texas One-Hour Ozone FAR SIP, April 19, 2000**

On April 19, 2000, the state adopted a revision to the Northeast Texas FAR SIP. The Flexible Attainment Region Agreement requires that contingency measures be implemented as a result of exceedances of the National Ambient Air Quality Standard for ozone. As outlined in the FAR Action Plan under Part B, Contingent Measures, in the event of a subsequent violation the SIP must be revised to include quantifiable and enforceable control measures. Through the use of Agreed Orders these measures were adopted and included in the Northeast Texas FAR SIP to make them federally enforceable.

#### **2000 - Transportation Control Measures (TCM) and Vehicle Miles Traveled (VMT) SIP Revisions, May 3, 2000**

On May 3, 2000, the state adopted a revision to the TCM and VMT portions of the SIP. This revision required TCM project-specific descriptions and estimated emissions reductions to be included in the SIP

and allowed nonattainment area MPOs to substitute TCMs without a SIP revision if the substitution results in equal or greater emission reductions.

#### **2000 – Houston-Galveston Area One-Hour Ozone Attainment SIP, December 6, 2000**

On December 6, 2000, the state adopted a revision to the Houston/Galveston Post-1999 ROP and Attainment Demonstration SIP. The December 2000 submittal contained the following elements: 1) rules and photochemical modeling analyses in support of the HGA ozone attainment demonstration; 2) post-1999 ROP plans for the milestone years 2002 and 2005, and for the attainment year 2007; 3) transportation conformity MVEBs for NO<sub>x</sub> and VOC; 4) enforceable commitments to implement further measures in support of the HGA attainment demonstration; and 5) a commitment to perform and submit a mid-course review by May 2004.

In order for the state to have an approvable attainment demonstration, the EPA indicated that the state needed to adopt those strategies modeled in the November 1999 SIP submittal, and then adopt sufficient measures to close the remaining gap in NO<sub>x</sub> emissions. The modeling indicated an emissions gap such that an additional 91 tpd of NO<sub>x</sub> reductions was necessary for an approvable attainment demonstration. The HGA nonattainment area needs to ultimately reduce NO<sub>x</sub> by more than 750 tpd to reach attainment with the one-hour ozone standard. In addition, a VOC reduction of about 25% will also have to be achieved.

#### **2001 – Houston-Galveston Area One-Hour Ozone Attainment SIP, September 26, 2001**

The September 2001 SIP revision for the HGA ozone nonattainment area included the following elements: 1) corrections to the ROP table/budget for the years 2002, 2005, and 2007 due to a mathematical inconsistency; 2) incorporation of a change to the idling restriction control strategy clarifying that the operator of a rented or leased vehicle is responsible for compliance with the requirements of Chapter 114 in situations where the operator of a leased or rented vehicle is not employed by the owner of the vehicle (the commission committed to making this change when the rule was adopted in December 2000); 3) incorporation of revisions to the clean diesel fuel rules to provide greater flexibility in complying with the requirements of the rule while preserving the emission reductions necessary to demonstrate attainment in the HGA area; 4) incorporation of a stationary diesel engine rule that was developed as a result of the state's analysis of EPA's reasonably available control measures; 5) incorporation of revisions to the point source NO<sub>x</sub> rules; 6) incorporation of revisions to the emissions cap and trade rules; 7) the removal of the construction equipment operating restriction and the accelerated purchase requirement for Tier 2/3 heavy duty equipment; 8) the replacement of these rules with the Texas Emission Reduction Plan program; 9) the layout of the mid-course review process which details how the state will fulfill the commitment to obtain the additional emission reductions necessary to demonstrate attainment of the one-hour ozone standard in the HGA area; and 10) replacement of 2007 Rate of Progress MVEBs to be consistent with the attainment MVEBs.

#### **2002 – One-Hour Ozone (O<sub>3</sub>) Flex Agreement**

The One-Hour O<sub>3</sub> Flex Agreement is a voluntary local approach to encourage emission reductions that will keep an area in attainment of the one-hour ozone standard, while also working toward the health benefits envisioned under the eight-hour ozone standard. The One-Hour O<sub>3</sub> Flex is implemented through a Memorandum of Agreement (MOA) between EPA, the state environmental agency and local governments. By developing, signing, and maintaining the MOA, the local area will not be designated

nonattainment for the one-hour ozone standard for the term of the agreement, as long as the control measures are being implemented. A major advantage of the region's participation in an One-Hour O<sub>3</sub> Flex Agreement is the flexibility afforded to the signatories in selecting emission reduction measures and programs which are best suited to local needs and circumstances.

**One-Hour O<sub>3</sub> Flex Plan Austin/San Marcos Metropolitan Statistical Area, March 28, 2002**

On March 28, 2002, local governments, community and business leaders, environmental groups, and concerned citizens in the Austin/San Marcos Metropolitan Statistical Area (A/SM MSA) signed a memorandum of agreement (MOA) with the TNRCC and the EPA to implement programs to improve regional air quality.

