

The Texas Natural Resource Conservation Commission (commission) adopts amendments to §114.421, Emission Specifications, and §114.429, Affected Counties and Compliance Schedules. These amendments to Chapter 114, Control of Air Pollution from Motor Vehicles; Subchapter I, Non-road Engines; Division 3, Non-road Large Spark-ignition Engines; and corresponding revisions to the associated state implementation plan (SIP) are being adopted in order to extend the existing requirements for non-road, large spark-ignition (LSI) engines to all counties in the state thus controlling ground-level ozone in the state. These amendments are one element of the control strategy for the HGA Post-1999 Rate-of-Progress (ROP)/Attainment Demonstration SIP. The new §114.421 and §114.429 are adopted ~~without changes~~ to the proposed text as published in the August 25, 2000 issue of the ~~Texas Register~~ (25 ~~TexReg~~ 8203) and will not be republished.

#### BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULE

The Houston/Galveston (HGA) ozone nonattainment area is classified as Severe-17 under the Federal Clean Air Act (FCAA) Amendments of 1990 (42 United States Code (USC), §§7401 et seq.), and therefore is required to attain the one-hour ozone standard of 0.12 parts per million (ppm) by November 15, 2007. In addition, 42 USC, §7502(a)(2), requires attainment as expeditiously as practicable, and 42 USC, §7511a(d), requires states to submit ozone attainment demonstration SIPs for severe ozone nonattainment areas such as HGA. The HGA area, defined by Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties, has been working to develop a demonstration of attainment in accordance with 42 USC, §7410. On January 4, 1995, the state submitted the first of its Post-1996 SIP revisions for HGA.

The January 1995 SIP consisted of urban airshed model (UAM) modeling for 1988 and 1990 base-case episodes, adopted rules to achieve a 9% ROP reduction in volatile organic compounds (VOC), and a commitment schedule for the remaining ROP and attainment demonstration elements. At the same time, but in a separate action, the

State of Texas filed for the temporary nitrogen oxides (NO<sub>x</sub>) waiver allowed by 42 USC, §7511a(f). The January 1995 SIP and the NO<sub>x</sub> waiver were based on early base-case episodes which marginally exhibited model performance in accordance with the United States Environmental Protection Agency (EPA) modeling performance standards, but which had a limited data set as inputs to the model. In 1993 and 1994, the commission was engaged in an intensive data-gathering exercise known as the COAST study. The state believed that the enhanced emissions inventory, expanded ambient air quality and meteorological monitoring, and other elements would provide a more robust data set for modeling and other analysis, which would lead to modeling results that the commission could use to better understand the nature of the ozone air quality problem in the HGA area.

Around the same time as the 1995 submittal, the EPA policy regarding SIP elements and timelines went through changes. Two national programs in particular resulted in changing deadlines and requirements. The first of these programs was the Ozone Transport Assessment Group (OTAG). This group grew out of a March 2, 1995 memo from Mary Nichols, former EPA Assistant Administrator for Air and Radiation, that allowed states to postpone completion of their attainment demonstrations until an assessment of the role of transported ozone and precursors had been completed for the eastern half of the nation, including the eastern portion of Texas. Texas participated in this study, and it has been concluded that Texas does not significantly contribute to ozone exceedances in the Northeastern United States. The other major national initiative that has impacted the SIP planning process is the revisions to the national ambient air quality standard (NAAQS) for ozone. The EPA promulgated a final rule on July 18, 1997 changing the ozone standard to an eight-hour standard of 0.08 ppm. In November 1996, concurrent with the proposal of the standards, the EPA proposed an interim implementation plan (IIP) that it believed would help areas like HGA transition from the old to the new standard. In an attempt to avoid a significant delay in planning activities, Texas began to follow this guidance, and readjusted its modeling and SIP development timelines accordingly. When the new standard was published, the EPA decided not to

publish the IIP, and instead stated that, for areas currently exceeding the one-hour ozone standard, that standard would continue to apply until it is attained. The FCAA requires that HGA attain the standard by November 15, 2007.

The EPA issued revised draft guidance for areas such as HGA that do not attain the one-hour ozone standard. The commission adopted on May 6, 1998 and submitted to the EPA on May 19, 1998 a revision to the HGA SIP which contained the following elements in response to the EPA guidance: UAM modeling based on emissions projected from a 1993 baseline out to the 2007 attainment date; an estimate of the level of VOC and NO<sub>x</sub> reductions necessary to achieve the one-hour ozone standard by 2007; a list of control strategies that the state could implement to attain the one-hour ozone standard; a schedule for completing the other required elements of the attainment demonstration; a revision to the Post-1996 9% ROP SIP that remedied a deficiency that the EPA believed made the previous version of that SIP unapprovable; and evidence that all measures and regulations required by the Subpart 2 of Title I of the FCAA to control ozone and its precursors have been adopted and implemented, or are on an expeditious schedule to be adopted and implemented.

In November 1998, the SIP revision submitted to the EPA in May 1998 became complete by operation of law. However, the EPA stated that it could not approve the SIP until specific control strategies were modeled in the attainment demonstration. The EPA specified a submittal date of November 15, 1999 for this modeling. In a letter to the EPA dated January 5, 1999, the state committed to model two strategies showing attainment.

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. Some of the scenarios for which the stakeholders requested evaluation

included options such as California-type fuel and vehicle programs as well as an acceleration simulation mode equivalent motor vehicle inspection and maintenance program. Other scenarios incorporated the estimated reductions in emissions that were expected to be achieved throughout the modeling domain as a result of the implementation of several voluntary and mandatory statewide programs adopted or planned independently of the SIP. It should be made clear that the commission did not propose that any of these strategies be included in the ultimate control strategy submitted to the EPA in 2000. The need for and effectiveness of any controls which may be implemented outside the HGA eight-county area will be evaluated on a county-by-county basis.

The SIP revision was adopted by the commission on October 27, 1999, submitted to the EPA by November 15, 1999, and contained the following elements: photochemical modeling of potential specific control strategies for attainment of the one-hour ozone standard in the HGA area by the attainment date of November 15, 2007; an analysis of seven specific modeling scenarios reflecting various combinations of federal, state, and local controls in HGA (additional scenarios H1 and H2 build upon Scenario V1f); identification of the level of reductions of VOC and NO<sub>x</sub> necessary to attain the one-hour ozone standard by 2007; a 2007 mobile source budget for transportation conformity; identification of specific source categories which, if controlled, could result in sufficient VOC and/or NO<sub>x</sub> reductions to attain the standard; a schedule committing to submit by April 2000 an enforceable commitment to conduct a mid-course review; and a schedule committing to submit modeling and adopted rules in support of the attainment demonstration by December 2000.

The April 19, 2000 SIP revision for HGA contained the following enforceable commitments by the state: to quantify the shortfall of NO<sub>x</sub> reductions needed for attainment; to list and quantify potential control measures to meet the shortfall of NO<sub>x</sub> reductions needed for attainment; to adopt the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000, and to adopt the rest of the shortfall rules as expeditiously

as practical, but no later than July 31, 2001; to submit a Post-99 ROP plan by December 31, 2000; to perform a mid-course review by May 1, 2004; and to perform modeling of mobile source emissions using the EPA mobile source emissions model (MOBILE6), to revise the on-road mobile source budget as needed, and to submit the revised budget within 24 months of the model's release. In addition, if a conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 release, the state will revise the motor vehicle emissions budget (MVEB) so that the conformity analysis and the SIP MVEB are calculated on the same basis.

In order for the state to have an approvable attainment demonstration, the EPA indicated that the state must adopt those strategies modeled in the November submittal and then adopt sufficient controls to close the remaining gap in NO<sub>x</sub> emissions. The modeling and other analysis supporting these rules and the HGA SIP indicate a gap of an additional 88.8 tons per day (tpd) of NO<sub>x</sub> reductions is necessary for an approvable attainment demonstration. The commission estimates that this measure will achieve a minimum of 2.8 tpd of NO<sub>x</sub> equivalent reductions and is therefore a necessary measure to consider for closing the gap and successfully demonstrating attainment.

The emission reduction requirements included as part of this SIP revision represent substantial, intensive efforts on the part of stakeholder coalitions in the HGA area. These coalitions, involving local governmental entities, elected officials, environmental groups, industry, consultants, and the public, as well as the commission and the EPA, have worked diligently to identify and quantify potential control strategy measures for the HGA attainment demonstration. Local officials from the HGA area formally submitted a resolution to the commission, requesting the inclusion of many specific emission reduction strategies.

This rule adoption is one element of the control strategy for the HGA SIP. Adoption and implementation of this control strategy is necessary in order for the HGA nonattainment area to comply with the requirements of the FCAA and achieve attainment for ozone. Additional elements of the control strategy for the HGA SIP are being adopted concurrently in this issue of the ~~Texas Register~~, or were included in the HGA SIP considered by the commission on December 6, 2000 and planned to be submitted to EPA by December 31, 2000.

The amount of NO<sub>x</sub> reductions required for the area to attain the ozone NAAQS has been estimated by extensive use of sophisticated air quality grid modeling, which because of its scientific and statutory grounding, is the chief policy tool for designing emission reduction strategies. The FCAA, 42 USC, §7511a(c)(2), requires the use of photochemical grid modeling for ozone nonattainment areas designated serious, severe, or extreme. The modeling has been conducted with input from a technical oversight committee. Commission staff have continued to improve the air quality modeling technology and refine emission inventory data. Numerous emission control strategies were considered in developing the modeling. Varying degrees of reductions from point sources, on-road and non-road mobile sources, and area sources were analyzed in multiple iterations of modeling, to test the effectiveness of different NO<sub>x</sub> reductions. The attainment demonstration modeling and other analysis submitted for public hearing and comment concurrently with the HGA SIP show that a significant amount of NO<sub>x</sub> reductions practicably achievable are necessary from ozone control strategies in order for the HGA nonattainment area to achieve the ozone NAAQS by 2007, including reductions from surrounding counties included in the HGA consolidated metropolitan statistical area (CMSA).

