The Texas Natural Resource Conservation Commission (commission) proposes new §114.482, Control Requirements; §114.486, Recordkeeping Requirements; §114.487, Exemptions; and §114.489, Affected Counties and Compliance Dates. The commission proposes these revisions to add new Division 9, Houston/Galveston Construction Equipment Operating Restrictions; to Subchapter I, Non-road Engines; Chapter 114, Control of Air Pollution from Motor Vehicles; and corresponding revisions to the state implementation plan (SIP). The commission proposes these new sections in Chapter 114 and revisions to the SIP in order to control ground-level ozone in the Houston/Galveston (HGA) ozone nonattainment area. The proposed sections are one element of the control strategy for the proposed HGA Post-1999 Rate-of-Progress (ROP)/Attainment Demonstration SIP.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE PROPOSED RULES

The 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. 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_x) waiver

allowed by 42 USC, §7511a(f). The January 1995 SIP and the NO_x 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. 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: The 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_x 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 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 VIf); identification of the level of reductions of VOC and NO_x 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_x 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_x reductions needed for attainment; to list and quantify potential control measures to meet the shortfall of NO_x 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 has 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_x emissions. The modeling included in this proposal indicates a gap of an additional 77.98 tons per day (tpd) of NO_x reductions is necessary for an approvable attainment demonstration.

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 have formally submitted a resolution to the commission, requesting the inclusion of many specific emission reduction strategies.

The current SIP revision contains rules, enforceable commitments, and photochemical modeling analyses 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_x 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 HGA Construction Equipment Operating Restrictions program will contribute to attainment and maintenance of the one-hour ozone standard in the HGA area. An HGA construction equipment operating restriction program should also contribute to a successful demonstration of transportation conformity in the HGA area.

The purpose of these rules is to establish a restriction on the use of construction equipment (non-road, heavy-duty diesel equipment rated at 50 horsepower (hp) and greater) as an air pollution control strategy to delay the emissions of NO_x, a key ozone precursor, until later in the day, thus limiting ozone formation. The non-road mobile source category is one of the few sources of ozone-forming emissions that is not currently regulated by state or federal rules. Federal controls such as cleaner-burning engines and cleaner-diesel fuel have been proposed, but are not scheduled to be implemented until the 2004 time frame.

The proposed revisions provide a similar restriction on the use of construction equipment previously adopted by the commission for the Dallas/Fort Worth (DFW) ozone nonattainment area, except for the effective period, which is between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends on the last Sunday in October, for the HGA ozone nonattainment area. The affected area includes the eight-county HGA nonattainment area of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties. The contribution towards the reduction in ozone levels from restricting the hours of operation of construction equipment is an essential component of the control strategy and is necessary for the eight-county HGA ozone nonattainment area to demonstrate attainment with the ozone NAAQS.

The effective date of the amended rules for HGA will be April 3, 2005. The commission established an effective date in 2005 to allow manufacturers time to produce and release new cleaner-burning equipment and retrofit technology, which would enable equipment operators to plan for and implement

purchases of this equipment before rules concerning restrictions on the operation of construction equipment become effective.

The equipment to which the rules concerning restrictions on the operation of construction equipment apply includes all non-road, heavy-duty diesel equipment classified as "construction equipment," rated at 50 hp and greater, regardless of how it is being used. For example, equipment such as bulldozers used in sanitary landfills, non-road cranes used in demolition, and rubber tire loaders used in manufacturing operations are covered by these rules concerning restrictions on the operation of construction equipment. It is not the commission's intent to restrict the use of agriculture equipment, which does not meet the definition of construction equipment.

The commission understands that a literal interpretation of the term "construction equipment" could lead the reader to believe that the rules concerning restrictions on the operation of construction equipment only applied to non-road, heavy-duty diesel equipment used only for purposes of construction and mining, when in fact, the rules apply to all construction equipment greater than 50 hp, regardless of how it is being used.