**One-Hour O<sub>3</sub> Flex Plan Corpus Christi , September 18, 2002**

On September 18, 2002, the Nueces and San Patricio counties, the Corpus Christi urban airshed, signed an O<sub>3</sub> Flex Intergovernmental Agreement with the TCEQ and the EPA. The 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, a large industrial and petrochemical complex, two major military bases, and a network of highways including the Interstate Highway System that facilitates commerce and a thriving tourism industry.

**2002 – Houston-Galveston Area One-Hour Ozone Attainment SIP, December 13, 2002**

The December 2002 HGA SIP revised to the industrial source control requirement, one of the control strategies within the existing federally approved SIP. This revision contains new rules to reduce emissions of highly reactive volatile organic compounds (HRVOC) from four key industrial sources: fugitives, flares, process vents, and cooling towers. The adopted rules target HRVOCs while maintaining the integrity of the SIP. Analysis showed that limiting emissions of ethylene, propylene, 1,3-butadiene, and butenes in conjunction with an 80% reduction in NO<sub>x</sub> is equivalent in terms of air quality benefit to that resulting from a 90% point source NO<sub>x</sub> reduction requirement. As such, the HRVOC rules are performance-based, emphasizing monitoring, recordkeeping, reporting, and enforcement rather than establishing individual unit emission rates. Technical support documentation accompanying the December 2002 revision contains the supporting analysis for early results from on-going analysis examining whether reductions in emissions of HRVOCs can replace the last 10% of industrial NO<sub>x</sub> controls with a reduction of approximately 36% in industrial HRVOC emissions, while ensuring that the air quality specified in the approved December 2000 HGA SIP continues to be met.

**2004 – Beaumont-Port Arthur Area One-Hour Ozone Rate of Progress and Eight-Hour Ozone Attainment Demonstration SIP, October 27, 2004**

On April 15, 2004, EPA designated Beaumont-Port Arthur as a "marginal" nonattainment area under the eight-hour ozone standard and promulgated the first phase of the eight-hour ozone standard implementation rules. The eight-hour rules discuss the requirements that previously applied in an area for the one-hour NAAQS which would continue to apply after revocation of the one-hour NAAQS for that area as it transitions from the one-hour to the eight-hour standard. Section 51.905(a)(ii) states that if the area has not met its obligation to have a fully-approved attainment demonstration SIP for the one-hour NAAQS, the state must comply with one of three options. In accordance with one of the options, an eight-hour attainment demonstration for BPA was adopted by the commission on October 27, 2004. This attainment demonstration demonstrated that the BPA area will be in compliance with the eight-hour ozone standard in 2007. As a marginal area, there is no requirement for an additional RFP submittal, and

therefore this SIP revision meets the requirements laid out in option (C) above. The October 2004 BPA eight-hour ozone attainment SIP revision also included the one-hour ROP obligations that existed as a result of the reclassification to serious.

#### **2004 – Early Action Compact (EAC) Eight-Hour Ozone SIPs for Austin, San Antonio, and Northeast Texas, November 17, 2004**

On November 17, 2004, the Commission adopted revisions to the State Implementation Plan (SIP) for the Austin, San Antonio, and Northeast Texas Early Action Compact (EAC) areas and Chapters 114 and 115 of Title 30 of the Texas Administrative Code (TAC). These adopted SIP revisions consist of an eight-hour ozone attainment demonstration for the area based on the local plan submitted to TCEQ by the area in March 2004, under its EAC. Revisions contain results of photochemical modeling and technical documentation in support of the attainment demonstration.