Additionally, reductions associated from the ozone control strategies that will be implemented outside the HGA nonattainment area will benefit the HGA nonattainment area. This is due to the regional nature of air pollution, the contribution from mobile sources, and the economies of scale and associated market advantages related to

distribution networks for some strategies. At the time the 1990 FCAA Amendments were enacted, the focus on controlling ozone pollution was centered on local controls. However, for many years an ever increasing number of air quality professionals have concluded that ozone is a regional problem requiring regional strategies in addition to local control programs. As nonattainment areas across the United States prepared attainment demonstration SIPs in response to the 1990 FCAA Amendments, several areas found that modeling attainment was made much more difficult, if not impossible, due to high ozone and ozone precursor levels entering from the boundaries of their respective modeling domains, commonly called transport. Recent science indicates that regional approaches may provide improved control of ozone air pollution.

The current SIP revision contains rules, enforceable commitments, photochemical modeling analyses, and calculation of the remaining NO<sub>x</sub> reductions required to reach attainment (gap calculation) in support of the HGA ozone attainment demonstration. In addition, this SIP contains Post-1999 ROP plans for the milestone years 2002 and 2005, and for the attainment year 2007. The SIP also contains enforceable commitments to implement further measures, if needed, in support of the HGA attainment demonstration, as well as a commitment to perform and submit a mid-course review.

The HGA ozone nonattainment area will need to ultimately reduce NO<sub>x</sub> more than 750 tpd to reach attainment with the one-hour standard. In addition, a VOC reduction of about 25% will have to be achieved. Adoption of the non-road LSI engine rules will contribute to attainment and maintenance of the one-hour ozone standard in the HGA area. The extension of these rules to all counties in the state should also contribute to maintenance of the one-hour ozone standard in the rest of the state.

The EPA has been regulating highway (on-road) cars and trucks since the early 1970s and continues to set increasingly stringent emissions standards for such vehicles. After considerable progress was made in controlling emissions from on-road vehicles, the EPA turned its attention to non-road (also called off-road) engines, which also contribute significantly to air pollution. Although emissions from non-road, LSI engines have not yet been regulated by the EPA, the California Air Resources Board (CARB) has adopted exhaust emission standards for these engines. Non-road, LSI engines are primarily used to power industrial equipment such as forklifts, generators, pumps, compressors, aerial lifts, sweepers, and large lawn tractors. The engines are similar to automotive engines and can use similar automotive technology, such as closed-loop engine control and three-way catalysts, to reduce emissions.

The CARB determined the exhaust emission standards for non-road, LSI engines to be technologically feasible and a cost-effective strategy at \$.25 per pound (\$500 per ton) of NO<sub>x</sub> and hydrocarbons (HC) reduced, that will move the state toward reducing NO<sub>x</sub> and HC from non-road, LSI engines. HC, also called VOC, and NO<sub>x</sub> are precursor chemicals that contribute to the formation of ground-level ozone. The HGA area alone will contain 23% of the state's LSI engines, or approximately 88,374 engines, by 2007. Statewide, there will be approximately 371,096 LSI engines by 2007. Adoption and implementation of California standards for non-road, LSI engines throughout the state should reduce the amount of VOC and NO<sub>x</sub> emissions from these sources and, therefore, help control ground-level ozone in nonattainment areas. For the HGA ozone nonattainment area, emission reductions by 2007 will be approximately 2.8 tpd. The program is estimated to cost about \$500 per ton of NO<sub>x</sub> reduced, which compares very favorably with the cost per ton of other emission control strategies.

These amendments are adopted in order to control ground-level ozone in the state by requiring model year 2004 and subsequent non-road, LSI engines 25 horsepower (hp) and larger to be certified under Title 13, California Code

of Regulations, Chapter 9, concerning Off-Road Vehicles and Engines Pollution Control Devices (13 CCR 9), as adopted by the CARB on October 19, 1999 and effective November 18, 1999. The commission is incorporating the non-road, LSI engine rules by reference due to the need for the Texas program to remain identical to the program in California. For any state program that differs from the federal standards, 42 USC, §7543(e)(2)(B), requires the state programs to be identical. The rules will be effective throughout the State of Texas. These amendments are necessary in order to attain and maintain the ozone standard in nonattainment areas, and to establish a single equipment design standard for the state. A single equipment design standard will help to prevent incompatibility and expense which may arise from the distribution of equipment with different emission standards.

The commission solicited comment on additional flexibilities relating to rule content and implementation which have not been addressed in this or other concurrent rulemakings. These flexibilities may be available for both mobile and stationary sources. Additional flexibilities may also be achieved through innovative and/or emerging technology which may become available in the future. Additional sources of funds for incentive programs may become available to substitute for some of the measures considered here. There were 46 comments received which are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

#### SECTION BY SECTION DISCUSSION

The intent of these amendments is to extend to all counties in the State of Texas the non-road, LSI standards that currently exist in the Dallas/Fort Worth (DFW) area. These existing standards are identical to the non-road, LSI standards in place in California.

The following sections of Division 3 were adopted during the DFW rule promulgation and were not reopened for public comment in this rulemaking action because no changes were proposed to these sections: §114.420, Definitions; §114.422, Control Requirements; and §114.427, Exemptions. The two sections of the rules being opened for comment were §114.421 and §114.429. Section 114.421 is amended to reflect the state-wide applicability of the LSI rules, and §114.429 is amended to reflect the compliance dates for the new portions of the state being affected by this rulemaking action.

Additionally, §§114.420, 114.422, and 114.427 were not reopened because they incorporate by reference the California non-road, LSI rules as those rules are set out in 13 CCR 9, concerning Off-Road Vehicles and Engines Pollution Control Devices, as adopted by the CARB on October 19, 1999 and effective November 18, 1999. The Texas program must remain identical to the California program, so the sections already incorporated by reference in the DFW rulemaking may not be changed to be different from the California 13 CCR 9 rules.

Existing §114.421 (Emission Specifications) incorporated by reference the 42 definitions found in 13 CCR 9, §2431 (Definitions). This rulemaking action made no changes to these definitions. Existing §114.429 applied the control requirements to nine counties in the DFW area which include Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, and Tarrant Counties. These amendments extend the control requirements to all counties within the state. Section 114.429 also specifies the compliance schedule for engine manufacturers.

#### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the rulemaking action in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking action does not meet the definition of a "major environmental rule" as defined in that statute. "Major environmental rule" means a rule, the specific intent

of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

These adopted rules do not meet any of the four applicability criteria for requiring a regulatory analysis of "major environmental rule" as defined in the Texas Government Code. Section 2001.0225 applies only to a major environmental rule the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

The new sections to Chapter 114 are one element of the HGA attainment SIP. While the amended rules are intended to protect the environment, based on the analysis provided in the preamble, including the discussion in the PUBLIC BENEFIT AND COSTS section of the proposal preamble, the commission does not believe the rules will adversely affect, in a material way, the sale or use of non-road, LSI engines. The commission does not believe these entities comprise a sector of the economy, or that these rules will adversely affect in a material way the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state.

These amendments to Chapter 114 are intended to protect the environment or reduce risks to human health from environmental exposure to ozone but are not anticipated to affect in a material way, the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a

sector of the state. The amendments would require units of state and local government, businesses, and individuals statewide that own or operate model year 2004 and subsequent non-road LSI engines of 25 hp and larger, and all equipment and vehicles that use such engines to use LSI engines certified under 13 CCR 9 as adopted by the CARB on October 19, 1999. The increased cost of \$100 to \$500 per engine would not cause material impact given the high total cost of this type of equipment.

These rules do not exceed an express standard set by federal law, since they implement requirements of the FCAA. Under 42 USC, §7410, states are required to adopt a SIP which provides for "implementation, maintenance, and enforcement" of the primary NAAQS in each air quality control region of the state. These rules were specifically developed as part of an overall control strategy to meet the ozone NAAQS set by the EPA under 42 USC, §7409. While 42 USC, §7410 does not require specific programs, methods, or reductions in order to meet the standard, state SIPs must include "enforceable emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter," (meaning 42 USC, Chapter 85, Air Pollution Prevention and Control). It is true that 42 USC does require some specific measures for SIP purposes, like the inspection and maintenance program, but those programs are the exception, not the rule, in the SIP structure of 42 USC. The provisions of 42 USC recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public, to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. Even though 42 USC allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of §7410. In order to avoid federal sanctions, states are not free to ignore the requirements of §7410 and must develop programs to assure that the nonattainment areas of the state will be brought into attainment

on schedule. Thus, while specific measures are not prescribed, both a plan and emission reductions are required to assure that the nonattainment areas of the state will be able to meet the attainment deadlines set by the FCAA. The EPA has provided the criteria for both the submission and evaluation of attainment demonstrations developed by states to comply with the FCAA. This criteria requires states to provide, in addition to other information, photochemical modeling and an analysis of specific emission reduction strategies necessary to attain the NAAQS. The commission's photochemical modeling and other analysis indicate that substantial emission reductions from both mobile and point source categories are necessary in order to demonstrate attainment. In this case, this rulemaking is intended to achieve emission reductions in the HGA nonattainment area. Specifically, as noted elsewhere in this rule preamble, the emission reductions associated with these rules are a necessary element of the attainment demonstration required by the FCAA.

In addition, 42 USC, §7502(a)(2), requires attainment as expeditiously as practicable, and 42 USC, §7511a(d), requires states to submit ozone attainment demonstration SIPs for severe ozone nonattainment areas such as HGA. By policy, the EPA requires photochemical grid modeling to demonstrate whether the 42 USC, §7511a(f), NO<sub>x</sub> measures would contribute to ozone attainment. The commission has performed photochemical grid modeling which predicts that NO<sub>x</sub> emission reductions, such as those required by these rules, will result in reductions in ozone formation in the HGA ozone nonattainment area and help bring HGA into compliance with the air quality standards established under federal law as NAAQS for ozone. The 42 USC, §7511a(f), exemption from NO<sub>x</sub> measures for HGA expired on December 31, 1997. The expiration of the exemption under 42 USC, §7511a(f), was based on the finding that NO<sub>x</sub> reductions in HGA are necessary for attainment of the ozone standard. Therefore, the adopted amendments are necessary components of and consistent with the ozone attainment demonstration SIP for HGA, required by 42 USC, §7410.

