

The Texas Natural Resource Conservation Commission (commission) adopts the repeal of §101.29, Emission Credit Banking and Trading. In addition, the commission adopts new §101.300, Definitions; §101.301, Purpose; §101.302, General Provisions; §101.303, Protocols; §101.304, Program Audits; §101.350, Definitions; §101.351, Applicability; §101.352, General Provisions; §101.353, Allocation of Allowances; §101.354, Allowance Deductions; §101.356, Allowance Banking and Trading; §101.358, Emission Monitoring and Compliance Demonstration; §101.359, Reporting; §101.360, Level of Activity Certification; §101.370, Definitions; §101.371, Purpose; §101.372, General Provisions; §101.373, Protocols; and §101.374, Program Audits. Adopted ~~with changes~~ from the proposed text as published in the May 25, 2000 issue of the ~~Texas Register~~ (25 TexReg 8137) are new §§101.300, 101.302, 101.303, 101.350 - 101.354, 101.356, 101.358 - 101.360, 101.370, 101.372 - 101.374. The repeal of §101.29 and new §§101.301, 101.304, and 101.371 are adopted ~~without changes~~ and therefore will not be republished. The repeal and new sections will be submitted to the United States Environmental Protection Agency (EPA) as a revision to the Texas state implementation plan (SIP).

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

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% rate-of-progress (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. 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's 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 FCAA, Title I, Subpart 2 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 state-wide 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<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 has indicated that the state must adopt those strategies modeled in the November 1999 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 predicted emission reductions from these rules are necessary to successfully demonstrate 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 have 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 the 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 tons per day to reach attainment with the one-hour standard. In addition, a VOC reduction of about 25% will have to be achieved. Adoption of the banking rules will contribute to attainment and maintenance of the one-hour ozone standard in the HGA area.

The emissions banking and trading program has been designed to offer flexibility in generating and using emission reduction credits (ERCs), mobile emission reduction credits (MERCs), discrete emission reduction credits (DERCs), and mobile discrete emission reduction credits (MDERCs). Flexibility has been built into the rules to create incentives for the early or permanent retirement of VOC and NO<sub>x</sub> emissions. The intent of the rules is to also streamline the emissions banking and trading program by combining the stationary credits with mobile credits to achieve continuity within the banking programs.

New §§101.300 - 101.304 are grouped into Subchapter H, Division 1, Emission Credit Banking and Trading. The rules consolidate the requirements for generating, using banking, and trading ERCs and MERCs. The revisions to the rules are intended to achieve consistency between the rules governing the use of ERCs/MERCs and DERCs and MDERCs. The revisions to the rules also address concerns raised by the EPA regarding current rules on how reductions are calculated as surplus and to ensure that emission reductions are not double-counted, that is, not banked as credits and relied upon as SIP reductions. These sections would reduce the life of ERCs/MERCs after January 2, 2001 to five years to restrict the use of ERCs/MERCs to meet current environmental conditions. The

rules require the registration of emission reductions as ERCs/MERCs within 180 days of the actual reduction and add recordkeeping requirements to sources generating or using ERCs/MERCs.

New §§101.350 - 101.354, 101.356, and 101.358 - 101.360 are grouped into Subchapter H, Division 3, Mass Emissions Cap and Trade Program. These sections implement a mandatory annual NO<sub>x</sub> emission cap on all existing stationary facilities located in the HGA area that emit ten tons or more per year (tpy) of NO<sub>x</sub> and that have SIP emission requirements in 30 TAC §117.106, Emission Specifications for Attainment Demonstrations, §117.206, Emission Specifications for Attainment Demonstrations, and §117.475, Emission Specifications. The cap would be enforced by the allocation, trading, and banking of allowances. An allowance is the equivalent of one ton of NO<sub>x</sub> emissions. NO<sub>x</sub> is a precursor gas that reacts with VOCs in the presence of sunlight to form ground-level ozone. This NO<sub>x</sub> cap would be established at levels demonstrated as necessary to allow HGA to attain the NAAQS for ozone. The cap will be implemented on January 1, 2002 at historical emission levels, with mandatory reductions increasing over time until achieving the final cap by January 1, 2007. These sections also require all new or modified sources in HGA to obtain unused allowances from other sources already participating under the cap to offset any increased NO<sub>x</sub> emissions.

At this time, the commission will cap only those sources located in the eight-county HGA area. The commission will continue to evaluate ozone control strategies and may extend the cap and trade program to include other regions of the state in future rulemaking.

New §§101.370 - 101.374 are grouped into Subchapter H, Division 4, Discrete Emission Credit Banking and Trading. The rules consolidate the requirements for generating, using, banking, and trading DERCs and MDERCs. The

revisions to the rules are intended to achieve consistency between the rules governing the use of ERCs/MERCs and DERCs/MDERCs. The revisions to the rules also address concerns raised by the EPA regarding current rules on how reductions are calculated as surplus and to ensure that emission reductions are not double-counted, that is, not banked as credits and relied upon as SIP reductions.

#### SECTION BY SECTION DISCUSSION

##### DIVISION 1

New §101.300 contains the definitions to be used within Subchapter H, Emissions Credit Banking and Trading, Division 1, Emission Credit Banking and Trading. The definitions of "Activity," "Actual emissions," "Area Source," "Certified," "Emission Reduction Credit (ERC)," "Emission Reduction Strategy," "Generator," "Permanent," "Quantifiable," and "Shutdown" were defined in §101.29 and are transferred unchanged to §101.300.