- **Austin EAC SIP Revision:** As a result of these analyses, and at the request of the Austin-area local governments, the revision included rule revisions implementing a vehicle inspection and maintenance (I/M) program in Travis and Williamson counties, a new rule allowing jurisdictions to enforce heavy duty diesel idling restrictions within their boundaries through an enforcement agreement with TCEQ, and for all five counties revisions to the VOC rules for degreasing, Stage 1 vapor recovery systems, and cutback-asphalt use. The counties included in the EAC are: Bastrop, Caldwell, Hays, Travis, and Williamson counties.
- **San Antonio EAC SIP Revision:** As a result of these analyses, and at the request of the San Antonio local governments, the revision includes, for all four counties (Bexar, Comal, Guadalupe, and Wilson counties), revisions to the VOC rules for degreasing and Stage 1 vapor recovery systems.
- **Northeast Texas EAC SIP Revision:** As a result of these analyses, and at the request of the Northeast Texas local governments, the revision includes voluntary measures, public outreach, a Clean Cities partner, and leak detection programs for HRVOCs at two chemical plants. The counties included in the EAC are: Gregg, Harrison, Smith, and Upshur counties.
- **Vehicle Inspection and Maintenance (I/M):** The adopted rulemaking would require all two to 24-year-old gasoline vehicles in Travis and Williamson Counties to undergo an annual emissions inspection test along with the current annual safety inspection. The program would be similar to the I/M program currently operated in other areas of the state.
- **Heavy-Duty Diesel Idling Opt-in:** The adopted rulemaking would allow local governmental entities to enforce restrictions on heavy-duty diesel idling within their jurisdictions if they sign an enforcement agreement with TCEQ.
- **VOC Measures:** The adopted rulemaking would revise 30 TAC Chapter 115, Subchapters C, E and F, to implement VOC controls on degreasing units, require the use of Stage 1 vapor recovery equipment in gasoline stations with more than 25,000 gallons per month of throughput, and prohibit the seasonal use of cutback asphalt. Degreasing and Stage 1 Vapor recovery changes will be applicable to the five Austin-area counties and the four San Antonio EAC counties, while cutback asphalt restrictions will only be applicable in the Austin area.

#### **2004 – Houston-Galveston-Brazoria One-Hour Ozone Mid-Course Review SIP, December 1, 2004**

The TCEQ committed in 2000 to perform a mid-course review (MCR) to ensure attainment of the one-hour ozone standard. The MCR process provides the ability to update emissions inventory data, utilize current modeling tools, such as MOBILE6, and enhance the photochemical grid modeling. The data gathered from the TexAQS continues to improve photochemical modeling of the HGB area. The collection of technical improvements gave a more comprehensive understanding of the ozone challenge in Houston which is necessary for developing a plan to reach attainment. In the early part of 2003, the TCEQ was preparing to move forward with the MCR, however, during the same time period EPA announced its plans to begin implementation of the eight-hour ozone standard. On June 2, 2003, the *Federal Register* published EPA's proposed rule for implementation of the eight-hour ozone standard. In the same timeframe, EPA also formalized its intentions to designate areas for the eight-hour ozone standard by April 15, 2004, meaning states would need to reassess their efforts and control strategies to address this new standard by 2007. Recognizing that existing one-hour nonattainment areas would soon be subject to the eight-hour ozone standard, and in an effort to efficiently manage the state's limited resources, the TCEQ decided to develop an approach that addresses the outstanding obligations under the one-hour ozone standard while beginning to analyze eight-hour ozone issues.

The TCEQ's one-hour ozone SIP commitments include:

- Completing a one-hour ozone MCR
- Performing modeling
- Adopting measures sufficient to fill the NO<sub>x</sub> shortfall
- Adopting measures sufficient to demonstrate attainment
- Revising the Motor Vehicle Emissions Budget (MVEB) using MOBILE6

Through this SIP revision, the TCEQ is fulfilling its outstanding one-hour ozone SIP obligations and beginning to plan for the upcoming eight-hour ozone standard. This proposal demonstrates attainment of the one-hour ozone standard in HGB in 2007 and provides a preliminary analysis of the HGB area in terms of the eight-hour ozone standard in 2007.

#### **2005 – Beaumont-Port Arthur Eight-Hour Ozone SIP Revision, September 28, 2005**

A BPA SIP revision was proposed on May 11, 2005, and adopted by the commission on September 28, 2005. It addresses EPA comments to the October 2004 revision by incorporating outstanding one-hour ozone anti-backsliding requirements and outstanding requirements for eight-hour attainment demonstration. This revision provides the elements required by EPA for the BPA area to have an approvable SIP. The key components of this revision are:

1. RACT and associated rulemaking
2. 2007 RACM
3. Clean-Fuel Vehicle Programs
4. Three percent contingency requirement and associated rulemaking
5. 2006 Motor Vehicle Emissions Budget
6. 2006 Backcast Modeling

#### **2005 - DFW 5% Increment of Progress (IOP) Eight-Hour Ozone SIP Revision, April 27, 2005**

On April 15, 2004, EPA designated several counties in the North Texas area as nonattainment for the eight-hour ozone standard. Those counties are: Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall and Tarrant. The nine-county DFW area was classified as moderate for the eight-hour ozone standard and must attain the eight-hour NAAQS by June 15, 2010. In accordance with the EPA's eight-hour ozone rule, the area should monitor attainment in the ozone season of the year prior to 2010. This revision contains several elements:

1. 2002 Periodic Emissions Inventory (PEI) for the 9-county DFW ozone nonattainment area;
2. An IOP plan that achieves a 5 percent reduction in emissions from the 2002 emissions inventory baseline;
3. Control measures that achieve the necessary NO<sub>x</sub> and VOC emission reductions;
4. Rules and programs necessary to implement the 5 percent IOP control measures; and
5. Motor vehicle emissions budgets (MVEBs) for use in transportation conformity demonstrations.