Construction equipment is considered to be, but is not limited to, pavers, paving equipment, plate compactors, rollers, scrapers, surfacing equipment, signal boards/light plants, trenchers, bore/drill rigs, excavators, concrete/industrial saws, cement and mortar mixers, cranes, graders, off-highway trucks, crushing/processing equipment, rough terrain forklifts, rubber tire loaders, rubber tire tractors/dozers,

tractors/loaders/backhoes, crawler tractors/dozers, skid steer loaders, off-highway tractors, and dumpsters/tenders.

Ozone is formed through chemical reactions between natural and man-made emissions of VOC and NO_x in the presence of sunlight. Higher ozone levels occur most frequently on hot summer afternoons. The critical time for the mixing of NO_x and VOC is early in the day. By delaying the hours of operation for construction equipment and delaying the release of NO_x emissions until after noon during Daylight Savings Time in the HGA nonattainment area, the NO_x emissions will not mix in the atmosphere with other ozone-forming compounds until after the critical mixing time has passed. Therefore, production of ozone will be stalled until later in the day when optimum ozone formation conditions no longer exist, ultimately reducing the peak level of ozone produced.

This strategy is not dependent on atmospheric conditions to reduce ozone formation, as such strategies are disfavored by 42 USC, §7423. Instead, the strategy creates reductions in the amount of NO_x added to the atmosphere by construction equipment during the time of day when those emissions have been shown to contribute to exceedances of the ozone NAAQS. Use of "time of day" restrictions such as this for NAAQS compliance strategies was anticipated and discussed by the EPA in their off-road mobile source rules.

As established in the previously adopted DFW rules concerning restrictions on the operation of construction equipment, the proposed rules contain exemptions from control and recordkeeping requirements. These exemptions include construction equipment used exclusively for emergency

operations to protect public health and the environment, and for mixing, transporting, pouring, or processing wet concrete. Also, the proposed rules contain an exemption that allows operators that submit an emissions reduction plan (plan) by May 31, 2002, which is approved by the executive director and the EPA by May 31, 2003, to operate during the restricted hours. The commission anticipates that by offering this exemption, equipment manufacturers or regulated businesses will invest in research and development of emissions-reducing technology for construction equipment to enable affected businesses to meet the exemption.

The emission reduction plan must describe in detail how the operator will modify his behavior or fleet of equipment to reduce NO_x emissions by the implementation date in 2005 by a target amount equivalent to the total NO_x reductions achieved by implementation of the rule from which the operator is applying for exemption. Owners or operators may submit plans to apply for exemption from either the construction equipment operating restriction rule or the accelerated purchase of non-road heavy-duty diesel equipment rule, or from both rules. The plans must contain emission reductions equivalent to the total NO_x reductions achieved by the rule from which they are applying for exemption and must contain adequate enforcement provisions. Examples of modifications that may result in emission reductions include using new, cleaner-burning equipment, replacing existing equipment with cleaner-burning engines, retrofitting existing equipment with emissions-reducing technology, using emissions-reducing fuel, changing hours of operation, restricting equipment idling, and participating in an emissions banking and trading program. For example, an owner or operator may obtain emission reduction credits (ERCs), mobile emission reduction credits (MERCs), discrete emission reduction credit (DERCs), or mobile discrete emission reduction credit (MDERCs) in accordance with this section and

30 TAC Chapter 101 (General Air Rules), §101.29 (Emission Credit Banking and Trading). In a concurrent rulemaking (rule log number 1998-089-101-AI), the emission credit banking and trading rules are being moved to Chapter 101, Subchapter H (Emissions Banking and Trading), Division 1 (Emission Credit Banking and Trading) and Division 4 (Discrete Emission Credit Banking and Trading).