The following definitions have been moved from §101.29 to §101.300 and amended. "Applicable emission point" is revised to refer to the emission point generating an emission reduction or using an emission credit. This revision will allow for consistency with the use of terms throughout the adopted rule language. The definition of "Baseline" is amended to limit the emissions occurring prior to a reduction strategy to levels not to exceed the most recent level of emissions reported in the emission inventory used for SIP determinations. The definition of "Baseline activity" is amended to describe a source's actual level of activity based on actual data averaged over any consecutive two calendar year periods during the most recent year of emissions inventory used for SIP determinations or subsequent year(s). For sources in existence less than 24 months or not having two complete calendar years of data, a shorter time period, not less than 12 months, may be considered by the executive director. The definition of "Baseline emission rate" is amended to refer to the source's rate of emissions per unit of

activity during the baseline activity period. The definition of "Curtailment" is amended to mean a reduction in activity level at any stationary or mobile source. The definition of "Mobile emission reduction credit (MERC or mobile credit)" is amended to be a credit representing the amount of emission reductions from a mobile source strategy. These emission reductions are voluntary and must be in addition to compliance with requirements of state and federal regulations. MERCs are any enforceable, permanent, and quantifiable emission reduction (exhaust and/or evaporative) generated by a mobile source, which has been banked in accordance with the rules of the commission. MERCs can be banked, purchased, traded, and sold to meet clean air mandates for specified air programs and MERCs may be applied to the emission reduction obligations of another air quality source or to air quality attainment goals. The definition was revised to clarify that MERCs are expressed in terms of tons per year. "Most stringent allowable emissions level" is amended to include a reference to state emission limits. The definition of "Ozone season" is revised to be the portion of the year when ozone monitoring is required to occur in a specific geographic area. This amendment removes specific references to dates for a given nonattainment area. "Protocol" is amended to refer to replicable and workable methods for mobile, stationary, or area sources. "Real reduction" means a reduction in actual emissions as opposed to a reduction in allowable emissions. "Surplus" is amended to refer to an emission reduction which is not otherwise required of a source by any state or federal law, regulation, or agreed order and is beyond the emissions level utilized for SIP determinations. "User" is amended to refer to the owner or operator which acquires and uses emission credits to meet a regulatory requirement, demonstrate compliance, or offset an emission increase.

The following new definitions are added to §101.300. "Baseline emissions" is defined as the source's total actual emissions based on the baseline activity and emission rate. An "Emission credit" is defined as a credible emission reduction such as an "Emission reduction credit" or "Mobile emission reduction credit." A new definition of

"Emission reduction" is added as an actual reduction of emissions from a stationary or mobile source. "Mobile emission baseline" is defined as a mobile source reduction that occurs prior to a mobile emission reduction strategy, considering all limitations required by applicable state and federal regulations. A valid mobile emission baseline could be calculated by either use of measured emissions of an appropriately sized sample of the participating mobile sources using an approved EPA test procedure or by using estimated emissions of the participating mobile sources using the most recent edition of the EPA's mobile emissions factor model or other applicable model. The baseline cannot be higher than the emissions that are estimated in the SIP for that vehicle. "Mobile source" is defined as on-road (highway) vehicles (e.g., automobiles, trucks, and motorcycles) and non-road vehicles (e.g., trains, airplanes, agricultural equipments, industrial equipment, construction vehicles, off-road motorcycles, and marine vessels). A "Mobile source baseline activity" is defined as the mobile source's level of activity during the applicable mobile source baseline year. "Mobile source baseline emissions" is defined as the mobile source's total emissions based on the product of mobile source baseline activity and mobile source baseline emission rate. "Source" is a point of origin of air contaminants, whether privately or publicly owned or operated. Upon request of a source owner, the executive director shall determine whether multiple processes emitting air contaminants from a single point of emission will be treated as a single source or as multiple sources.

New §101.301 states that the purpose of Division 1 is to allow an operator of a source to generate and use emission credits. The wording of this section has been revised from the previous language in §101.29 to refer to both ERCs and MERCs as emission credits, unless the rule language specifically refers to only one of these emission credits. This new section also states that participation in the program is voluntary.

New §101.302 contains the general provisions for the Emission Credit and Trading Program (Division 1). The wording of this section has been revised from the previous language in §101.29 to refer to both ERCs and MERCs as emission credits, unless the rule language refers to only one of these emission credits. Language was added to clarify that the EPA must also grant approval before a reduction of one pollutant may be used to meet the requirements of another pollutant. The certification requirements of an emission credit have been revised to only allow credits which have occurred after the most recent year of emissions inventory used for SIP determinations and to require the source's annual emissions to have been represented in the emissions inventory of the most recent year of emissions inventory used for SIP determinations prior to the submittal of the emission credit application. Rule language has been added to this division which would not allow emission credits which are certified as ERCs or MERCs to be recertified as emission credits under any other division within Subchapter H. The rules associated with eligible sources have been changed to be consistent with the previous language of §101.29 for discrete emission credits. The changes allow for stationary sources (including area sources), mobile sources, and stationary sources (including area sources) or mobile sources associated with agencies under §101.30 to be eligible to generate emission credits. Effective January 2, 2001, the life of an emission credit would be revised to be available for use for 60 months from the date of the reduction except to the extent regulatory changes reduce or invalidate the reduction. ERCs, for which an administratively complete application has been received prior to January 2, 2001, would continue to be available for 120 months from the date of the reduction except to the extent regulatory changes reduce or invalidate the reduction. The geographic scope would remain the same as previously stated in §101.29, except the new rule language allows for the trading of emission credits achieved in the county, state, or nation provided the applicant can demonstrate an improvement to the air quality in the county of use and the demonstration is approved by the executive director and the EPA. To be consistent with the previous language of §101.29, rule language is added which allows for the