### **2006 - El Paso Eight-Hour Ozone SIP Revision Maintenance Plan, January 11, 2006**

El Paso County was formally designated as attainment for the eight-hour ozone standard on June 15, 2004. However, the eight-hour ozone rule requires the state to submit an eight-hour ozone maintenance plan within three years of the area being designated as attainment. Adoption and submittal of a maintenance plan to EPA is required by June 15, 2007. El Paso was designated as nonattainment for the one-hour ozone standard. However, the area monitors compliance with the one-hour ozone standard as well as the eight-hour ozone standard. The one-hour ozone standard was revoked in June 2005.

The eight-hour ozone maintenance plan establishes the approach the TCEQ will take to ensure the El Paso area stays in attainment of the eight-hour ozone standard. The maintenance plan includes contingency measures that the state can institute without further rule making in the event the area does not maintain the ozone standard. Three contingency measures are currently in the TCEQ rules that apply to volatile organic compounds in El Paso and require no further rule making. The commission adopted revised rules on October 26, 2005, addressing an I/M program change replacing the two-speed idle vehicle I/M program with an I/M program that uses newer technology. This SIP revision also incorporates the newly adopted rules.

### **2006 – Clean Air Interstate Rule (CAIR) SIP, July 12, 2006**

On May 12, 2005, the Clean Air Interstate Rule (CAIR) was published in the *Federal Register* by the United States Environmental Protection Agency (EPA) to assist nonattainment areas in downwind states in achieving compliance with the National Ambient Air Quality Standard (NAAQS) for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and ozone. Twenty-eight eastern states and the District of Columbia were identified as upwind contributors to the nonattainment of the PM<sub>2.5</sub> and eight-hour ozone NAAQS prompting the requirement for the reduction in emissions of sulfur dioxide (SO<sub>2</sub>) and/or nitrogen oxides (NO<sub>x</sub>).

The NO<sub>x</sub> and SO<sub>2</sub> reduction requirements under CAIR are implemented in two phases by providing states with declining budgets. For NO<sub>x</sub>, Phase I begins in 2009 and continues through the year 2014 with Texas receiving an initial NO<sub>x</sub> budget of 181,014 tons annually. The Phase II NO<sub>x</sub> budget will begin in 2015 with Texas receiving 150,845 tons annually. State SO<sub>2</sub> budgets are based on the allowance allocations provided under Title IV of the Clean Air Act. Annual state budgets for Phase I, years 2010 to 2014, are based on a 50% reduction of Title IV allowances allocated in the affected state. The initial SO<sub>2</sub> budget for Texas during Phase I is 320,946 tons annually. For Phase II, years 2015 and thereafter, SO<sub>2</sub> budgets

are based on a 65% reduction of Title IV allowances allocated in the affected state with Texas receiving 224,662 tons annually.

Texas will meet the reduction requirements under CAIR meet through measures of provided by House Bill (HB) 2481 of the 79th Texas Legislature, 2005. HB 2481 requires Texas to participate in the EPA-administered interstate cap-and-trade program through the incorporation by reference of the CAIR model trading rule. The bill, authored by Representatives Bonnen, Hamric, and Branch and sponsored by Senator Harris, also provided specific direction for the methodology to be used in allocating the NO<sub>x</sub> trading budget provided to Texas, identified an amount of CAIR NO<sub>x</sub> allowances to be set-aside for new sources, and specified that reductions associated with CAIR would only be required from new and existing EGUs. The CAIR SIP incorporates the following elements necessary for EPA approval:

1. Control measures for EGUs to reduce NO<sub>x</sub> and SO<sub>2</sub> emissions to address interstate transport of pollutants under Section 110(a)(2)(D) of the Federal Clean Air Act;
2. A multi-state cap-and-trade program for new and existing EGUs for annual NO<sub>x</sub> and SO<sub>2</sub> emissions for control of PM<sub>2.5</sub> that will be administered by the EPA, which is the control measure for EGUs to reduce NO<sub>x</sub> and SO<sub>2</sub> emissions to address interstate transport of pollutants under Section 110(a)(2)(D) of the Federal Clean Air Act;
3. Opt-in provisions for other units to participate in the NO<sub>x</sub> and/or SO<sub>2</sub> cap-and-trade program;
4. Enforcement and monitoring components for EGUs participating in CAIR;
5. Recordkeeping and reporting requirements for EGUs participating in CAIR;
6. Title V permit requirements for CAIR for NO<sub>x</sub> and SO<sub>2</sub>; and
7. Methodology for allocating CAIR NO<sub>x</sub> allowances.

The CAIR SIP was submitted to the EPA on August 3, 2006.