The commission will apply emission inventory factors for construction equipment used in the modeling utilized in the development of the rules concerning restrictions on the operation of construction equipment to quantify the NO_x and VOC emission reductions and equivalent ozone reductions resulting from the fleet modifications. The commission will develop a guidance document to assist operators in developing their plans. The guidance document will contain both the target emissions amount operators must meet, as well as emission factors for each type of equipment affected by the rules concerning restrictions on the operation of construction equipment, and will offer guidance on how to calculate total emissions reductions for a fleet of equipment. The commission estimates that this measure results in an approximate 8.0 tpd shift of NO_x emissions from morning to afternoon which is equivalent to a 6.7 tpd NO_x reduction.

The commission is requiring submission of the plans by May 31, 2002 to allow sufficient time to review and quantify the collective emissions reductions the plans propose. The executive director and the EPA will complete the reviews by May 31, 2003, which coincides with the planned mid-course review of all control measures included in the SIP. After reviewing the plans, the executive director will determine whether the collective emission reductions proposed by the plans are equivalent to the

NO_x reductions achieved from implementing the underlying exempted rule. The commission will implement the construction equipment operating restrictions rules on April 3, 2005 and the accelerated purchase rules on December 31, 2004, as proposed, for operators who did not submit plans or whose plans were not approved.

Because this proposed strategy does not create an actual reduction in emissions nor require the use of additional control equipment or any new technology, the commission estimated that the fiscal implications may be significant due to the shift in work hours. The restriction in the hours of operation may require that companies adjust their work schedules to coincide with the hours of operation allowed under the regulation.

The commission solicits 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.

SECTION BY SECTION DISCUSSION

The new Division 9 is proposed regarding HGA construction equipment operating restrictions in order to provide an opportunity for comment on the complete control strategy.

The proposed new §114.482 establishes control requirements for construction equipment operating restrictions. The proposal restricts the operation of any non-road diesel construction equipment of 50 hp and above, between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends on the last Sunday in October.

The proposed new §114.486 requires all persons subject to the provisions of §114.482 to maintain daily records of equipment operation in the affected counties.

The proposed new §114.487 establishes exemptions from the control requirements of §114.482 and the recordkeeping requirements of §114.486. These exemptions include diesel equipment used exclusively for situations involving emergency operations and diesel equipment while being used for mixing, transporting, pouring, or processing of wet concrete. The commission understands the definition of emergency equipment includes equipment which may have to be used to repair facilities or devices which have failed in order to prevent greater immediate environmental harm. Also, the proposed rules contain an exemption that allows operators that submit an emissions reduction plan by May 31, 2002, which is approved by the executive director and the EPA by May 31, 2003, to operate during the restricted hours.

The proposed new §114.489 specifies the counties which are subject to the new requirements and the dates and times these counties are subject to these requirements. The affected counties include all eight counties in the HGA ozone nonattainment area, which include Brazoria, Chambers, Fort Bend,

Galveston, Harris, Liberty, Montgomery, and Waller Counties. The compliance date for the HGA area is April 3, 2005.

FISCAL NOTE: COSTS TO STATE AND LOCAL GOVERNMENT

John Davis, Technical Specialist with Strategic Planning and Appropriations, has determined that for the first five-year period that the proposed rules are in effect, significant fiscal implications are anticipated for units of state and local government as a result of administration or enforcement of the proposed rules. The proposed rules would restrict the use of heavy-duty diesel construction equipment, rated at 50 hp and greater, from use between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends the last Sunday in October. The restriction would apply to construction equipment in the eight-county HGA ozone nonattainment area of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties. The proposed rules would become effective April 3, 2005. Units of state and local government within the HGA ozone nonattainment area that have ongoing construction projects will be affected. Based on comments received from units of state and local government affected by the DFW rules, including the North Central Texas Council of Government (NCTCOG) and the Texas Department of Transportation (TxDOT), costs associated with delays and extended construction schedules may increase overall construction costs by 15% to 20%. State and local agencies engaged in road construction and repair are anticipated to bear the heaviest burden among state and local agencies. The proposed rules do not require additional control equipment or new emission control technologies to be applied to the affected diesel equipment.