possibility of the trading of emission credits to be discontinued by the executive director, with commission approval, as a remedy for problems caused by localized trading of emission credits. The rules regarding the registry were revised from the proposal to state that a unique number is assigned to certificates and not to individual tons of ERCs or MERCs. Recordkeeping requirements have been revised to require users to maintain a copy of all notices and information submitted to the registry for at least two years after the beginning of the use period along with the name, emission point number (EPN), and facility identification number (FIN) of each unit using emission credits, the amount of emission credits being used, and the specific identification number of the emission credits being used. The rule language concerning public information has been changed to be consistent with the discrete emission reduction requirements language previously located in §101.29(d)(1)(L). All information submitted with a notice or report regarding the nature and quantity of emissions associated with the use or generation of an emission credit is public information and will not be considered confidential. All non-confidential notices and information regarding generation, use, and availability of emission credits may be obtained from the Office of Permitting, Remediation, and Registration (OPRR). In addition, rule language is adopted which allows the executive director to prohibit a company from participating in the program if the company has violated or abused the program.

New §101.303 outlines the required protocols of generating, calculating, certifying and registering, using, and transferring emission credits. This section requires emission credits to be determined based on established EPA protocols when available, actual monitoring results, or calculated using good engineering practices. The procedures previously in §101.29 regarding the various means for generating emission credits are transferred unchanged to this section. The rule addresses procedures for calculating MERCs although most mobile source strategies will likely only qualify for MDERCs. MERCs would be available for mobile source strategies that are

ongoing, creating the same amount of mobile reduction each year. Language is added which prohibits the generation of credits if the emissions have been transferred to another unit. This additional language eliminates the potential for a company to shut down a unit to generate emission credits, and then alter the operation of another piece of equipment to take the place of the shut down unit which would increase the emissions at the altered unit. The new rules require companies to apply for emission credits within 180 days of generation, except that those sources that have implemented strategies prior to the effective date of this rule will be given until June 1, 2001 to apply. New language has been added to the rules specifying the information which must be submitted. The information, which is to be submitted on the EC-1 Form, includes the information necessary for the executive director to review the application in accordance with the adopted rules and to properly administer the program. Language was added to clarify that the most stringent emission rate would be determined by also reviewing local, state, and federal statutory requirements. Applicants will be notified in writing if the executive director denies the application. The new rule language specifically states the commission's accepted practice that emissions credits will be determined and certified to the nearest tenth of a ton per year. As was previously stated in §101.29, the new section states that emission credits are determined and certified by using the EPA methodologies, monitoring results, or otherwise good engineering practices, and all emission credits are deposited in the registry and reported as available credits until they are used, withdrawn, or expired. As was previously contained in §101.29, the new section would list the mechanisms which can be used to make emission credits enforceable. Rule language has been added which lists the OPCRE-1 Form as an enforceable mechanism to establish new emission limits for grandfathered sources when applying for emission credits. Rule language has also been added to make MERCs enforceable by registering them on a form approved by the executive director or by an agreed order that will set new maximum allowable mobile source emission limits which are not required to be implemented by a rule. The language would limit the use of emission credits if there are permits under the

same account number which contain a condition or conditions which preclude such use. As was previously allowed in §101.29, the new section allows ERCs to be used for offsets, mitigation offsets, and alternative compliance with reasonably available control technology (RACT) or SIP requirements. As has been the commission's practice, the language allows the use of emission credits for netting only by the original applicant if the emission credits have not been previously sold or otherwise used and also allows the use of emission credits for other provisions within the guidelines of local, state, and federal laws. The section allows MERCs to be used as offsets, mitigation offsets, alternative compliance with RACT or SIP requirements, compliance with fleet requirements as allowed by the Texas Clean Fleet Program Requirements for Motor Vehicle Fleets, or other provisions as allowed within the guidelines of local, state, and federal laws. The requirements for compliance with §117.570, Use of Emissions Credits for Compliance, except for the equations for determining 30-day rolling average emission limits, are changed to allow for emission reduction calculations in accordance with the methodology of this new division. These revisions replace the former equations previously located in §117.570. The equations for calculating 30-day rolling average emission limits have been relocated from §117.570 to this section. The procedure for notifying the commission of the intent to use emission credits in accordance with 30 TAC Chapter 114, Control of Air Pollution from Motor Vehicles, §115.950, Emissions Trading, and §117.570 and any other commission rules is revised to require the submittal of the EC-3 Form. The timelines for the review of this submittal have been removed from the rule language, revised, and included in the Emission Banking and Trading Program Technical Guidance Package. As previously required in §101.29, an additional 10% of emission credits will be retired as an environmental contribution. The section states that the user of credits shall submit an EC-3 Form along with the emission credit certificates when using the credits as offsets in accordance with 30 TAC Chapter 116, Division 7, Emission Reductions: Offsets, or for alternative compliance with 30 TAC Chapters 114, 115, or 117. The procedure for transfer is revised to require emission credit certificate owners to submit an EC-4 Form,

including the sale price, to the agency prior to the transfer. Transfers would only be considered final after the executive director has completed the transaction. This is a change to the previous language in §101.29, which requires notification within 30 days of the transfer. As previously stated in §101.29, the new section states that the emission credits may be withdrawn from the registry at any time prior to the expiration date of the credit, and that emission reductions which have been certified as credits and have expired may still be used by the original owner for netting in accordance with §116.150. The section requires applicants needing offsets for a new source review permit to identify the credits at the time of permit issuance and to provide the original emission credit certificate prior to operation. It should be noted that emission credits will be evaluated to ensure that they are surplus at the time of use. The section requires that any other uses of credits be approved by the executive director prior to commencement of the intended use. Rule language added allows an applicant to file a motion for reconsideration with the executive director within 60 days of denial of use of emission credits.