#### **2006 – Clean Air Mercury Rule (CAMR) State Plan, July 12, 2006**

On May 18, 2005, the final CAMR rule was published in the *Federal Register* by the United States Environmental Protection Agency (EPA). CAMR will permanently cap and reduce mercury emissions from new and existing coal-fired utility units nationwide. The 79<sup>th</sup> Texas Legislature passed House Bill (HB) 2481 that requires Texas to adopt the CAMR by reference. Therefore, Texas must participate in the EPA administered nationwide cap-and-trade program for mercury. Phase I of the CAMR program, years 2010 - 2017, will take advantage of the “co-benefit” reductions of the Clean Air Interstate Rule (CAIR). The EPA has concluded that mercury reductions achieved as a “co-benefit” of controlling SO<sub>2</sub> and NO<sub>x</sub> under CAIR should dictate the appropriate mercury cap level. The EPA has also stated that requiring SO<sub>2</sub> and NO<sub>x</sub> controls beyond those needed to meet the requirements of the CAIR solely for the purposes of further reducing mercury emissions by 2010 is not reasonable because the incremental cost effectiveness of such a requirement would be extraordinarily high. Therefore, additional Phase I mercury reduction requirements will not be required beyond CAIR. For Phase I, the national cap is 38 tons annually, and 4.656 tons annually for Texas. Phase II of the CAMR program, 2018 and thereafter, will require new and existing coal-fired utility units to use mercury-specific air pollution control technologies. The EPA has set a 15 ton annual national cap, and a 1.838 ton Phase II annual budget for Texas. Phase II reductions are based on the combined use of co-benefit CAIR reductions and mercury-specific controls.

The CAMR state plan provides the elements required by the EPA for Texas to have an approvable CAMR state plan. The CAMR submittal is also a requirement of the 79<sup>th</sup> Texas Legislature in HB 2481. The state plan incorporates the following elements necessary for EPA approval:

1. Control measures for new and existing coal-fired EGUs to reduce mercury emissions;

2. Nationwide cap-and-trade program for new and existing coal-fired EGUs for annual mercury emissions that will be administered by EPA;
3. Enforcement and monitoring components for new and existing coal-fired EGUs participating in CAMR;
4. Recordkeeping and reporting requirements for new and existing coal-fired EGUs participating in CAMR; and
5. Title V permit requirements for mercury.

The CAMR plan was submitted to the EPA on August 3, 2006.

### **2007 Regional Haze SIP –**

#### **Best Available Retrofit Technology (BART) Rule, January 10, 2007**

The United States Environmental Protection Agency (EPA) is required by the Federal Clean Air Act (FCAA) to address visibility impairment (haze) at federal Class I areas. Class I areas are designated parks and scenic areas of national importance, including sites in Texas such as Guadalupe Mountains National Park and Big Bend National Park. The EPA promulgated regulations to address regional haze in 40 Code of Federal Regulations (CFR) Part 51, Subpart P, Protection of Visibility, on July 1, 1999 (64 FR 35763), and promulgated amendments to Subpart P and a new Appendix Y, Guidelines for BART Determinations Under the Regional Haze Rule, to Part 51 on July 6, 2005 (70 FR 39156). The FCAA and regional haze regulations require states to submit state implementation plans (SIPs) to address visibility impairment caused by regional haze, and require states to ensure that certain existing major sources are equipped with best available retrofit technology (BART). The rules are intended to satisfy the federal requirement to implement BART and to facilitate the preparation of the Texas Regional Haze SIP.

These rules add a new Subchapter M to Chapter 116 to ensure that owners or operators of sources that are subject to BART requirements perform an engineering evaluation to determine the appropriate level of BART emission controls and subsequently implement any required BART controls. The sources that are affected by the rules are those that belong to one of 26 industry source categories, have the potential to emit 250 tons per year or more of a visibility-impairing pollutant [nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), or particulate matter (PM)], and were built or reconstructed between August 7, 1962, and August 7, 1977. The rules also provide a mechanism for sources to exclude themselves from BART requirements if they demonstrate, by meeting exemption criteria or through modeling that they do not significantly impact visibility in Class I areas.

#### **2007 - El Paso County Area Natural Events Action Plan (NEAP), February 21, 2007**

In 1990, the El Paso area was designated by EPA as nonattainment for particulate matter of 10 microns or less (PM<sub>10</sub>). The Texas Air Control Board (TACB), a predecessor agency to the Texas Commission on Environmental Quality (TCEQ) completed a State Implementation Plan in 1991 and included control measures for particulate matter (PM) to address anthropogenic sources. The El Paso County Area Natural Events Action Plan (NEAP) manages exceedances of the PM<sub>10</sub> and PM<sub>2.5</sub> based on the National Ambient Air Quality Standards (NAAQS) that can be attributed to uncontrollable natural events such as unusually high winds that result in dust storms. The El Paso area has experienced intermittent exceedances of the 24-hour PM<sub>10</sub> standard. TCEQ's analysis of wind data and other information regarding conditions during the exceedances indicates that the major cause is high winds, which lift and carry dust from exposed dry soil. In 1996, the United States Environmental Protection Agency's (EPA) Natural Events Policy (NEP) set forward procedures, through the development of a NEAP, for areas that wish to protect public health