During the 75th Legislative Session, Senate Bill (SB) 633 amended the Texas Government Code to require agencies to perform a regulatory impact analysis (RIA) of certain rules. The intent of SB 633 was to require agencies to conduct a RIA of extraordinary rules. With the understanding that this requirement would seldom apply, the commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. This conclusion was based, in part, on the criteria set forth in the bill that exempted proposed rules from the full analysis unless the rule was a major environmental rule that exceeds a federal law. As previously discussed, 42 USC does not require specific programs, methods, or reductions in order to meet the NAAQS; thus, states must develop programs for each nonattainment area to ensure that area will meet the attainment deadlines. Because of the ongoing need to address nonattainment issues, the commission routinely proposes and adopts SIP rules. The legislature is presumed to understand this federal scheme. If each rule proposed for inclusion in the SIP was considered to be a major environmental rule that exceeds federal law, then every SIP rule would require the full RIA contemplated by SB 633. This conclusion is inconsistent with the conclusions reached by the commission in its cost estimate and by the Legislative Budget Board (LBB) in its fiscal notes. Because the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full RIA for rules that are extraordinary in nature. While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of 42 USC.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially

unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App.-Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App.-Austin 1990, no writ). Cf. *Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Sharp v. House of Lloyd Inc.*, 815 S.W.2d 245 (Tex. 1991); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App.-Austin 2000, pet. denied); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the RIA requirements is also supported by a change made to the Texas Administrative Procedure Act (APA) by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." Texas Government Code, §2001.035. The legislature specifically identified Texas Government Code, §2001.0225 as falling under this standard. The commission has substantially complied with the requirements of §2001.0225.

Therefore, in addition to not exceeding an express standard set by federal law, these rules do not exceed state requirements, and are not adopted solely under the general powers of the agency because the provisions of the TCAA, §§382.011, 382.012, 382.017, 382.019, 382.039, and 382.051(d) authorize the commission to implement a plan for the control of the states air quality, including measures necessary to meet federal requirements. The remaining applicability criteria, pertaining to exceeding a delegation agreement or contract between the state and the federal government does not apply. Thus, the commission is not required to conduct an RIA as provided in Texas Government Code, §2001.0225.

#### TAKINGS IMPACT ASSESSMENT

The commission evaluated this rulemaking action and performed an analysis of whether the proposed rules are subject to Texas Government Code, Chapter 2007. The following is a summary of that analysis. The specific purposes of these amendments are: to develop a new attainment demonstration SIP for the ozone NAAQS for HGA; and to establish emission requirements on model year 2004 and subsequent non-road, LSI engines 25 hp and larger and all equipment and vehicles that use such engines by requiring these engines to be certified under 13 CCR 9 throughout the state.

This rulemaking action will act as an air pollution control strategy to reduce NO<sub>x</sub> emissions in the ozone nonattainment areas so that they may demonstrate attainment with the ozone NAAQS and maintain air quality in near nonattainment areas across the state. Promulgation and enforcement of these rules will not burden private, real property. Although these rules do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety, and partially fulfill a federal mandate under 42 USC, §7410. Specifically, the emissions limitations and delays within these rules were developed in order to meet the ozone NAAQS set by the EPA under 42 USC, §7409. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once the EPA has established them. Under 42 USC, §7410 and related provisions, states must submit, for EPA approval, SIPs that provide for the attainment and maintenance of NAAQS through control programs directed to sources of the pollutants involved. Therefore, the purpose of these rules is to implement a cleaner-burning, non-road, LSI engine program necessary for the entire state to meet air quality standards established under federal law as NAAQS. Consequently, the exemption which applies to these rules is that of an action reasonably taken to fulfill an obligation mandated by federal law. Therefore, this rulemaking action will not constitute a taking under the Texas Government Code, Chapter 2007.

Also, Texas Government Code, §2007.003(b)(13), states that Chapter 2007 does not apply to an action that: 1) is taken in response to a real and substantial threat to public health and safety; 2) is designed to significantly advance the health and safety purpose; and 3) does not impose a greater burden than is necessary to achieve the health and safety purpose. Although the rule revisions do not directly prevent a nuisance or prevent an immediate threat to life or property, they do prevent a real and substantial threat to public health and safety and significantly advance the health and safety purpose. In addition, §2007.003(b)(4) provides that Chapter 2007 does not apply to these adopted rules since it is reasonably taken to fulfill an obligation mandated by federal law. The amendments will implement requirements of 42 USC, §7410. This action is taken in response to the HGA area exceeding the NAAQS for ground-level ozone, which adversely affects public health, primarily through irritation of the lungs. The action significantly advances the health and safety purpose by reducing ambient NO<sub>x</sub> and ozone levels in HGA. Attainment of the ozone standard will eventually require substantial NO<sub>x</sub> reductions. Any NO<sub>x</sub> reductions resulting from the current rulemaking are no greater than what the best scientific research indicates is necessary to achieve the desired ozone levels. However, this rulemaking action is only one step among many necessary for attaining the ozone standard.

The commission has included elsewhere in this preamble its reasoned justification for adopting this strategy and has explained why it is a necessary component of the SIP, which is federally mandated. This discussion, as well as the HGA SIP which is being adopted concurrently, explains in detail that every rule in the HGA SIP package is necessary and that none of the reductions in those packages represent more than is necessary to bring the area into attainment with the NAAQS. For these reasons the rules do not constitute a takings under Chapter 2007 and do not require additional analysis. Comments received during the comment period regarding the takings impact assessment (TIA) are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

#### COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission determined that this rulemaking action relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission rules in 30 TAC Chapter 281, Subchapter B, Consistency with the Texas Coastal Management Program. As required by 31 TAC §505.11(b)(2) and 30 TAC §281.45(a)(3), relating to actions and rules subject to the CMP, commission rules governing air pollutant emissions must be consistent with the applicable goals and policies of the CMP. The commission reviewed this rulemaking action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and determined that this rulemaking action is consistent with the applicable CMP goals and policies. The primary CMP policy applicable to this rulemaking action is the policy that commission rules comply with regulations at 40 Code of Federal Regulations (CFR) to protect and enhance air quality in the coastal area. The rules, which require additional reductions of air emissions in HGA, will result in reductions of ambient NO<sub>x</sub> and ozone concentrations. These rules are consistent with the applicable CMP policy because they are consistent with 40 CFR. Title 40 CFR, Part 51, sets out requirements for states to prepare, adopt, and submit implementation plans for the attainment of the NAAQS. The adopted rules would be submitted to the EPA under these requirements. No comments were received during the comment period regarding the CMP.

#### HEARINGS AND COMMENTERS

The commission held public hearings on this proposal at the following times and locations: September 18, 2000, in Conroe and Lake Jackson; September 19, 2000, in Houston (two hearings); September 20, 2000, in Katy and Pasadena; September 21, 2000, in Beaumont, Amarillo, and Texas City; September 22, 2000, in Dayton, El Paso, and Arlington; September 25, 2000, in Austin and Corpus Christi. The comment period closed on September 25, 2000.

The following 46 commenters provided written or oral testimony on this proposal: the City of Fort Worth (Fort Worth); the City of Lake Jackson (Lake Jackson); the League of Women Voters of Texas (LWV-TX); Hispanic Community for Texas Citizens for a Sound Solid Economy (TCSE-HC); American Road and Transportation Builders Association (ARTBA); Baker Botts; Business Coalition for Clean Air (BCCA); Dow Chemical Company (Dow); Dynege Inc. (Dynege); the EPA; ExxonMobil Corporation (ExxonMobil); Hanover Compressor Company (Hanover); Harris County Judge Robert Eckels (Harris County); the City of Missouri City (Missouri City); Phillips 66 Company (Phillips 66); Reliant Energy, Inc. (REI); RMT, Inc. on behalf of Montgomery County (Montgomery Co.); Sierra Club Houston Regional Group (Sierra-Houston), and 28 individuals.

Fort Worth, Lake Jackson, LWV-TX; and ten individuals supported the proposed revisions, while the TCSE-HC; and four individuals opposed the proposed revisions. The ARTBA, Baker Botts, BCCA, Dow, Dynege, the EPA, ExxonMobil, Hanover, Harris County, Missouri City, Phillips 66, REI, Montgomery Co., Sierra-Houston, and five individuals supported the proposed revisions, but suggested changes or clarifications as stated in the ANALYSIS OF TESTIMONY section of this preamble. ExxonMobil adopted the BCAA comments by reference, and Dow and one individual supported the BCCA comments.

#### ANALYSIS OF TESTIMONY

Sierra-Houston, LWV-TX, and one individual stated that all of these rules should be applied statewide. Sierra-Houston commented that these rules should be applied statewide so that maximum reductions in transboundary air pollution can be made and so that county boundaries cannot be used to avoid adherence to these rules. LWV-TX commented that SIP strategies that exceed those required by the EPA should be adopted.

The commission appreciates the commenters' support for state-wide applicability of these rules.

The commission notes, however, that it is not obligated to adopt all rules statewide in order to satisfy its commitments under the SIP, nor is the commission required to do so under 42 USC.

Three of the proposed measures contain emission reduction strategies that have been proposed for state-wide applicability: California LSI engines; emissions banking and trading (that portion of the proposed rules which relates to the trading of emission reduction credits and discrete emission reduction credits); and low emission diesel fuel (that portion of the proposed rules which relates to on-road fuel).