New §101.304 requires the executive director to perform an audit of the emission reduction program within three years of the effective date of the new division and every three years thereafter. The audit would evaluate the timing of credit generation and use, the impact of the program on the SIP, availability and cost of credits, compliance by participants, and any other elements chosen by the executive director.

### DIVISION 3

New §101.350 contains the definitions to be used with Subchapter H, Emissions Credit Banking and Trading, Division 3, Mass Emission Cap and Trade Program. In response to comments received, the definition of "Allowance" has been modified from the proposal and is now defined as the authorization to emit one ton of NO<sub>x</sub> during a control period as expressed in tenths of a ton. The definition of "Authorized account representative" is

the person authorized, in writing, to transfer and otherwise manage allowances. The definition of "Banked allowance" is an allowance which is not used to reconcile emissions in the designated year of allocation, but which is carried forward for up to one-year and noted in the compliance or broker account as banked. The definition of "Broker" is a person not required to participate in the requirements of this division who opens an account under this division for the purpose of banking and trading allowances. The definition of "Broker account" is the account where allowances held by a broker are recorded. Allowances held in a broker account may not be used to satisfy compliance requirements for this division. The definition of "Compliance account" is the account where allowances held by a facility or multiple facilities at a single site are recorded for the purposes of meeting the requirements of this division. This definition was modified from the proposal to clearly identify the intent when referring to a piece of equipment that is emitting NO<sub>x</sub>. It was necessary to add language concerning a single site to clarify the correspondence of a single compliance account to a single site. The reference to sources not under common ownership or control was deleted as it was unnecessary and ambiguous. Separate sites with facilities subject to the cap and trade program will automatically be assigned separate compliance accounts unless a single property designation is obtained. The definition of "Control period" is the 12-month period beginning January 1 and ending December 31 of each year. The initial control period would begin January 1, 2002. The definition of "Level of activity" is the amount of activity at a source measured in terms of production, fuel use, raw materials input, or other similar units that have a direct correlation with the economic output and emission rate of the source (i.e., mass emitted per unit of activity). The definition of "Person" includes, for the purpose of issuance of allowances under this division, an individual, a partnership of two or more persons having a joint or common interest, a mutual or cooperative association, and a corporation. The new section refers to the following existing definitions: "Houston/Galveston (HGA) ozone nonattainment area" as defined in §101.1; and "Site" as defined in §122.10, General Definitions. The definition of "Site" was added since publication of the proposal. The definition of

"Source" was deleted from the adoption because the use of the term "facility" is more appropriate when describing pieces of equipment emitting NO<sub>x</sub>.

New §101.351 states that the requirements of Division 3 apply to all stationary facilities which emit NO<sub>x</sub> in the HGA nonattainment area subject to the emission specifications under §§117.106, 117.206, and 117.475 and that have a design capacity to emit ten tons or more per year of NO<sub>x</sub>. The term facility has been substituted for source to identify specific equipment emitting NO<sub>x</sub>. The commission intends to propose a revision to this section to clarify that the cap and trade rules apply to all facilities subject to Chapter 117 at sites where these facilities collectively have a design capacity to emit ten tons or more per year of NO<sub>x</sub>. This clarification reflects the original intent of the commission and the commission will propose this revision to allow for notice and comment on the clarification shortly after adoption of these rules.

New §101.352 states that allowances may only be used as described in Division 3 and cannot be used to meet or exceed the limitations of any annual emission limitation authorized under Chapter 116, Subchapter B, any applicable rule or law, or for netting purposes to avoid the applicability of federal and state new source review (NSR) requirements. The new section requires that each site shall hold a quantity of allowances in its compliance account on February 1 equal to or greater than the total emissions of NO<sub>x</sub> emitted from each facility subject to Chapter 117 for the control period just ending. The cap and trade program begins January 1, 2002. Beginning February 1, 2003 and no later than every February 1 following the end of every subsequent control period, each site is required to hold the amount of allowances it used in the previous year's control period. The new section allows unused allowances to be banked as ERCs provided that an enforceable and permanent reduction of annual allowances is approved by the executive director, and all applicable requirements of Division 1 of Chapter 101,

Subchapter H are met. The section does not allow unused allowances to be banked as DERCs. The new section states that allowances may be simultaneously used to satisfy the correlating one-to-one portion of offset requirements for new or modified facilities subject to federal nonattainment NSR requirements as provided in Chapter 116, Division 7. However, allowances may not be used for netting under Chapter 116, Subchapter B, Divisions 5 or 6. This language has been changed from the proposal for clarity. The new section states that all allowances would be allocated, transferred, or used in tenths of a ton. This is a change from the proposal which required the banking and trading of allowances in whole tons. This change was made because the cost of allowances could cause significant financial loss if they were rounded to the nearest ton. The meaning of allowance still means the authorization to emit one ton of NO<sub>x</sub> per year. One compliance account shall be used for multiple sources located at the same site and under common ownership or control. The new section states that an allowance would not constitute a security or a property right. The commission will maintain a registry of the allowances in each compliance account. The registry will not contain proprietary information. Requests for information identified as proprietary when submitted to the agency would be subject to the procedures set out in the Texas Public Information Act.