when the PM<sub>10</sub> standard may be exceeded due to these uncontrollable natural events. Based on EPA's guidance, the El Paso NEAP applies to both PM<sub>10</sub> and PM<sub>2.5</sub> NAAQS exceedances caused by natural events. The El Paso NEAP is a plan for managing the exceedances of the PM standards that can be attributed to uncontrollable natural events such as unusually high winds. The NEAP includes the following elements: documentation and analysis of the PM monitoring data, description of local public outreach programs, and steps to limit public exposure to PM emissions during natural events episodes. In addition, the plan will help protect public health, educate the public about high wind events, mitigate health impacts on the community during uncontrollable natural events, and identify and implement appropriate Best Available Control Measures (BACM) for man-made sources of windblown dust.

#### **2007 - Victoria County Eight-Hour Ozone Maintenance Plan, March 7, 2007**

The EPA designated and classified areas for the eight-hour ozone NAAQS with an effective date of June 15, 2004 (See 69 FR 23858). Victoria was classified attainment (69 FR 23936) for the eight-hour ozone standard, but under the EPA's Phase I Implementation Rule is required to submit a maintenance plan by June 15, 2007. This revision provides the elements required by the EPA. According to the Phase I Implementation Rule [40 CFR §51.905(e)], the contingency measure obligations that are part of the approved one-hour maintenance plan remain federally enforceable until such time as the EPA approves a SIP revision removing these obligations. There are no contingency measures that the TCEQ intends to remove from the one-hour ozone maintenance plan. This SIP revision is required by Section 110(a)(1) of the Federal Clean Air Act and 40 CFR §51.905(a)(4)(ii). Victoria was designated as attainment for eight-hour ozone NAAQS and attainment for one-hour ozone NAAQS with an approved maintenance plan, so, must adopt and submit a ten-year maintenance plan within three years of designation. The Victoria SIP revision was approved by the commission on March 7, 2007.

#### **2007 - Houston-Galveston-Brazoria Area SIP Revision, May 23, 2007**

This SIP revision documents the substantial progress toward attainment made under the one-hour ozone National Ambient Air Quality Standard (NAAQS) despite rapid economic and population growth in the area. This SIP also documents steps toward attainment of the eight-hour ozone standard. This SIP revision is the first step in addressing the eight-hour ozone standard in the HGB area and represents the TCEQ's best effort considering the time constraints for planning for attainment of the eight-hour ozone standard due to EPA's delay of adoption of the implementation rules. This SIP revision includes revisions to rules in Chapter 114, related to the Texas Low Emission Diesel Rule (TxLED) for Certain Marine Fuels, Chapter 115, related to the Control of Volatile Organic Compounds (VOC) Emissions from Storage and Degassing Operations in HGB, and Chapter 117, related to the Water Heater Rule Repeal. The revision also includes additional Voluntary Mobile Emission Reduction Program (VMEP) commitments and contains the Reasonably Available Control Technology (RACT) Analysis and the Texas 2002 Periodic Emissions Inventory (EI) for the Houston-Galveston-Brazoria Ozone Nonattainment Area. The TCEQ is committed to attaining the standard as expeditiously as practicable. The TCEQ will continue developing the HGB Eight-Hour Ozone Attainment Demonstration SIP.

The two rules contained in this SIP revision are for: 1) adding marine diesel fuels to the definition of diesel fuel that is subject to the TxLED Rule and 2) adding new controls for under-estimated, unreported, or under-reported VOC emissions from floating roof storage tank landings, flash emissions, and degassing of storage tanks, transport vessels, and marine vessels with liquid heels in revisions to the rules in Chapter 115, Division I: Storage of Volatile Organic Compounds.

The plan also describes ongoing efforts to develop the eight-hour ozone attainment demonstration SIP including a new modeling episode, the continued implementation of increasingly lower federal emission standards for on-road and non-road engines, and further research and consideration of additional control strategies.

The proposed adoption of the HGB SIP revisions is on May 23, 2007.

### **2007 - Houston-Galveston- Brazoria Reasonable Further Progress SIP Revision, May 23, 2007**

The eight-county Houston-Galveston-Brazoria (HGB) metropolitan area is classified a "moderate" ozone nonattainment area by the U.S. Environmental Protection Agency (EPA) under the eight-hour ozone standard. Section 182 of the 1990 Federal Clean Air Act Amendments (FCAA) requires ozone nonattainment areas with air quality classified as moderate or higher to submit plans showing reasonable further progress (RFP) towards attainment of the national ambient air quality standards (NAAQS). EPA's eight-hour ozone implementation rule specifies the requirements for the RFP State Implementation Plan (SIP), which is due to EPA on June 15, 2007.