The proposed rules would establish a limitation on the use of heavy-duty diesel construction equipment as an air pollution control strategy to delay the emission of NO_x until later in the day, thus limiting ozone production. The commission is required to submit a SIP revision by the end of 2000 which will bring the HGA into attainment by 2007. The rules proposed for HGA in this notice are one element of the ozone attainment demonstration SIP for HGA. The purpose of the proposed rules is for the HGA nonattainment area to demonstrate attainment with the ozone NAAQS. The SIP sets forth a control strategy that provides part of the emission reductions necessary for attainment and maintenance of the ozone NAAQS.

As established in the DFW rules concerning restrictions on the operation of construction equipment, the existing rules contain exemptions from control and recordkeeping requirements. These exemptions include construction equipment used exclusively for emergency operations to protect public health and the environment, and for mixing, transporting, pouring, or processing wet concrete. Also, the existing rules contain an exemption that allows operators that submit a plan by May 31, 2002, which is approved by the executive director and the EPA by May 31, 2003, to operate during the restricted hours.

Units of state and local government within the HGA ozone nonattainment area that have ongoing construction projects may have significant fiscal implications. According to TxDOT, the TxDOT's Houston and Beaumont districts (which cover Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties) spent over $464 million during calendar year 1999 for road and bridge construction projects in the HGA area. Based on the TxDOT expenditures, an

estimated 15% to 20% cost increase due to delays and extended construction schedules would add $70 million to $93 million annually to TxDOT-related construction costs in the HGA area. Note, these figures only apply to TxDOT-related road and bridge construction costs. Because the proposed rules do not require additional control equipment or new technology, the commission does not anticipate significant economic impacts to affected agencies and businesses beyond the shift in work schedule and possible implications caused by potential construction delays attributable to the proposed rules. Delaying use of diesel construction equipment until after noon may require affected state and local agencies and associated businesses to adjust their work schedules and could cause extensions of construction timelines. The fiscal impact of potential delays would depend on the scope, magnitude, and time-critical nature of the construction projects.

PUBLIC BENEFIT AND COSTS

Mr. Davis also determined that for each year of the first five years the proposed rules are in effect, the public benefit anticipated from enforcement of and compliance with the proposed rules will be a potential reduction in the formation of ozone by delaying NO_x emissions from construction equipment until later in the day when optimum conditions for the formation of ozone no longer exist, potentially improved air quality, and contribution toward demonstration of attainment with the ozone NAAQS.

The proposed rules would restrict the use of heavy-duty diesel construction equipment, rated at 50 hp and greater, from use between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends the last Sunday in October. The restriction would apply to

construction equipment in the eight-county HGA ozone nonattainment area. The proposed rules would become effective April 3, 2005.

Businesses within the HGA ozone nonattainment area that have ongoing construction projects may have significant fiscal implications in an amount that cannot be determined at this time; however, based on comments received from units of state and local government affected by the DFW rules, including the NCTCOG and TxDOT, costs associated with delays and extended construction schedules may increase overall construction costs by 15% to 20%. Because the proposed rules do not require additional control equipment or new technology, the commission does not anticipate significant economic impacts to affected agencies and businesses beyond the shift in work schedule and possible implications caused by potential construction delays attributable to the proposed rules. Delaying use of diesel construction equipment until after noon may require affected state and local agencies and businesses to adjust their work schedules and could cause extensions of construction timelines. The fiscal impact of potential delays would depend on the scope, magnitude, the slack time available in the schedule, and the time-critical nature of certain parts of the construction project.

As established in the DFW rules concerning restrictions on the operation of construction equipment, the existing rules contain exemptions from control and recordkeeping requirements. These exemptions include construction equipment used exclusively for emergency operations to protect public health and the environment, and for mixing, transporting, pouring, or processing wet concrete. Also, the existing rules contain an exemption that allows operators that submit a plan by May 31, 2002, which is approved by the executive director and EPA by May 31, 2003, to operate during the restricted hours.

SMALL BUSINESS AND MICRO-BUSINESS ASSESSMENT

Small and micro-businesses within the HGA ozone nonattainment area that have ongoing construction projects may have significant fiscal implications as a result of enforcement and administration of the proposed rules in an amount which cannot be determined.