New §101.353 describes how allowances will be allocated to individual facilities. This section has been revised since proposal for the adoption for clarity, to change the reduction schedule, and to revise the amount of necessary reductions. Initially, for any facility operating prior to January 1, 1997, allowances will be based on its actual level of activity from 1997, 1998, and 1999 multiplied by the higher of the facility's actual emission factors from 1997, 1998, and 1999 (not to exceed any applicable federal or state regulation, rule, or permit limit) or the facility's emission factor listed in Chapter 117. For a facility not operating prior to January 1, 1997 and which has submitted, under Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, an application which the

executive director has determined to be administratively complete before January 2, 2001 or has qualified for a permit by rule under Chapter 106, Permits by Rule, and has commenced construction before January 2, 2001, allowances will be equal to the facility's level of activity as authorized by the executive director, (until such time that two complete consecutive calendar years of actual level of activity data is available), multiplied by the higher of the facility's authorized emission factor (until such time an emission factor averaged over the most recent two consecutive calendar years is available, not to exceed any applicable federal or state regulation, rule, or permit limit) or the facility's emission factor listed in Chapter 117. For a facility using alternative emission specifications as allowed in §§117.106(c)(2), 117.206(c)(17), or 117.475(c)(3) beginning allowances will be calculated using the lowest level of activity as determined by the facility's 1997 through 1999 level of activity average, two complete calendar years of average level of activity subsequent to 1997, or a level of activity limited by an enforceable limit or commitment multiplied by the higher of the facility's authorized emission factor (until such time an emission factor averaged over the most recent two consecutive calendar years is available, not to exceed any applicable federal or state regulation, rule, or permit limit) or the facility's emission factor listed in Chapter 117. The purpose for using a two- or three-year average, when available, is to limit the effect of a year in which the activity level was uncharacteristically low or high for a facility. The purpose for using the higher of the facility's actual or allowable emission factor or its emission factor as listed in Chapter 117 is to prevent penalizing those facilities already emitting or authorized to emit at levels equal to or lower than the requirements in Chapter 117.

For all boilers, auxiliary steam boilers, and stationary gas turbines within an electric power generating system as defined in §117.10, Definitions, allowances will be reduced by 47% of the required reductions in Chapter 117 beginning January 1, 2003. Beginning January 1, 2004, allowances for boilers, auxiliary steam boilers, and stationary gas turbines will be reduced by 95% of the required reduction. Beginning January 1, 2007 and for all

subsequent control periods allowances for boilers, auxiliary steam boilers, and stationary gas turbines will be reduced by 100% of the required reductions.

For all other sources, allowances will be reduced by 44% of the required reductions in Chapter 117 beginning January 1, 2004. Beginning January 1, 2005, allowances for boilers, auxiliary steam boilers, and stationary gas turbines will be reduced by 89% of the required reduction. Beginning January 1, 2007 and for all subsequent control periods allowances will be reduced by 100% of the required reductions. The commission believes that this revised compliance schedule facilitates a determination at the mid-course review by May 1, 2004 to ensure that the final 5% of the reductions from boilers, auxiliary steam boilers, and stationary gas turbines within an electric power generating system, as defined in §117.10, and the final 11% of the reductions from other sources are necessary or sufficient for attainment of the ozone standard.

The section states that any new or modified facility will not be allocated any allowances if that facility has submitted, under Chapter 116, Control of Air Pollution by Permits for New Construction or Modification, an application which the executive director has determined to be administratively complete on or after January 2, 2001 or has qualified for a permit by rule under Chapter 106, Permits by Rule, and has commenced construction on or after January 2, 2001. These new or modified facilities will be required to obtain allowances on an annual basis from other facilities already participating in the cap and trade program or by obtaining DERCS or MDERCS. This requirement applies only to those facilities identified in §101.351 relating to applicability. The section states that if a facility emits more NO<sub>x</sub> than was held in the compliance account on January 31 following the control period, allowances for the next control period will be reduced by the amount equal to the emission exceeding the compliance account plus an additional 10%. Based on comments received, language was added from the proposal

to clarify that this section does not preclude additional enforcement action by the executive director. The section states that allowances would be allocated by January 1 of each control period, beginning in 2002, that the annual allocation of allowances may be adjusted by the executive director for any new or existing SIP requirement, and that allowances may be added or subtracted from compliance accounts after reviewing the reports required in §101.359. The section allows the executive director to deviate from the allocation methodology in extenuating circumstances. The commission added language stating that owners or operators of facilities seeking deviations from the allocation methodology of this section due to extenuating circumstances must apply to the executive director no later than June 1, 2001. Based on comments received, the commission added language stating that allowances allocated based on historical activity levels will continue to be allocated despite subsequent shutdowns or reductions in activity levels.