This SIP demonstrates that HGB will meet the RFP 15 percent reduction requirement for the analysis period of 2002 to 2008. Target year inventories include the latest information available to estimate emissions projections. Target levels for 2008 also account for RFP corrections and non-creditable reductions. All of the RFP inventories are based upon an ozone season weekday analysis.

The 1990 FCAA require that RFP emissions inventories (EIs) be prepared for ozone nonattainment areas. The TCEQ maintains an EI of up-to-date emissions information, including the ozone precursors, nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC). The EI identifies the source types in the HGB area, the amount of each pollutant emitted, and the types of processes and control devices employed at each plant or source category. The HGB RFP demonstration establishes baseline emission levels, calculates reduction targets, identifies control strategies to meet emission target levels, and tracks actual emission reductions against established emissions growth and control budgets.

The RFP methodology involves development of the base year (2002) and milestone year inventories, the emission reductions for each milestone year, and an estimate of the effects of non-creditable reductions and pre-1990 FCAA rule corrections. Once these values have been analyzed, the milestone target levels and EI can be compared to determine if the forecasted controlled EI is less than the target level. The comparison of the controlled target year inventories and the target level of emissions demonstrate that the HGB RFP SIP meets the RFP requirements for the 2008 milestone year.

Additionally, this SIP sets a motor vehicle emissions budget (MVEB) for transportation conformity purposes for the milestone year 2008 of 188.81 tons per day of NO<sub>x</sub> and 86.77 tons per day of VOC. An MVEB is the on-road mobile source allocation of the total allowable emissions for each applicable criteria pollutant or precursor, as defined in the SIP. Transportation conformity determinations must be performed using the budget test, once EPA determines the budget adequate for transportation conformity purposes. To pass the budget test, areas must demonstrate that the estimated emissions from transportation plans, programs, and projects do not exceed the motor vehicle emissions budget.

Although no new on-road mobile source controls have been adopted as a part of the HGB RFP SIP, the on-road mobile EIs and control reduction values have been updated using the latest EPA on-road mobile

source inventory development tool, MOBILE6. Since the inventories have changed, the MVEB is updated as part of this SIP revision.

The proposed adoption of the HGB SIP revisions is on May 23, 2007.

### **2007 - Dallas-Fort Worth Attainment Demonstration State Implementation Plan (SIP), May 23, 2007**

The nine-county Dallas-Fort Worth (DFW) metropolitan area is designated a “moderate” ozone nonattainment area under the eight-hour ozone standard. The Federal Clean Air Act (FCAA), 42 USC, §7410, requires states to submit State Implementation Plan (SIP) revisions for the eight-hour ozone SIP standard by June 15, 2007. This SIP revision demonstrates attainment of the eight-hour ozone standard using photochemical modeling and weight-of-evidence (WOE) and includes several concurrently adopted Chapter 117 rules. These rules include emission reductions from the following sources:

- Major Industrial, Commercial, and Institutional Sources
- Minor Sources
- Electric Generating Facilities (EGFs)
- Cement Kilns
- East Texas Combustion Sources

All of the proposed rules apply to the nine-county DFW area except for the East Texas Combustion rule, which applies in specific counties located in northeast Texas. The North Central Texas Council of Governments (NCTCOG) also commits to reduce nitrogen oxides (NO<sub>x</sub>) emissions by 4.16 tpd by the end of the 2009 ozone season.

The attainment demonstration includes the 1999 base case and 2009 future case modeling for the August 13-22, 1999, episode and is supported by additional technical work that shows decreasing NO<sub>x</sub> and volatile organic compounds (VOC) trends as a result of the control strategies implemented under the one-hour national ambient air quality standards (NAAQS). The SIP revision also explains that several other programs being implemented will improve the area’s air quality, but have not been included in the modeling because of difficulty in quantifying emission reductions, determining whether reductions are surplus, or the programs do not have dedicated future funding. The SIP establishes a new motor vehicle emissions budget (MVEB) for transportation conformity purposes.

This SIP revision documents the progress made under the one-hour ozone NAAQS and the downward trends in eight-hour ozone over the past 15 years, even though population and vehicle miles traveled have increased during the same period. Preliminary 2006 data indicate the DFW area is monitoring attainment of the one-hour ozone standard with a design value of 124 ppb. This SIP revision also includes changes to reflect implementation of House Bill (HB) 965, 79<sup>th</sup> Legislature, 2005, and the proposed repeal of the 10 nanogram/joule (ng/J) NO<sub>x</sub> emissions standard for Type 0 residential natural gas-fired water heaters in Chapter 117, Subchapter D, Division 1. Consistent with the requirements of HB 965 and with EPA guidance, this SIP revision includes replacement reductions to offset the loss of SIP credit due to the proposed repeal of the 10 ng/J emissions standard for residential water heaters.