The proposed rules would restrict the use of heavy-duty diesel construction equipment, rated at 50 hp and greater, from use between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends the last Sunday in October. The restriction would apply to construction equipment in the eight-county HGA ozone nonattainment area. The proposed rules would become effective April 3, 2005.

Small and micro-businesses within the HGA ozone nonattainment area that have ongoing construction projects may have significant fiscal implications in an amount that cannot be determined at this time; however, based on comments received from units of state and local government affected by the DFW rules, including the NCTCOG and TxDOT, costs associated with delays and extended construction schedules may increase overall construction costs by 15% to 20%. Because the proposed rules do not require additional control equipment or new technology, the commission does not anticipate significant economic impacts to affected small and micro-businesses beyond the shift in work schedule and possible implications caused by potential construction delays attributable to the proposed rules. Delaying use of diesel construction equipment until after noon may require affected small and micro-businesses to adjust their work schedules and could cause extensions of construction timelines. The fiscal impact of

potential delays would depend on the scope, magnitude, the slack time available in the schedule, and the time-critical nature of certain parts of the construction project.

As established in the DFW rule concerning restrictions on the operation of construction equipment, the existing rules contain exemptions from control and recordkeeping requirements. These exemptions include construction equipment used exclusively for emergency operations to protect public health and the environment, and for mixing, transporting, pouring, or processing wet concrete. Also, the existing rules contain an exemption that allows operators that submit an emissions reduction plan (plan) by May 31, 2002, which is approved by the executive director and the EPA by May 31, 2003, to operate during the restricted hours.

DRAFT REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the proposed rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225, and determined that the rulemaking is subject to §2001.0225 because it meets 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. The proposed rules are intended to protect the environment or reduce risks to human health from environmental exposure to ozone and, although we do not have definitive cost estimates at this time, construction delays could affect a sector of the economy in a material way. The proposed rules are intended to implement an operating-use restriction

program requiring that heavy-duty diesel construction equipment be restricted from use between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends the last Sunday in October. This program is part of the strategy to reduce the formation of ozone by delaying NO_x emissions from construction equipment until later in the day when optimum conditions for the formation of ozone no longer exist. The program was developed for the HGA ozone nonattainment area to be able to demonstrate attainment with the ozone NAAQS. The proposed rules are one element of the HGA Post-1999 ROP/Attainment Demonstration SIP. Provisions of 42 USC, §7410, require 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 §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 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. Thus, while specific measures are not generally required, the emission reductions are required. 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.

The requirement to provide a fiscal analysis of proposed regulations in the Texas Government Code was amended by Senate Bill 633 (SB 633) during the 75th Legislative Session, 1999. The intent of SB 633 was to require agencies to conduct a regulatory impact analysis (RIA) of extraordinary rules. These are identified in the statutory language as 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. 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. 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 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 the FCAA. For these reasons, rules proposed for inclusion in the SIP fall under the exception in Texas Government Code, §2001.0225(a), because they are required by federal law. The commission performed photochemical grid modeling which predicts that NO_x emission reductions, such as those required by these rules, will result in reductions in ozone formation in the HGA ozone nonattainment area. This rulemaking does not exceed an express requirement of state law. This rulemaking is intended to obtain NO_x emission reductions which 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 rulemaking does not exceed a standard set by federal law, exceed an express requirement of state law (unless specifically required by federal law), or exceed a requirement of a delegation agreement. The rulemaking was not developed solely under the general powers of the agency, but was specifically developed to meet the NAAQS established under federal law and authorized under Texas Clean Air Act (TCAA), §§382.011, 382.012, 382.017, 382.019, and 382.039.

The commission invites public comment on the draft regulatory impact analysis.