New §101.354 describes how allowances will be subtracted out of compliance accounts. The section states that allowances are deducted from a site's compliance account in tenths of tons based on the facility's level of activity during a control period and multiplied by the facility's emission factor during the control period. This change from the proposal, which used whole tons, was based on comments. The commission added language which states that another method to determine the number of allowances to be deducted from a compliance account can be used in lieu of the method mentioned above as determined by the executive director. This was added for cases where continuous monitoring data, stack sampling, or other methods might provide better results when determining a facility's actual emissions. The commission added language which requires the executive director to deduct the most recently allocated allowances before deducting banked allowances. This language was added to minimize the possible effect on the emission cap by the accumulation of allowances. The commission added language that states that allowances allocated based on authorized levels of activity and not on historical levels

of activity may only be used by the facility for which they were allocated and may not be used by other facilities at the same site during the same control period. Allowances allocated based on authorized levels of activity are intended to allow new and modified facilities an authorization to emit until such time as two complete consecutive calendar years of data is available. These allowances are not intended to provide additional flexibility to existing facilities at the site. The section states that a facility shall hold a quantity of allowances equal to or greater than its actual  $\text{NO}_x$  emissions by February 1 for the preceding control period.

The new §101.356 describes how allowances may be traded and banked. Allowances may generally be banked for future use or traded during the control period for which they are allocated or the following control period. Any allowance not used for compliance may be banked or traded for use in the following control period, with the exception of unused allowances allocated in variables (2)(B) and (3)(B) in Figure 30 TAC §101.353(a). The section states that allowances that aren't expired or used could be traded at any time after they have been allocated, again with the exception of allowances allocated in variables (2)(B) and (3)(B) in Figure 30 TAC §101.353(a). Only authorized account representatives may trade allowances. Trade requests would be made through the submittal of a completed ECT-2 Form. As part of the application, the account representative shall report the price paid per allowance and shall submit the ECT-2 Form within 15 days prior to be deposited into the transferee's broker or compliance account. Trades would be completed through the executive director and would be considered complete when the executive director issues a letter finalizing the trade. This section would allow for the use of discrete emission credits in accordance with Chapter 101, Subchapter H, Division 4 in place of allowances for compliance with Division 3. This section has been revised based on comments to clarify how DERCs and MDERCs may be used. The section has been revised to state that MDERCs may be used in lieu of allowances on a one-to-one ratio. DERCs generated prior to January 1, 2005 may be used in lieu of allowances at a one-to-one ratio prior to

January 1, 2005. DERCs generated prior to January 1, 2005 may be used in lieu of allowances at a ten-to-one ratio after January 1, 2005. DERCs generated on or after January 1, 2005 may be used in lieu of allowances at a one-to-one ratio on or after January 1, 2005. In addition, no more than 10,000 DERCs will be allowed to be used in the entire HGA nonattainment area per year on or after January 1, 2005. The executive director will develop guidance to determine how the 10,000 DERCs will be distributed among all applicants requesting their use. Language was added to clarify that the 10% environmental contribution and the 5% compliance margin of Division 4 do not apply to the use of DERCs and MDERCs in lieu of allowances. The commission has also reduced the 45 day requirement to submit a notice of intent to use to 30 days. In response to comments the commission is evaluating the use of ERCs in lieu of allowances and may consider future rulemaking. The section was also revised, based on comments, to require an audit of the cap and trade program every three years. The audit will evaluate the program, its success and failures, its impact on the SIP, and any other pertinent information.

New §101.358 states that if monitoring is required of a facility under a federal or state program, that monitoring or other data shall be used to determine actual NO<sub>x</sub> emissions. Facilities not required to monitor shall calculate actual NO<sub>x</sub> emissions using generally accepted engineering practices, including calculation methodologies in general use and accepted in NSR permitting.

New §101.359 states that facilities shall submit by March 31 a completed ECT-1 Form detailing the amount of actual NO<sub>x</sub> emission for the preceding control period and shall include the methods used in determining the NO<sub>x</sub> emissions and a summary of all final trades.

New §101.360 states that all facilities required to participate in the cap and trade program would be required to submit a completed ECT-3 Form certifying their historical level of activity by June 30, 2001. This section was revised to clarify that the level of activity must be submitted not only for facilities with three complete years of historical data from 1997 through 1999, but also for the other facilities that will receive allowances based on their authorized activity levels and subsequently, their two years of actual data. This information will be used to calculate each facility's allocations.

#### DIVISION 4

New §101.370 contains the definitions to be used within Subchapter H, Emissions Credit Banking and Trading, Division 4, Discrete Emission Credit Banking and Trading. The definitions of "Activity," "Actual emissions," "Area Source," "Certified," "Emission Reduction Strategy," "Generator," "Permanent," "Quantifiable," "Shutdown," and "Use period" were defined in §101.29 and were transferred unchanged to §101.370.

The following definitions were moved from §101.29 to §101.370 and amended. "Applicable emission point" is revised to refer to the emission point generating an emission reduction or using an emission credit. This revision allows for consistency with the use of terms throughout the rule language. The definition of "Baseline" is amended to limit the emissions occurring prior to a reduction strategy to levels not to exceed the most recent level of emissions reported in the emission inventory used for SIP determinations. The definition of "Baseline activity" is amended to describe a source's actual level of activity based on actual data averaged over any consecutive two calendar year period during the most recent year of emissions inventory used for SIP determinations or subsequent year(s). For sources in existence less than 24 months or not having two complete calendar years of data, a shorter time period, not less than 12 months, may be considered by the executive director. The definition

of "Baseline emission rate" is amended to refer to the source's rate of emissions per unit of activity during the baseline activity period. The definition of "Curtailment" is amended to mean a reduction in activity level at any stationary or mobile source. The definition of "Discrete emission reduction credit" is revised to be a credible emission reduction that is created during a generation period, quantified after the period in which emission reductions are made, and expressed in tons. This change provides consistency with the new terms and definitions of the adopted rules. The definition of "Ozone season" is revised to the portion of the year when ozone monitoring is federally required to occur in a specific geographic area. "Protocol" is amended to refer to replicable and workable methods for mobile and stationary sources. The definition of "Real reduction" means a reduction in actual emissions as opposed to a reduction in allowable emissions. "Surplus" is amended to refer to an emission reduction which is not otherwise required of a source by any state or federal law, regulation, or agreed order and is beyond the emissions level utilized for SIP determinations. "User" is amended to refer to the owner or operator which acquires and uses emission credits to meet a regulatory requirement, demonstrate compliance, or offset an emission increase. "Use strategy" is revised to refer to the use of "emission credits" which is more consistent with the terms in the new rules.