In evaluating whether to implement all of the rules statewide, the commission took into account many concerns, including but not limited to, the need for the marketplace to be able to respond to regulation, the possible impacts on transport and distribution systems, the possibility of increased costs and financial burdens on regulated entities, and regional needs and issues associated with state-wide mandates. The commission also analyzed where emission reduction measures are most needed and where emission reduction measures will be most effective in order to demonstrate attainment.

Sierra-Houston resubmitted comment letters dated August 2, 1999, January 31, 2000, and February 24, 2000 concerning already-completed rulemakings and SIP revisions which Sierra-Houston had initially submitted during the comment period for these previous rulemakings and SIP revisions.

These comments were addressed in the ANALYSIS OF TESTIMONY section of the preambles to the earlier rulemakings and SIP revisions which were published in previous issues of the ~~Register~~ **Texas Register**.

One individual commented that the proposed rules are designed to embarrass the governor, and that the Texas Legislature and Congress should analyze these plans.

The commission's intent is not to embarrass Texas and the governor, but instead to comply with the timelines provided in the 1990 FCAA amendments and subsequent EPA guidance for submitting rules to demonstrate ozone attainment in HGA. Accordingly, Texas has committed to adopting the majority of the necessary rules for the HGA attainment demonstration by December 31, 2000.

One individual stated opposition to tractor restrictions being applied to rural counties like Chambers and Liberty, because those counties add nothing to the pollution problem.

These rules apply to all counties throughout the state including Chambers and Liberty County. However, engines less than 175 hp used in agriculture and construction are exempt from these rules, so those living in rural counties who operate tractors with engines rated at less than 175 hp will not be affected by these rules.

One individual commented that recreational equipment should not be exempt from these rules, and another individual commented that no equipment should be exempted from these rules.

The commission appreciates the commenter interest in protecting air quality by suggesting inclusion of all equipment, including recreational equipment, in the scope of these rules.

However, the commission disagrees with the suggestion that no equipment should be exempt from these rules, including recreational vehicles. The amendments to these rules incorporate by reference the California non-road, LSI engine rule because 42 USC requires that the Texas program be identical to the California non-road LSI program. Although emissions from non-road, LSI engines have not yet been regulated by the EPA, the CARB has adopted exhaust emission standards for these engines. These rules and amendments will apply throughout the State of Texas.

One individual commented that the phasing out of equipment should be a longer period so that small farmers or small business owners are not adversely affected.

These rules do not require an immediate phase-out of equipment. Rather, these rules require that any equipment which is replaced beginning in model year 2004 must be CARB-certified. Small farmers and small business owners should not experience financial harm from these rules because the CARB-certified engines are estimated to cost an additional \$100 - \$500 per piece of equipment. No significant fiscal implications are anticipated to individuals, state and local government agencies, and businesses statewide that own or operate affected equipment powered by LSI engines as a result of implementing these rules, unless a business or individual replaces between 200 and 1,000 of these engines annually.

One individual commented that fleet vehicles should not be required to meet the California emission standards.

These rules cover non-road LSI engines rated 25 hp or over, or equipment that uses engines of that size, whether or not the engines or equipment are to be used in a fleet. Non-road LSI engines over 25 hp are primarily used to power industrial equipment such as forklifts, generators, pumps, compressors, aerial lifts, sweepers, and large lawn tractors. Texas has chosen to adopt the California standards because they are more stringent than the current engine standards in place in Texas, and because implementation of the California standards is estimated to provide at least 2.8 tpd of NO<sub>x</sub>-equivalent reductions which are needed in order for the HGA nonattainment area to achieve the ozone NAAQS by 2007. The extension of these rules to all counties in the state should also contribute to maintenance of the one-hour ozone standard in the rest of the state.

One individual commented that all equipment manufactured by Briggs and Stratton will meet the CARB emission standards. The individual stated that the engines already have a spark-advanced system, and that Briggs and Stratton will continue to follow California emission standards.

The commission is pleased to hear that companies such as Briggs and Stratton are complying with the California standards at this time and encourages Briggs and Stratton to continue to do so.

One individual commented that the registration of and pollution tax on engines over 24 hp is long overdue, and is necessary to determine the contribution of their emissions to the HGA ozone precursor problem.

The commission agrees with the commenter that these rules are necessary. However, these rules do not require the registration of, nor levy a tax on all engines 25 hp and greater. Rather, the

rules require that non-road, LSI engines 25 hp or greater produced in model year 2004 and subsequent, be CARB-certified.

One individual commented that “these rules go far beyond anything necessary to protect the environment.” The individual also commented that the basis and analysis for these rules is flawed. One individual added that the “guess” models are an insufficient basis upon which to base policy decisions and regulations, and that emission curtailment is necessary due to the long operational life of these engines.

The commission disagrees with the first three comments. The HGA is classified as a “severe” nonattainment area under 42 USC. If the commission were to propose a SIP with less stringent emission reductions, the HGA could face penalties from the federal government, including the loss of federal highway funds. In order to avoid such penalties, the commission has worked with all stakeholders to attempt to formulate strategies that can reduce emissions to levels that will satisfy the requirements of 42 USC. The current SIP revision contains photochemical modeling analysis in support of the HGA ozone attainment demonstration that meets all EPA criteria. Modeling staff used the latest technology to estimate emission levels across the state and has worked with EPA to study the air pollution dilemma in the HGA area. The commission estimates that this control measure will achieve a minimum of 2.8 tpd of NO<sub>x</sub>-equivalent reductions and is therefore a necessary measure to successfully demonstrate attainment. The commission agrees that emission curtailment is necessary to help reduce NO<sub>x</sub>.

One individual applauded the commission for passing rules related to more efficient engines, but asked that the commission not force people to do things they can't afford.

The commission appreciates the commenter's support for these rules related to engine efficiency. The commission is uncertain whether the commenter's monetary concern is for private individuals or businesses. These rules will not affect the average citizen, unless he or she uses LSI engines rated at or above 25 hp and the engines are not exempted under these rules. These engines are mainly used for industrial operations. There are no significant fiscal implications anticipated to individuals, state and local government agencies, and businesses statewide that own or operate affected equipment powered by LSI engines as a result of implementing these amendments unless a business or individual replaces between 200 and 1,000 of these engines annually. It is unlikely that the average citizen will replace a large quantity of these types of engines annually.

Fort Worth commented that it appreciates the efforts of the City of Houston and its regional partners in submitting a proposed SIP that is compliant with the 42 USC mandates because the DFW region is affected by the pollution generated in the HGA. Fort Worth also commented that it appreciates the commission efforts to enlarge the markets for affected LSI engines by applying these rules statewide.

The commission appreciates the commenter's support. The entire state will benefit from reduction of NO<sub>x</sub> emissions and from the greater economy of scale. State-wide emission reductions help attainment areas maintain attainment status while assisting nonattainment areas in controlling and reducing NO<sub>x</sub> emissions.

One individual commented that the California LSI engine rules should apply to all internal combustion engines in the HGA and the state. Dow commented that these rules do not make clear which equipment is included and asked the commission to clarify whether a diesel engine is of the LSI category.

Diesel engines are not affected by these rules. Diesel engines are classified as compression-ignition engines, not spark-ignition engines. Spark-ignition engines run on gasoline, not diesel fuel, therefore these rules do not apply to all internal combustion engines. The amendments to these rules incorporate by reference the California non-road, LSI engine rule, which does not apply to all internal combustion engines. These rules are identical to the rules effective in California because 42 USC requires that the Texas program be identical to the California non-road LSI program. Although emissions from non-road, LSI engines have not yet been regulated by the EPA, the CARB has adopted exhaust emission standards for these engines. These rules will apply throughout the State of Texas.

EPA commented that the statement relating to the incorporation by reference into the HGA SIP of future revisions to the California regulations should be removed as was done in the DFW SIP. Hanover commented that it understood these rules to state that all future amendments that may be passed in California will be adopted and incorporated into the Texas rules.

The EPA is correct. The preamble of these rules as published for proposal in the ~~Texas Register~~ contained two statements relating to the incorporation by reference into the Texas rules of all future revisions to the California regulations. Although the commission believes it has authority to adopt all future revisions by reference, the two statements relating to incorporation by

reference of all future revisions have been removed from the preamble. The commission has deleted the statements relating to incorporation by reference to allow greater consideration of each change made by California prior to adoption of a change in Texas.

Lake Jackson commented that it can replace by 2007 its two pieces of equipment covered under these rules. Missouri City commented that it would experience increased costs associated with the purchase of new vehicles for the city fleet and the modification of existing equipment.

Lake Jackson may use the equipment it has on hand until the year 2007 and still remain in compliance with these rules. In fact, Lake Jackson and Missouri City can continue to use the equipment already on hand until that equipment fails and must be replaced whether that is in 2004, 2007, or beyond. If the equipment is replaced beginning in model year 2004 any new equipment using a non-road LSI engine must be CARB-certified. As noted elsewhere in this ANALYSIS OF TESTIMONY, these rules require model year 2004 and subsequent non-road, LSI engines 25 hp and larger to be certified under 13 CCR 9. Therefore, Missouri City will not be required to modify existing equipment. Furthermore, Missouri City should not experience significant increased costs associated with the purchase of new vehicles unless it replaces between 200 and 1,000 vehicles per year, because the estimated additional cost of the CARB-certified LSI engine is approximately \$100 - \$500 per vehicle. Finally, these rules do not apply to on-road vehicles.

One individual supported stricter automobile emission standards and would approve of a proposal making trucks and sport utility vehicles (SUV) meet California LSI standards.

The commission appreciates the commenter's enthusiasm for stricter emission standards. The commission notes, however, that these rules apply only to non-road engines. The commenter seems to be registering support for stricter standards for on-road trucks and SUVs. The EPA has adopted the Tier II standards which require most trucks and SUVs to meet emission standards similar to light-duty gasoline automobiles.

One individual commented that "non-road engine strategies" would bankrupt businesses and undermine family lives.