TAKINGS IMPACT ASSESSMENT

The commission prepared a takings impact assessment for these rules in accordance with Texas Government Code, §2007.043. The following is a summary of that assessment. The specific purpose of the rulemaking action is to establish a construction equipment operating restriction to delay NO_x emissions that lead to high levels of ground-level ozone production. This rulemaking action will act as an air pollution control strategy to reduce NO_x emissions necessary for the HGA ozone nonattainment area to be able to demonstrate attainment with the ozone NAAQS. The affected area consists of the eight counties included in the HGA ozone nonattainment area. Promulgation and enforcement of the rules will not burden private, real property as it only regulates mobile sources, and will not cause a takings to occur. Although the rules do not directly prevent a nuisance, prevent an immediate threat to life or property, or prevent a real and substantial threat to public health and safety, the rules partially fulfill a federal mandate under the 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 the 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 the rules is to implement a construction equipment operating restriction necessary for the HGA nonattainment area to meet the air quality standards established under federal law as NAAQS. Consequently, the exemption which also applies to these rules is that of an action reasonably taken to fulfill an obligation mandated by federal law. For the reasons stated, these proposed rules will not constitute a takings under Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that the proposed rulemaking 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, concerning Consistency with the CMP. 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 action for consistency with the CMP goals and policies in accordance with the rules of the Coastal Coordination Council, and determined that the action is consistent with the applicable CMP goals and policies. The CMP goal applicable to this rulemaking action is the goal to protect, preserve, and enhance the diversity, quality, quantity, functions, and values of coastal natural resource areas (31 TAC §501.12(1)). No new sources of air contaminants will be authorized and NO_x air emissions will be reduced as a result of these rules. The CMP policy applicable to this rulemaking action is the policy that commission rules comply with regulations in 40 Code of Federal Regulations (CFR), to protect and enhance air quality in the coastal area (31 TAC §501.14(q)). This rulemaking action complies with 40 CFR 50, National Primary and Secondary Ambient Air Quality Standards, and 40 CFR 51, Requirements for Preparation, Adoption, and Submittal Of Implementation Plans. Therefore, in compliance with 31 TAC §505.22(e), this rulemaking action is consistent with CMP goals and policies.

Interested persons may submit comments on the consistency of the proposed rules with the CMP during the public comment period.

ANNOUNCEMENT OF HEARINGS

The commission will hold public hearings on this proposal at the following times and locations: September 18, 2000, 10:00 a.m., Lone Star Convention Center, 9055 Airport Road (FM 1484), Conroe; September 18, 2000, 7:00 p.m., Lake Jackson Civic Center, 333 Highway 332 East, Lake Jackson; September 19, 2000, 10:00 a.m. and 7:00 p.m., George Brown Convention Center, 1001 Avenida de Las Americas, Houston; September 20, 2000, 9:00 a.m., VFW Hall, 6202 George Bush Drive, Katy; September 20, 2000, 6:00 p.m., East Harris County Community Center, 7340 Spencer, Pasadena; September 21, 2000, 10:00 a.m., Southeast Texas Regional Airport Media Room, 6000 Airline Drive, Beaumont; September 21, 2000, 2:00 p.m., Amarillo City Commission Chambers, City Hall, 509 East 7th Avenue, Amarillo; September 21, 2000, 6:00 p.m., Charles T. Doyle Convention Center, 21st Street at Phoenix Lane, Texas City; September 22, 2000, 10:00 a.m., Dayton High School, 2nd Floor Lecture Room, 3200 North Cleveland Street, Dayton; September 22, 2000, 11:00 a.m., El Paso City Council Chambers, 2 Civic Center Plaza, 2nd Floor, El Paso; September 22, 2000, 2:00 p.m., North Central Texas Council of Governments, 2nd Floor Board Room, 616 Six Flags Drive, Suite 200, Arlington; and September 25, 2000, 10:00 a.m., Texas Natural Resource Conservation Commission, 12100 North I-35, Building E, Room 201S, Austin. The hearings are structured for the receipt of oral or written comments by interested persons. Registration will begin one hour prior to each hearing. Individuals may present oral statements when called upon in order of registration. A four-minute time limit will be established at each hearing to assure that enough time is allowed for every interested person to speak. Open discussion will not occur during each hearing; however, agency staff members will be available to discuss the proposal one hour before each hearing, and will answer questions before and after each hearing.