The following new definitions are added to §101.370. "Baseline emissions" is defined as the source's total actual emissions based on the baseline activity and baseline emission rate. A "Discrete emission credit" is defined as a credible emission reduction such as a "Discrete emission reduction credit" or "Mobile discrete emission reduction credit." A definition of "Emission reduction" is added as an actual reduction of emissions from a stationary or mobile area source. The "Generation period" is defined as the discrete period of time, not exceeding 12 months, over which a discrete emission reduction credit is created. The definition of "Level of Activity" was added in response to comments. The definition states that the level of activity is the amount of activity at a source

measured in terms of production, fuel use, raw material input, or other similar units that have a direct correlation with the economic output and emission rate of the source (i.e., mass emitted per unit of activity). A "Mobile discrete emission reduction credit (MDERC or discrete mobile credit)" is defined as a credit that is surplus, generated by a mobile source strategy. It is a creditable emission reduction that is created during a generation period, quantified after the period in which emissions reductions are made, and expressed in tons. "Mobile emissions baseline" is defined as mobile emissions which occur prior to a mobile emission reduction strategy, considering all limitations required by applicable state and federal regulations. A valid mobile emission baseline could be calculated by either using measured emissions of an appropriately-sized sample of the participating mobile sources using an approved EPA test procedure or by using estimated emissions of the participating mobile sources using the most recent edition of the EPA's mobile emissions factor model or other applicable model. The baseline cannot be higher than the emissions which are estimated in the SIP for that vehicle. "Mobile source baseline activity" is defined as the mobile source's level of activity during the applicable mobile source baseline year. The definition for "Mobile source baseline emissions" is a source's total actual mobile source emissions based on the mobile source activity and the mobile source emissions rate. "Most stringent allowable emissions rate" is the emission rate of a source, considering all limitations required by applicable local, state, and federal regulations. The term "Strategy activity" is the source's level of activity during the discrete emission reduction generation period and "Strategy emission rate" is the source's emission rate during the discrete emission reduction generation period. "Source" is a point of origin of air contaminants, whether privately or publically owned or operated. Upon request of a source owner, the executive director shall determine whether multiple processes emitting air contaminants from a single point of emission will be treated as a single source or multiple sources.

New §101.371 states that the purpose of Division 4 is to allow an operator of a source to generate and use discrete emission credits. The wording of this section is revised from the previous language in §101.29 to refer to both DERCs and MDERCs as discrete emission credits, unless the rule language refers to specifically only one of these discrete emission credits. This new section also states that participation in the program is voluntary.

New §101.372 contains the general provisions for the Discrete Emission Credit and Trading Program. The wording of this section is revised from the previous language in §101.29 to refer to both DERCs and MDERCs as emission credits, unless the rule language refers to only one of these discrete emission credits. The section specifies to which pollutants the program will apply and the included pollutants are unchanged from those previously in §101.29. Language was added to clarify that the EPA must also grant approval before a reduction of one pollutant may be used to meet the requirements of another pollutant. The section states that DERCs and MDERCs must be real, quantifiable, and surplus. The certification requirements of a discrete emission credit would be revised to only allow credits which have occurred after the most recent year of emissions inventory used for SIP determinations and to require the source's annual emissions prior to the submittal of the emission credit application to have been represented in the emissions inventory of the most recent year of emissions inventory used for SIP determinations. Rule language is added which prohibits emission credits certified as DERCs or MDERCs from being recertified as emission credits under any other division within Subchapter H. The section allows for stationary sources (including area sources), mobile sources, and stationary sources (including area sources) or mobile sources associated with agencies under §101.30 to be eligible to generate and use emission credits. The rule language will allow DERCs and MDERCs to be available for use after the executive director has received a notice of generation and the discrete emission credits have been reviewed and deemed creditable. This is a change from previous procedures where emission credits were placed in the registry upon receipt of the

notice of generation and were not reviewed for credibility until a notice of intent to use was received by the executive director. This change will allow for the emission reduction program and the discrete emission reduction program to operate on a more consistent basis. The section states that DERCs and MDERCs may be used anytime after certification and that they do not expire. The geographic scope will remain the same as previously stated in §101.29, except the new rule language will allow for the trading and use of emission credits generated in other counties, states, or nations provided that a demonstration has been made and approved by the executive director and the EPA showing that the reduction in the area where the credit was generated causes an improvement in air quality in the county where the credit is used. As previously stated in §101.29, the trading of discrete emission credits may be discontinued by the executive director with commission approval, and for areas having an ozone season less than 12 months, discrete emission credits generated outside the ozone season may not be used during the ozone season. The commission will maintain a registry that lists all discrete emission credits available or used. The section requires the generator and user of discrete emission credits to maintain a copy of records for a minimum of five years regarding the generation and use of credits. The records shall include at a minimum the name, emission point, and facility identification number of each source using discrete reduction credits, the amount of discrete reduction credits being used, and the specific identification number of the credit being used. As previously stated in §101.29, all information submitted with any application to generate or use discrete emission credits may not be submitted as confidential and discrete emission credits do not constitute a property right. The rules state that the executive director has the authority to prohibit either the generation or the use of discrete reduction credits if the executive director determines that the company has violated any of the requirements of the program or has abused the privileges provided by the program. Rule language concerning the start date for the discrete emission reduction program has been removed, since this program is currently ongoing.