The commission does not believe that these rules will have the negative financial impact predicted by the commenter. No significant fiscal implications are anticipated to individuals, state and local government agencies, and businesses statewide, unless an entity replaces between 200 and 1,000 of these engines annually. The CARB has determined the exhaust emission standards for non-road, LSI engines to be technologically feasible and a cost-effective strategy at \$.25 per pound (\$500 per ton) of NO<sub>x</sub> and HC reduced, that will move the state toward reducing NO<sub>x</sub> and HC from non-road, LSI engines.

ARTBA commented on six proposed rules collectively calling them the "proposed construction rules." ARTBA included California LSI engine standards in this group. ARTBA stated that these rules will threaten public and occupational safety, and that these rules will create negative social and economic effects which the commission has not studied.

The commission first notes that although ARTBA included the California LSI engine rules in its general category of proposed construction rules, ARTBA acknowledged that the FCAA expressly preempts all of the proposed construction rules except the California LSI standards. This statement implies that ARTBA's comments are focused on the remaining five proposed rules it includes in the proposed construction rules, not on the California LSI engine proposed rule.

ARTBA stated elsewhere in its comments that only California may adopt standards or requirements relating to non-road vehicles, and ARTBA observes that only the commission's LSI standards follow the prescribed FCAA §209(e) procedures for adopting nonroad emissions regulations. ARTBA noted that "if and only if California does so, other states may then mirror California's actions, but may not deviate from them." The LSI engine rules mirror California's rules, as explained elsewhere in this ANALYSIS OF TESTIMONY.

Assuming that ARTBA's comments were intended to express ARTBA's belief that the California LSI engine rules will "threaten public and occupational safety, and create negative social and economic effects which the commission has not studied, the commission does not agree that these rules will have the negative impacts predicted by ARTBA. These rules will, to the contrary, prevent a real and substantial threat to public health and safety via the reduction of air pollution, and partially fulfill a federal mandate under 42 USC, §7410. Specifically, the emissions limitations and delays within these rules were developed in order to meet the ozone NAAQS set by the EPA under 42 USC, §7409.

The commission disagrees that possible negative social and economic effects of these rules have not been studied. There are no significant fiscal implications anticipated to individuals, state and

local government agencies, and businesses statewide that own or operate affected equipment powered by LSI engines as a result of implementing these rules and amendments unless an entity replaces between 200 and 1,000 of these engines annually. The CARB has determined the exhaust emission standards for non-road, LSI engines to be technologically feasible and a cost-effective strategy at \$.25 per pound (\$500 per ton) of NO<sub>x</sub> and HC reduced, that will move the state toward reducing NO<sub>x</sub> and HC from non-road, LSI engines.

ARTBA encouraged the commission to consider adopting incentive programs to reduce mobile source emissions from both on-road motor vehicles and non-road vehicles, and to adopt both incentive programs and command and control regulations on stationary sources.

The commission agrees that economic incentive programs can potentially be an effective tool for achieving air quality. One such program is the Carl Moyer program in California. That program appears to be successful in providing flexibility to the regulated industry while still achieving reductions in air emissions. The California program is authorized by and funded through the state legislative process and such legislative approval does not currently exist for a similar Texas program. The commission will continue to try to identify economic incentives which it has authority to implement. Because the commission agrees that market-based incentive programs can be an important component in encouraging development of new technologies and/or greater or more cost effective emission reduction strategies, the commission has provided for the inclusion of economic incentive programs as a component of the HGA SIP in the future.

Hanover requested clarification as to whether the type of engine it uses (minor source semi-portable compressor engines) is exempted from these rules, and whether an exemption can be added to these rules for clarity.

Hanover believed that minor source semi-portable compressor engines should be exempted due to their short projected useful life. Hanover also noted that the control systems required by these rules would involve costs of development, implementation, and maintenance far beyond the estimates contained in the proposal.

The type of engine to which Hanover refers is the type of engine intended to be regulated by this proposed rule, therefore no exemption will be added to the rules. The commission disagrees that semi-portable compressor engines should be excluded from these rules based upon the length of their projected useful life because these are precisely the types of engines that the commission is seeking to include in these rules. The commission cannot exempt these engines because these rules must remain identical to the California rule. The following is quoted from an EPA Engine Programs and Compliance Division Memorandum dated January 29, 1999, titled **California Requirements for Large SI Engines and Possible EPA Approaches** : "Upgrading to modern engine technologies greatly improves the capability of these engines to control emissions and will generally improve engine performance. Electronically-controlled closed-loop operation also provides the potential for great improvement in engine operation. For example, improving control of combustion may allow a fuel economy improvement of 15% to 20%. Also, feedback control of air-fuel ratios eliminates much of the need to maintain and adjust a large number of fuel system calibrations, resulting in reduced product inventories and, more importantly, less downtime and maintenance for equipment in the field. Finally, improved control of the upgraded engines should lead to significantly longer engine lifetimes. The net present value of these

benefits would likely be considerably greater than the incremental cost of improving the engines.”

No significant fiscal implications are anticipated to negatively impact individuals, state and local government agencies, and businesses statewide that own or operate affected equipment powered by LSI engines as a result of implementing the proposed amendments unless an entity replaces between 200 and 1,000 of these engines annually.

Montgomery Co. commented that it should be excluded from these rules based on its assumption that exclusion of this area would result in a difference of less than 1/1000th (0.001) of a part per billion of ozone. One individual stated opposition to these rules being applied to counties like Chambers and Liberty, because those counties add “nothing” to the pollution problem.

The FCAA Amendments of 1990 provided new requirements for areas that had not attained the NAAQS for ozone, carbon monoxide, particulate matter, sulfur dioxide, nitrogen dioxide, and lead, and new requirements for SIPs in general. The EPA was authorized to designate areas failing to meet the NAAQS for ozone as nonattainment and to classify them according to severity. The FCAA, §107(d)(4)(A)(iv) mandated that areas designated as serious, severe, or extreme for ozone that were within a metropolitan statistical area (MSA) or CMSA must have boundaries that include the entire MSA or CMSA. This requirement is supported by the legislative history for the 1990 FCAA Amendments in Senate Report No. 101-228, page 3399, “because ozone is not a local phenomenon but is formed and transported over hundreds of miles and several days, localized control strategies will not be effective in reducing ozone levels. The bill, thus, expands the size of

areas that are defined as ozone nonattainment areas to assure that controls are implemented in an area wide enough to address the problem." The 1990 FCAA Amendments did provide the ability to exclude portions of the entire MSA or CMSA prior to designation, if the state conducted a study, to which the EPA agreed, that proved the geographic portion did not contribute significantly to violation of the NAAQS.

Redesignation has not occurred for any portion of the HGA nonattainment area, and is not currently being considered. For existing areas currently included within a nonattainment area, the specific area must be redesignated as attainment in order to be removed from a nonattainment area. The FCAA, §107(d)(3) provides that the EPA may not redesignate a nonattainment area, or a portion of a nonattainment area, to attainment unless several criteria are met. These criteria include: a determination that the area has attained the NAAQS; there is a fully approved SIP for the area; there is a determination that the improvement in air quality is due to permanent and enforceable emissions reductions; there is an approved maintenance plan for the area; and the state has met all requirements for the area under FCAA, §110 and Part D.

However, even if a specific area within the HGA nonattainment area was redesignated by the EPA as attainment for ozone, reductions associated from all adopted ozone control strategies would still be necessary, because of the requirements of FCAA, §107(d)(3) and §175A which require maintenance plans for all redesignated areas. The maintenance plan must include the measures specified in §107(d)(3) and any additional measures that are necessary to ensure that the area continues to be in attainment with the NAAQS for ten years after the redesignation. Eight years

after the redesignation, the state is required to submit an additional SIP revision to maintain the NAAQS for another ten years after the end of the first ten-year period.

Additionally, reductions associated from the ozone control strategies that will be implemented outside the HGA nonattainment area will benefit the HGA nonattainment area. This is due to the regional nature of air pollution, the contribution from mobile sources, and the economies of scale and associated market advantages related to distribution networks for some strategies.

At the time the 1990 FCAA Amendments were enacted, the focus on controlling ozone pollution was centered on localized controls. However, for many years an ever increasing number of air quality professionals have concluded that ozone is a regional problem requiring regional strategies in addition to local control programs. As nonattainment areas across the United States prepared attainment demonstration SIPs in response to the 1990 FCAA Amendments, several areas found that modeling attainment was made much more difficult, if not impossible, due to high levels of ozone and ozone precursor entering from the boundaries of their respective modeling domains, commonly called transport. Recent science indicates that regional approaches may provide improved control of ozone air pollution.

The commission has conducted air quality modeling and upper air monitoring that found regional air pollution should be considered when studying air quality in the Texas ozone nonattainment areas. This work is supported by research conducted by the OTAG, the most comprehensive attempt ever undertaken to understand and quantify the transport of ozone.

Both the commission and the OTAG study point to the need to take a regional approach to controlling air pollutants.

REI commented that the emission limitations have been developed with a less than complete analysis of the technical or economic feasibility, inaccurate cost estimates, and a less than complete analysis of the possible environmental or economic disbenefit of the controls. One individual commented that the rules may harm economic growth.

The commission disagrees with the comments and made no change in response to these comments. The proposed rules contained an analysis of information available to the commission regarding the costs and benefits of the proposed rules. This information met the statutory requirements of the TCAA and the Texas Administrative Procedures Act (APA) because the information provided in the proposed rules was sufficient for commenters to submit alternative assessments of the costs and benefits.

Adequate notice is essential for fairness as well as a meaningful opportunity to comment on proposed rules. *United Loans, Inc. v. Pettijohn*, 955 S.W.2d 649, 651 (Tex. App.-Austin 1997). To achieve the goal of encouraging meaningful public participation in the formulation and adoption of rules by state agencies, the notice must have sufficient information so that interested persons can determine whether it is necessary for them to participate in order to protect their legal rights and privileges. The commission received intelligent comments which were substantial in both number and in scope, regarding the costs of the proposed rules and the technical practicability of

compliance. Therefore, the commission believes this goal has been achieved and that the notice includes sufficient information to constitute adequate notice.