Persons with disabilities who have special communication or other accommodation needs, who are planning to attend a hearing, should contact the Office of Environmental Policy, Analysis, and Assessment at (512) 239-4900. Requests should be made as far in advance as possible.

SUBMITTAL OF COMMENTS

Written comments may be submitted to Heather Evans, Office of Environmental Policy, Analysis, and Assessment, MC 206, P.O. Box 13087, faxed to (512) 239-4808, or emailed to *siprules@tnrcc.state.tx.us*. All comments should reference Rule Log Number 2000-011B-114-A1. Comments must be received by 5:00 p.m., September 25, 2000. For further information, please contact Gayla McCarty at (512) 239-4631 or Alan Henderson at (512) 239-1510.

STATUTORY AUTHORITY

The new sections are proposed under Texas Water Code (TWC), §5.103, which authorizes the commission to adopt rules necessary to carry out its powers and duties under the TWC, and under 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 new sections are also proposed 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.

The proposed new sections implement TCAA, §382.002, relating to Policy and Purpose; §382.011, relating to General Powers and Duties; §382.012, relating to State Air Control Plan; §382.019, relating to Methods Used to Control and Reduce Emissions from Land Vehicles; and §382.039, relating to Attainment Program.

SUBCHAPTER I: NON-ROAD ENGINES

DIVISION 9: HOUSTON/GALVESTON CONSTRUCTION EQUIPMENT OPERATING RESTRICTIONS

§§114.482, 114.486, 114.487, 114.489

§114.482. Control Requirements.

No person shall start or operate any non-road diesel construction equipment, of 50 horsepower and above, between the hours of 6:00 a.m. and noon, during Daylight Savings Time, which begins on the first Sunday in April and ends on the last Sunday in October, in the counties listed in §114.489 of this title (relating to Affected Counties and Compliance Dates.)

§114.486. Recordkeeping Requirements.

(a) Any person that operates construction equipment described in §114.482 of this title (relating to Control Requirements) in those counties listed in §114.489 of this title (relating to Affected Counties and Compliance Dates) is subject to requirements of this section.

(b) Such person described in subsection (a) of this sectionshall provide to the executive director, or other air pollution program with jurisdiction, any records required to be maintained in accordance with this section within five days of a written request from the executive director, or other air pollution program with jurisdiction.

(c) Such person described in subsection (a) of this section shall maintain daily operating records on the job site. These records must be maintained for a minimum of two years. The records at a minimum must contain:

(1) date(s) of operation;

(2) start and end times of daily operation;

(3) types of equipment being used; and

(4) name(s) of the equipment operator(s).

§114.487. Exemptions.

(a) The following uses of construction equipment are exempt from §114.482 and §114.486 of this title (relating to Control Requirements; and Recordkeeping Requirements) in the counties listed in §114.489 of this title (relating to Affected Counties and Compliance Dates):

(1) equipment used exclusively for emergency operations to protect public health and safety or the environment; and

(2) equipment used for mixing, transporting, pouring, or processing of wet concrete provided such equipment is actually processing wet concrete.

(b) Operators that submit an emissions reduction plan by May 31, 2002 (that is approved by the executive director and the EPA by May 31, 2003) will be exempt upon implementation of the rule in 2005, and will be permitted to operate during the restricted hours. In order to be approved, the plan must demonstrate reductions of oxides of nitrogen equivalent to those required by both §114.472 of this title (relating to Control Requirements) and §114.482 of this title, and must contain adequate enforcement provisions.

§114.489. Affected Counties and Compliance Dates.

Effective April 3, 2005, affected persons in the following counties shall be in compliance with §§114.482, 114.486, and 114.487 of this title (relating to Control Requirements; Recordkeeping Requirements; and Exemptions). These include Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.