The proposed adoption of the HGB SIP revisions is on May 23, 2007.

### **2007 - Dallas-Fort Worth Reasonable Further Progress State Implementation Plan,**

## May 23, 2007

The nine-county Dallas-Fort Worth (DFW) metropolitan area is classified a “moderate” ozone nonattainment area under the eight-hour ozone standard. Section 182 of the 1990 Federal Clean Air Act Amendments (FCAA) requires ozone nonattainment areas with air quality classified as moderate or higher to submit plans showing reasonable further progress (RFP) towards attainment of the national ambient air quality standards (NAAQS). EPA’s eight-hour ozone implementation rule specifies the requirements for the RFP State Implementation Plan (SIP), which is due to the EPA on June 15, 2007.

The DFW eight-hour ozone nonattainment area consists of two sets of counties: the original four nonattainment counties under the one-hour ozone standard, or four core counties, (Collin, Dallas, Denton, and Tarrant) and the five newly designated nonattainment counties under the eight-hour ozone standard (Ellis, Johnson, Kaufman, Parker, and Rockwall). Because of this circumstance, the TCEQ has two options for fulfilling its eight-hour ozone RFP requirements for the DFW area. Option 1 treats all nine counties as a single area with a single RFP reduction target. Under this option, the TCEQ must demonstrate a 15 percent reduction in volatile organic compounds (VOC) emissions from the entire nine-county area between 2002 and 2008. Option 2 was selected because it includes nitrogen oxides (NO<sub>x</sub>) reductions and treats the two sets of counties as separate areas with separate RFP targets. For the five new counties, the TCEQ must reduce VOC emissions by 15 percent between 2002 and 2008. For the four core counties, the TCEQ must reduce emissions of either VOC, NO<sub>x</sub>, or combination of the two by 15 percent between 2002 and 2008.

The 1990 FCAA require that RFP emissions inventories be prepared for ozone nonattainment areas. The TCEQ maintains an emissions inventory (EI) of up-to-date emissions information, including the ozone precursors, NO<sub>x</sub> and VOC. The EI identifies the source types present in the DFW area, the amount of each pollutant emitted, and the types of processes and control devices employed at each plant or source category. The DFW RFP demonstration establishes baseline emission levels, calculates reduction targets, identifies control strategies to reduce emission target levels, and tracks actual emission reductions against established emissions growth and control budgets.

The RFP methodology involves development of the base year (2002) and milestone year (2008) inventories, the emission reductions for each milestone year, and an estimate of the effects of non-creditable reductions and pre-1990 FCAA rule corrections. Once these values have been analyzed, the milestone target levels and EIs can be compared to determine if the forecasted controlled EI is less than the target level. The comparison of the controlled target year inventories and the target level of emissions demonstrate that the DFW RFP SIP meets the RFP requirements for the 2008 milestone year. Additionally, this SIP sets a motor vehicle emissions budget (MVEB) for transportation conformity purposes for the milestone year 2008. The 2008 eight-hour ozone RFP MVEB for the DFW nine-county ozone nonattainment area is 249.33 tons per day of NO<sub>x</sub> and 119.81 tons per day of VOC.

An MVEB is the on-road mobile source allocation of the total allowable emissions for each applicable criteria pollutant or precursor, as defined in the SIP. Transportation conformity determinations must be performed using the budget test, once EPA determines the budget adequate for transportation conformity purposes. To pass the budget test, areas must demonstrate that the estimated emissions from transportation plans, programs, and projects do not exceed the MVEB.

Although no new on-road mobile source controls have been adopted as a part of the DFW RFP SIP, the on-road mobile emission inventories and control reduction values have been updated using the latest EPA on-road mobile source inventory development tool, MOBILE6. Since the inventories have changed, the

MVEBs are updated as part of this SIP revision.

The proposed adoption of the HGB SIP revisions is on May 23, 2007.

**2007 - Corpus Christi Eight-Hour Ozone Flex Memorandum of Agreement, June 13, 2007**

The Corpus Christi urban airshed, comprising of 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 ozone flex program based for the eight-hour ozone standard and sent a letter of intent to do so to the EPA from the Mayor of Corpus Christi on October 4, 2004. EPA issued guidelines for the Eight-Hour Ozone 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-Hour Ozone Flex Program. The purpose of the Eight-Hour Ozone 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-Hour Ozone Flex 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.

The Corpus Christi Eight-Hour Ozone Flex program is currently in the final review process. It is anticipated that the memorandum of agreement with the Corpus Christi area, the TCEQ, and the EPA will be finalized on June 13, 2007.