The purpose of the comment period is for the public to provide the commission with information to say why they agree or disagree. To simply state that the proposal did not meet the statute or that compliance with the proposed rules is not technically or economically feasible does not provide the commission with sufficient information to propose changes or alternative strategies. There is no requirement that the commission determine the probable economic cost of the unique aspects of every facility or source that must comply, nor give the probable economic cost of every possible method of control. Rather, the notice must include the cost of a reasonable method of compliance. Mere disagreement with cost or technical feasibility estimates does not render notice inadequate.

The rule proposal met the requirement to include sufficient information, because it provided an explanation of the costs associated with implementation of the rule requirements, as well as the date upon which CARB-certified engines must be made available for purchase. To simply state that the proposal failed to provide sufficient information does not provide the commission with sufficient information to propose changes or alternative strategies. The commenters did not say how the notice is insufficient, merely that it is insufficient. Nevertheless, the commission reviewed the notice and determined it to have been adequate. The commission responses to comments regarding costs of compliance with these rules are discussed in the FINAL REGULATORY IMPACT ANALYSIS DETERMINATION section of this preamble and throughout this ANALYSIS OF TESTIMONY. The commission response to technical feasibility of these rules is also

discussed in the BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULE section of this preamble and throughout this ANALYSIS OF TESTIMONY.

One individual commented that the rule package does not contain any information concerning the effectiveness of this equipment, therefore the individual would like to see a pilot program initiated before these rules are adopted.

The commission will not be performing a pilot program due to the success of these rules in California. The commission is relying on data obtained by the CARB to justify the effectiveness of these rules, which the commission is entitled to do because of the need for the Texas program to remain identical to the California program. With respect to effectiveness of equipment, the following is quoted from an EPA Engine Programs and Compliance Division Memorandum dated January 29, 1999, titled California Requirements for Large SI Engines and Possible EPA Approaches :  
"Upgrading to modern engine technologies greatly improves the capability of these engines to control emissions and will generally improve engine performance. Electronically-controlled closed-loop operation also provides the potential for great improvement in engine operation. For example, improving control of combustion may allow a fuel economy improvement of 15% to 20%. Also, feedback control of air-fuel ratios eliminates much of the need to maintain and adjust a large number of fuel system calibrations, resulting in reduced product inventories and, more importantly, less downtime and maintenance for equipment in the field. Finally, improved control of the upgraded engines should lead to significantly longer engine lifetimes. The net present value of these benefits would likely be considerably greater than the incremental cost of improving the engines." There are no significant fiscal implications anticipated to individuals,

state and local government agencies, and businesses statewide that own or operate affected equipment powered by LSI engines as a result of implementing these rules unless an entity replaces between 200 and 1,000 of these engines annually. The commission estimates that this measure will achieve a minimum of 2.8 tpd of NO<sub>x</sub> equivalent reductions and is therefore a necessary measure for successfully demonstrating attainment.

These rules will go into effect without a pilot program due to the fact that these rules and the others contained in the SIP package that pertain to the HGA and the state are necessary for the HGA to meet attainment by 2007. Furthermore, the commission has studied the results that California has experienced with this program and is convinced of its effectiveness in reducing emissions in a cost-effective manner.

Several individuals inquired about who would enforce these rules, and commented that enforcement of the proposed rules will be difficult, impossible, and expensive. One individual asked how the commission will ensure that the engines affected by these rules will be inspected for compliance, because they do not have to be inspected like those engines that are licensed for highway use.

As with all of its rules, the commission will enforce the requirements after the rule compliance date and take appropriate action for noncompliance situations. The rules are enforced by staff in the commission's regional offices, as well as local air pollution control programs. Local governments have the same power and are subject to the same restrictions as the commission under TCAA, §382.015, Power to Enter Property, to inspect the air and to enter public or private property in its territorial jurisdiction to determine if the levels of air contaminants meet levels

set by the commission. Local governments are not required to enforce commission rules, but may sign cooperative agreements with the commission to enforce the rules under TCAA, §382.115, Cooperative Agreements. Local programs can also enforce commission rules without signing a cooperative agreement. The authority of local governments to enforce air pollution requirements is specified in detail in TCAA, §§382.111 - 382.115, and local governments can institute civil actions in the same manner as the commission under Texas Water Code (TWC), §7.351.

The commission will work with local officials to ensure enforcement of the SIP and SIP rules. The commission has existing relationships with pollution control authorities in the City of Houston, Harris County, and Galveston County for enforcement of other commission rules. The commission will continue enforcement relationships with these entities and develop relationships with other local officials as needed to create effective enforcement mechanisms for the SIP and SIP rules.

BCCA, Dynegy, ExxonMobil, Phillips 66, and REI stated that the proposed rules did not include an adequate small business and micro-business assessment as required under Texas Government Code, §2006.002. The commenters stated that an analysis of the costs of compliance for small and micro-businesses must also compare the costs of compliance for these businesses with the costs for the largest businesses affected by these rules. The commenters stated that the comparison must use at least one of the following standards: cost for each employee, cost for each hour of labor, or cost for each \$100 of sales. The commenters asserted that the rule proposal failed to include the mandated cost comparison standards. The commenters stated that this is the case even in those instances where the commission acknowledged a significant impact. The commenters stated that the commission either restated the costs of compliance it identified in the analysis of public benefits and costs, or

concluded that it cannot determine the cost to small businesses. The commenters stated that the rule proposal preamble stated that "the estimated capital and annualized cost of installing and operating control technology used for the various types of equipment in the fiscal note would appear to be a reasonable cost estimate for small and micro-businesses." (25 TexReg 8293).

The commenters asserted that the rule proposal assessments fall short of what Texas law requires and that it is not sufficient for the commission merely to state that the costs for small and large businesses will be the same. The commenters stated that the rationale behind requiring a comparison using an established standard, e.g., cost for each employee, cost for each hour of labor, or cost for each \$100 of sales, is to determine whether there is a disparate impact on small businesses. The commenters stated that according to *Unified Loans v. Pettijohn*, 955 S.W.2d at 652 (Court of Appeals -- Austin, 1997), the statute's purpose is to obtain "an objective assessment of the agency's proposed action by forcing it to consider seriously... the effect of these rules on small businesses, including an analysis of their costs of compliance and a comparison of their costs with the cost of compliance for the largest businesses affected..." The commenters stated further that the commission cannot merely conclude that the costs to small businesses "cannot be determined," and is obliged to include in the notice "some basis" for its conclusion so that interested parties can "confront that basis in a meaningful way in their comments." (*Unified Loans v. Pettijohn*, 955 S.W.2d at 653.)

The commenters stated that in the rule proposal preamble, the commission did not publish the information mandated by Texas law and that as a result, it is impossible for the public to comment on whether the agency adequately considered the effect of these rules on small businesses, thus rendering the notice of the plan inadequate. The commenters stated that Texas Government Code, §2006.002, requires the commission to provide

a comparison of the proposed rule impact on small and large businesses, using the specified standards, for public review and comment before adoption.

The commission estimated, to the extent possible, the costs to small businesses and determined that the cost depends more upon the number of non-road engines operated by the business, and that it is not dependent upon the number of employees, hours of labor, or amount of sales income. Some small businesses have only one piece of non-road equipment while others have large fleets. Large businesses vary in the same way. The size of the fleet is not dependent upon the size of the business. The commission provided the estimated cost per piece of equipment and argues that this is the only meaningful way to provide sufficient notice of the cost to small business and therefore that it meets the objective of Texas Government Code, Chapter 2006. This assertion is supported by the fact that no small businesses provided comments which include cost of compliance in terms of the number of employees, hours of labor, or amount of sales income.

ARTBA, BCCA, Dynegy, ExxonMobil, Phillips 66, and REI commented on the draft RIA and stated that the proposed rules were not evaluated in accordance with the analysis requirements for a major environmental rule. The commenters stated that Texas Government Code, §2001.0225, requires an RIA for certain major environmental rules. The commenters stated that the commission must consider the benefits and costs of the proposed rules in relationship to state agencies, local governments, the public, the regulated community, and the environment. The commenters stated further that the commission must also incorporate aspects of this analysis into the fiscal note in the proposed rules, e.g., identify the costs and the benefits; describe reasonable alternative methods for achieving the purpose of these rules considered by the agency; provide the reasons for rejecting those

alternatives; and identify the data and methodology used in performing the analysis. The commenters stated that under §2001.0225(d) the commission must also find that "compared to the alternative proposals considered and rejected, these rules will result in the best combination of effectiveness in obtaining the desired results and of economic costs not materially greater than the costs of any alternative regulatory method considered."

The commenters stated that the rule proposal preamble statement, that the rules are exempt from the RIA requirement because federal law mandates the rules, is a legally flawed effort to avoid an RIA and may render these rules invalid. The commenters stated that federal law does not mandate the control requirements, emission rates, and use restrictions contained in the proposal and asserted that many of the proposed rules exceed specific federal rules and standards applicable to the same sources. The commenters stated that examples of departures from the federal framework include the following: boiler, turbine, and other fired-equipment emission limits set well below federal new source performance standards, reasonably available control technology, best available control technology, or lowest achievable emission rate limits for the same sources; and compressor engine emission limits set at unprecedented low levels specifically designed to be unachievable and prevent the further use of the affected engines.

The commenters stated that the rule proposal preamble acknowledges that the rules are "major environmental rules," but that the commission asserted that an RIA is "seldom" required and is only required for "extraordinary" rules. The commenters stated that these criteria appear nowhere in the RIA requirements. The commenters stated that the rule proposal preamble states that "while the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of the FCAA." The commenters stated that this "no greater than is necessary or appropriate" determination is the conclusion that an RIA is designed to evaluate and to offer for public review and comment. The commenters stated that the rule proposal is well

beyond any federal mandates for the covered sources and are "extraordinary." The commenters stated that under Texas Government Code, §2001.0225, an RIA must be performed and offered for public comment before the proposal can be adopted.

The commission disagrees with ARTBA, BCCA, Dynegy, ExxonMobil, Phillips 66, and REI that the rules are legally flawed. While the rules may require those entities purchasing new CARB-certified LSI engines upon replacement of worn out engines, that alone is not enough to trigger the RIA requirements. The Texas Government Code, §2001.0225 only applies to a major environmental rule adopted by a state agency, the result of which is to: 1) exceed a standard set by federal law, unless the rule is specifically required by state law; 2) exceed an express requirement of state law, unless the rule is specifically required by federal law; 3) exceed a requirement of a delegation agreement or contract between the state and an agency or representative of the federal government to implement a state and federal program; or 4) adopt a rule solely under the general powers of the agency instead of under a specific state law.

This rulemaking action does not meet any of these four applicability requirements, and is adopted in substantial compliance with the RIA requirements of Texas Government Code, §2001.035. These rules do not exceed an express standard set by federal law because the LSI non-road engine requirements are specifically developed to meet the ozone NAAQS set by the EPA under 42 USC, §7409. Title 42 USC, §7410 requires states to adopt a SIP which provides for "implementation, maintenance, and enforcement" of the primary NAAQS in each air quality control region of the state. While 42 USC, §7410 does not specifically prescribe programs, methods, or reductions to meet the federal standard, state SIPs must include "enforceable

emission limitations and other control measures, means or techniques (including economic incentives such as fees, marketable permits, and auctions of emissions rights), as well as schedules and timetables for compliance as may be necessary or appropriate to meet the applicable requirements of this chapter' (meaning 42 USC, Chapter 85, Air Pollution Prevention and Control). The FCAA does require some specific measures for SIP purposes, such as an inspection and maintenance program, but those programs are the exception, not the rule, in the federal SIP structure. The provisions of 42 USC recognize that states are in the best position to determine what programs and controls are necessary or appropriate in order to meet the NAAQS. This flexibility allows states, affected industry, and the public to collaborate on the best methods for attaining the NAAQS for the specific regions in the state. In order to avoid federal sanctions, states are not free to ignore the requirements of 42 USC, §7410, and must develop programs to assure that the nonattainment areas of the state will be brought into attainment on schedule. Failure to develop control strategies to demonstrate attainment can result in federal sanctions. Thus, while specific measures are not prescribed, both a plan and emission reductions are required to assure that the nonattainment areas of the state will be able to meet the attainment deadlines set by 42 USC. The EPA has provided the criteria for both the submission and evaluation of attainment demonstrations developed by states to comply with 42 USC. This criteria requires states to provide, in addition to other information, photochemical modeling and an analysis of specific emission reduction strategies necessary to attain the NAAQS. The commission's photochemical modeling and other analyses indicate that substantial emission reductions from both mobile and point source categories are necessary in order to demonstrate attainment. In this case, this rulemaking action is intended to achieve reductions in ozone precursor emissions in the HGA nonattainment area. Specifically, as noted elsewhere in this rule preamble, the

emission reductions associated with these rules are a necessary element of the attainment demonstration required by 42 USC.

This conclusion is supported by the legislative history for Texas Government Code, §2001.0225. During the 75th Legislative Session, SB 633 amended the Texas Government Code to require agencies to perform an RIA of certain rules. The intent of SB 633 was to require agencies to conduct a RIA of major environmental rules that will have a material adverse impact, and will exceed a requirement of state law, federal law, or a delegated federal program, or are adopted solely under the general powers of the agency. The commission provided a cost estimate for SB 633 that concluded "based on an assessment of rules adopted by the agency in the past, it is not anticipated that the bill will have significant fiscal implications for the agency due to its limited application." The commission also noted that the number of rules that would require assessment under the provisions of the bill was not large. Because of the ongoing need to address nonattainment demonstrations required by federal law, the commission routinely proposes and adopts SIP rules. If each rule proposed for inclusion in the SIP was incorrectly considered as exceeding federal law, every SIP rule would require the full RIA contemplated by SB 633. This result would be inconsistent with the cost estimates and fiscal notes prepared by the commission and by the LLB. Since the legislature is presumed to understand the fiscal impacts of the bills it passes, and that presumption is based on information provided by state agencies and the LBB, the commission believes that the intent of SB 633 was only to require the full RIA for rules that meet the requirements under §2001.0225(a). While the SIP rules will have a broad impact, that impact is no greater than is necessary or appropriate to meet the requirements of

42 USC. In other words, the rules are intended to meet federal and state law, and does not go above and beyond what is required to meet federal or state statutes.

The commission has consistently applied this construction to its rules since this statute was enacted in 1997. Since that time, the legislature has revised the Texas Government Code but left this provision substantially unamended. It is presumed that "when an agency interpretation is in effect at the time the legislature amends the laws without making substantial change in the statute, the legislature is deemed to have accepted the agency's interpretation." *Central Power & Light Co. v. Sharp*, 919 S.W.2d 485, 489 (Tex. App.-Austin 1995), writ denied with per curiam opinion respecting another issue, 960 S.W.2d 617 (Tex. 1997); *Bullock v. Marathon Oil Co.*, 798 S.W.2d 353, 357 (Tex. App.-Austin 1990, no writ). Cf. *Humble Oil & Refining Co. v. Calvert*, 414 S.W.2d 172 (Tex. 1967); *Sharp v. House of Lloyd, Inc.*, 815 S.W.2d 245 (Tex. 1991); *Southwestern Life Ins. Co. v. Montemayor*, 24 S.W.3d 581 (Tex. App.-Austin 2000, pet. denied); and *Coastal Indust. Water Auth. v. Trinity Portland Cement Div.*, 563 S.W.2d 916 (Tex. 1978).

The commission's interpretation of the RIA requirements is also supported by a change made to the APA by the legislature in 1999. In an attempt to limit the number of rule challenges based upon APA requirements, the legislature clarified that state agencies are required to meet these sections of the APA against the standard of "substantial compliance." Texas Government Code, §2001.035. The legislature specifically identified §2001.0225 as falling under this standard. The commission has substantially complied with the requirements of §2001.0225.

Therefore, in addition to not exceeding an express standard set by federal law, these rules do not exceed state requirements, and are not adopted solely under the general powers of the agency because the provisions of the TCAA, §§382.011, 382.012, 382.017, 382.019, and 382.039; authorize the commission to implement a plan for the control of the states air quality, including measures necessary to meet federal requirements. The remaining applicability criteria, pertaining to exceeding a delegation agreement or contract between the state and the federal government does not apply. Thus, the commission is not required to conduct a regulatory analysis as provided in Texas Government Code, §2001.0225.

BCCA, Dynegy, ExxonMobil, Phillips 66, and REI stated that the proposed rules did not include an adequate TIA as required under Texas Government Code, §2007. The commenters stated that the TIA provision mandates that covered agencies "take a 'hard look' at the private real property implications of the actions they undertake..." according to the Office of the Attorney General, Private Real Property Rights Preservation Act Guidelines (21 TexReg 387, January 12, 1996). The commenters stated that under §2007.043, a TIA must describe the specific purpose of the proposed action, determine whether engaging in the proposed governmental action will constitute a taking, and describe reasonable alternative actions that could accomplish the specified purpose. The commenters stated that the agency must also explain whether these alternative actions also would constitute takings.

The commenters stated that agencies must also comply with guidelines developed by the Texas Attorney General when developing the TIA and that according to these guidelines, agencies must carefully review governmental actions that have a significant impact on the owner's economic interest. The commenters stated that these guidelines include the statement: "Although a reduction in property value alone may not be a 'taking,' a severe reduction in property value often indicates a reduction or elimination of reasonably profitable uses." (21 TexReg

392, January 12, 1996). The commenters stated that examples of aspects of the rule proposal that could significantly impact private real property in a manner that constitutes a taking include gas-fired compressor engines and other point source NO<sub>x</sub> controls. The commenters stated that the rule proposal preamble acknowledged that retrofitting compressor engines to the level specified in the proposal (25 TexReg 8137 and 8291) is infeasible, and stated that the existing equipment, representing a significant capital improvement at a number of industrial sites, would be rendered unusable. The commenters stated that the 90% point source reduction requirement is economically and technologically infeasible for a number of existing sites, and that this requirement could cause a number of facilities to shut down their operations, dramatically impacting the value of their real property.

The commenters stated that the proposed rule preamble acknowledged that some of the rules may "burden" private real property, but claimed an exemption from performing a TIA based on the assertion that the proposal does not impose a greater burden than necessary to advance a health and safety purpose and that the proposal "reasonably" fulfills a federal mandate. (25 TexReg 8175, 8194, 8201, 8208, 8220, 8228, 8237, 8245, 8294, and 8295). The commenters stated that the commission provided the public no basis to infer that a cost/benefit analysis or a reasonableness determination was, in fact, performed as necessary to support the TIA exemption claim because the preamble contains only the bare assertions. The commenters asserted that the proposed rules will impose a greater burden than is necessary, and are not reasonably taken to fulfill a federal mandate. The commenters commented that according to the Attorney General's guidelines, a full TIA was required to be completed with the proposal, and that failure to perform a TIA could invalidate the rules.

The primary reason the commission determined that these rules did not constitute a takings under Texas Government Code, Chapter 2007 is that it will not burden private real property.

These rules apply to non-road equipment which is not real property or appurtenance thereto.

In its analysis, the commission also found that this rulemaking action is exempt from Texas Government Code, Chapter 2007 under §2007.003(b)(4) because it is reasonably taken to fulfill an obligation mandated by federal law. The commission included elsewhere in this preamble its reasoned justification for adopting this strategy and has explained why it is a necessary component of the SIP which is federally mandated. This discussion, as well as the HGA SIP which is being adopted concurrently, explains in detail that every rule in the HGA SIP package is necessary and that none of the reductions in those packages represent more than is necessary to bring the area into attainment with the NAAQS. This rulemaking action therefore meets the requirements of §2007.003(b)(4). For these reasons this rulemaking action not constitute a takings under Chapter 2007 and does not require additional analysis.

ExxonMobil, Phillips 66, and REI stated that the proposed rules did not include adequate notice as required under Texas Government Code, §2002.024. The commenters stated that §2001.024, requires adequate notice of a proposed rule, including information about its public benefits and costs. The commenters stated that adequate notice is essential for fairness as well as a meaningful opportunity to comment on a proposed rule, and that courts have considered notice "adequate" only if: interested persons can confront the agency's factual suppositions and policy preconceptions; and the agency provides interested parties the opportunity to challenge the underlying factual data relied upon by the agency. The commenters asserted that in proposing the rules, the commission failed to provide interested parties with sufficient information to constitute adequate notice.

The commenters stated that the rule proposal preamble appears short of adequate notice because the cost estimates were "dramatically underestimated." The commenters stated that the commission published insufficient information and analysis regarding costs and impacts.

The commenters also noted that the rule proposal preamble stated that "there may be individual sources for which the equipment actual control costs are higher than the ones identified in this cost note," and asserted that through this statement the commission "acknowledged that its estimates may have been low."

The commenters stated that it has identified a number of critical gaps in the underlying factual data, methodology, and analysis in support of the proposed rules. The commenters asserted that the proposal included insufficient information and analysis regarding costs and impacts. The commenters asserted that the commission has not adequately responded to requests for additional information from stakeholders. The commenters stated that the following requests for information included outstanding: information regarding the modeling of emissions; information regarding the corrected emissions inventory database; and information supporting the estimated costs of control. The commenters stated that this information is necessary in order to comment effectively on the proposed rules and that data gaps in the proposal hindered effective comment.

The commission disagrees with the commenters and has made no change in response to these comments. Texas Government Code, §2001.024 requires that the notice of proposed rules must include certain information. Subsection (a)(5) requires the notice to state the public benefits expected as a result of the adoption of the proposed rules, and the probable economic cost to persons required to comply with these rules. Adequate notice is essential for fairness as well as a meaningful opportunity to comment on proposed rules. **United Loans, Inc. v. Pettijohn**, 955 S.W.2d

649, 651 (Tex. App.-Austin 1997). To achieve the goal of encouraging meaningful public participation in the formulation and adoption of rules by state agencies, the notice must have sufficient information so that interested persons can determine whether it is necessary for them to participate in order to protect their legal rights and privileges. The proposed rules contained an analysis of information available to the commission regarding the costs and benefits. The commission received intelligent comments which were substantial in both number and in scope, regarding the costs as well as the benefits. Therefore, the commission believes this goal has been achieved and that the notice includes sufficient information to constitute adequate notice. The purpose of the comment period is for the public to provide the commission with information to say why they agree or disagree.

To simply state that the proposal failed to provide sufficient information does not provide the commission with sufficient information to propose changes or alternative strategies. The commenters did not say how the notice was insufficient, merely that it was insufficient. Nevertheless, the commission reviewed the notice and determined that it is adequate. The commission response to comments regarding costs of compliance with these rules are discussed in the FINAL REGULATORY IMPACT ANALYSIS DETERMINATION section of this preamble and throughout this ANALYSIS OF TESTIMONY. The commission is unaware of any requests for additional information to which it was not completely responsive.

REI, BCCA, Dynegy, and ExxonMobil commented that the proposal did not have a local employment impact statement.

The commission agrees with the commenters that the rules may affect a local economy, however, does not agree that it is the responsibility of the commission to provide the local employment impact analysis. The APA requires state agencies to determine whether rules may affect a local economy before proposing the rules for adoption. If the agency determines that proposed rules may affect a local economy, the agency must send a copy of the proposed rules and other information to the Texas Workforce Commission (Workforce Commission) before the agency files notice of the proposed rules with the secretary of state. The APA requires the Workforce Commission to prepare a local employment impact statement for proposed rules, if a state agency requests the statement. The commission determined that the proposed rules might affect a local economy, and sent the proposed rule and other requested information to the Workforce Commission. The commission received a letter from the Workforce Commission, indicating that they did not have the ability to determine the potential local employment impacts for the proposed rules.

Baker Botts commented that it generally supports the ongoing efforts by the commission to develop a SIP that is technologically achievable, economically reasonable, and legally approvable. Baker Botts, BCCA, Dynegy, ExxonMobil, Harris County, Phillips 66, and an individual commented that the commission should incorporate into the SIP a greater level of reductions from federally preempted sources and stated that EPA-regulated sources account for about 40% of the NO<sub>x</sub> emissions in the HGA. REI commented that federal NO<sub>x</sub> reductions should be fully incorporated. The commenters stated that the EPA issued a number of regulations for some federally preempted sources, such as land-based spark engines; marine, recreational, and land-based diesel engines; aircraft and locomotive engines; well after the FCAA deadlines, and that the EPA recently strengthened rules for on-road and non-road vehicles and fuels, such as low sulfur gas and diesel, Tier II motor vehicles, heavy-duty

highway vehicle standards, and non-road Tier 2/Tier 3 heavy-duty engine standards. The commenters stated that delays in implementing these rules have prompted the commission to propose technically and economically infeasible emission reductions from sources in HGA that the state has no authority to regulate to make up for the missing federal reductions. The commenters stated that these delays have forced the commission to propose expensive regional fuels and significant use restriction regulations. The commenters stated that the commission and the EPA can ensure an equitable distribution of the compliance burdens necessary to meet mandated air quality improvement in HGA only by allowing the SIP to capture anticipated emission reductions from federally preempted sources. Baker Botts noted that the EPA demonstrated a willingness to assume responsibility for a portion of emissions reductions by creating a process in Los Angeles called a "public consultative process," that would resolve issues related to emissions from national and international sources, and that the EPA has also provided flexibility in obtaining offsets by allowing states to provide offsets to refiners based on emissions reductions that the EPA projected would result from mobile sources using Tier II gasoline. Baker Botts suggested that this same sort of prospective crediting should be used to develop a more rational HGA SIP, and that the EPA should allow the commission to claim credit in the SIP for the prospective emission reductions that will result from implementation of the Tier II gasoline rule and from other federally preempted sources. Finally, Baker Botts cited two cases in which the District of Columbia Circuit Court approved the EPA flexibility with respect to statutory deadlines under 42 USC when the EPA failed to meet its own deadlines, and this failure was deemed to upset the balanced federal/state responsibilities under 42 USC. ExxonMobil commented that it supported the commission and the EPA crediting the HGA SIP with an additional 60 tpd of federally preempted emission reductions that will occur over the next ten years. Harris County commented that the commission should work with the EPA to accelerate the implementation schedule for federally preempted emissions so that at least one-half of the related emission reductions are achieved by 2007, and that as a part of this process, the commission

should delineate federal assignments detailing the engine standards and emission reductions necessary to achieve real and sustainable pollution reductions.

The commission agrees with the commenters that emission reductions from federally preempted sources would provide benefits for the HGA SIP demonstration, and the inability of the commission to regulate certain source categories has necessitated the use of other ozone control strategies. However, the commission understands that the EPA SIP approval process does not provide a mechanism for credit for emission reductions that occur after the attainment date. The commission understands that EPA is not currently considering accelerating implementation schedules for existing federal rules. The commission is working with the EPA to determine the availability of SIP credit for many non-traditional control strategy mechanisms, like economic incentive programs and flexibility for preempted source categories. Additionally, the commission is working with the EPA to determine an appropriate federal contribution credit available for the HGA SIP.

#### STATUTORY AUTHORITY

The amendments are adopted under TWC, §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC, and under the Texas Health and Safety Code, TCAA, §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA. The amendments are also adopted under TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air; §382.019, which authorizes the commission to adopt rules to control and reduce emissions from engines used to propel land vehicles; and §382.039, which authorizes the commission to

develop and implement transportation programs and other measures necessary to demonstrate attainment and protect the public from exposure to hazardous air contaminants from motor vehicles.

CHAPTER 114: CONTROL OF AIR POLLUTION FROM MOTOR VEHICLES

SUBCHAPTER I: NON-ROAD ENGINES

DIVISION 3: NON-ROAD LARGE SPARK-IGNITION ENGINES

§114.421, §114.429

§114.421. Emission Specifications.

(a) The provisions of this division shall apply to new non-road, large spark-ignition (LSI) engines as defined in §114.420 of this title (relating to Definitions).

(b) Exhaust emissions from new non-road, LSI engines manufactured for sale, sold, or offered for sale, or that are introduced, delivered or imported for introduction into commerce in the State of Texas shall not exceed the requirements of Title 13, California Code of Regulations, Chapter 9 (13 CCR 9), §2433(b), concerning Exhaust Emission Standards and Test Procedures -- Off-Road Large Spark-Ignition Engines, as effective on November 18, 1999.

(c) New non-road, LSI engines operated in the State of Texas shall not exceed the requirements of 13 CCR 9, §2433(b).

(d) Beginning on January 1, 2004, a new non-road, LSI engine, not including non-road equipment, intended solely to replace an engine in a piece of non-road equipment that was originally produced with an engine manufactured prior to the applicable implementation date as described in §114.429 of this title shall not be

subject to the emissions requirements of subsection (b) of this section provided that the requirements of 13 CCR 9, §2433(e), have been met.

§114.429. Affected Counties and Compliance Schedules.

(a) Beginning with model year 2004, but no later than January 1, 2004, all sales of new non-road, large spark-ignition (LSI) engines in the State of Texas shall comply with §114.421(b) of this title (relating to Emissions Specifications) and §114.422 of this title (relating to Control Requirements).

(b) Beginning January 1, 2004, new non-road, LSI engines as defined in §114.420 of this title (relating to Definitions) which are used in the State of Texas shall comply with §114.421(c) of this title.