New §101.373 outlines the required protocols of generating, calculating, certifying and registering, using, and transferring discrete emission credits. This section requires discrete emission credits to be determined based on established EPA protocols when available, actual monitoring results, or calculated using good engineering practices. There are no changes from the previous requirements in §101.29 regarding the various means for generating discrete emission credits. The section revises the equation for calculating the amount of DERCs generated to use the lower of the baseline emission rate or the most stringent emission rate. This revision will allow for the correct calculation of DERCs if the baseline emission rate was exceeding the emission rate required by local, state, or federal requirements. As previously in §101.29, the section would require DERCs to be rounded down to the nearest ton. The section limits the generation period for DERCs to five years. The section would not allow a source to generate discrete emission credits for any emissions exceeding its allowable emission limit. The section deletes a requirement that previously existed in §101.29, which restricted reductions used for netting from being generated as DERCs. The new section states what requirements and data must be documented to calculate MDERCs.

The language previously located in §101.29 regarding registration and certification of emission credits remains the same and is relocated to §101.373. The section adds language detailing what information, at a minimum, would be required to generate mobile discrete emission credits. The information, which is to be submitted on DEC-1 Form, includes the information necessary for the executive director to review the application in accordance with the new rules and to properly administer the program. It should be noted that, for continuing credits, each application will be reviewed for creditability at the time of submittal in addition to the time of strategy implementation. The new rule language specifically states the commission's practice that discrete emissions credits will be determined and certified to the nearest ton. The section includes new language regarding the

review of discrete emission reduction registrations for credibility upon receipt and that applicants being denied registration of discrete emission credits would be notified of such denial in writing. The section states that discrete emission credits will be reviewed and certified based on actual monitoring data, EPA methodology, or other commission approved protocols. In addition, rule language is added which states that discrete emission credits will be deposited in the registry and will be available for use until they are used, withdrawn, or expire. The compliance and burden language is essentially the same as formerly stated in §101.29. The user would be responsible for ensuring that the discrete emission credits are certified and certification, by the executive director, does not relieve the user on any other responsibilities. Previously existing §101.29 language regarding what discrete emissions can or cannot be used for has been reorganized into subparagraphs which state what the discrete emission credits can be used for and a subparagraph which states what they cannot be used for.

The adoption relocates the equations which provide flexibility to the 30-day rolling average emission limits and the new maximum daily emission limit for source caps as defined in Chapter 117 from §101.29 to new §101.373. The commission modified the equation used to calculate the amount of discrete emission credits needed to demonstrate compliance or meet a regulatory requirement to be consistent with the terms adopted for this division, and added language which would be consistent with the procedures and methodologies adopted within this division.

The equations for calculating 30-day rolling average emission limits are relocated from §101.29 to §101.373 unmodified. There are no changes to the existing requirements for additional credits needed as compliance margins or for environmental contributions. As previously stated in §101.29, the calculated discrete emission credits will be rounded up to the nearest ton and the user must retire 10% more than are needed. The amount of

discrete emission credits needed for NSR offsets would remain equal to the quantity of tons needed to achieve the maximum allowable emission level set in the user's NSR program. As previously stated in §101.29, discrete emission credits which are not used during the use period would remain surplus and available for use or transfer by the holder. As previously stated in §101.29, a notice of intent to use the DEC-2 Form would be submitted to inform the executive director of the intent to use discrete emission credits. The information required to be submitted on the DEC-2 Form would remain the same as previously stated in §101.29. The section includes a list of the required information to be submitted when a mobile source user intends to use discrete emission credits. The requirement for a user to notify the executive director of the amount of actual discrete emission credit use remains the same as previously stated in §101.29 with the exception of added language requiring the user to submit the information on a DEC-3 Form. The language regarding compliance burden and enforcement for discrete emission credit users is transferred unchanged from §101.29.

New §101.374 is a relocation of requirements from §101.29, with no changes, concerning auditing of the DERC program. The word "section" as found in proposed §101.374(a) was replaced with "division" since the intent was to refer to the entire Division 4 and not §101.374.

#### FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission has reviewed the adopted rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225. Divisions 1 and 4 create a voluntary mechanism which provides regulatory flexibility for compliance with state and federal emission limitations and do not add mandatory regulatory requirements or required costs. Division 3 affects owners and operators of new and existing stationary sources emitting NO<sub>x</sub> subject to §§117.106, 117.206, and 117.475 requirements in the HGA nonattainment area. The

commission has determined the adopted rulemaking in Division 3 of Chapter 101 meets the definition of a "major environmental rule" as defined in Texas Government Code, §2001.0225, but adopted rulemaking in Divisions 1 and 4 does not. "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 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.

As discussed earlier in this preamble, these adoptions are 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 the EPA by December 31, 2000.

Under the cap and trade portion of these rules, existing sources would be limited to NO<sub>x</sub> emission levels under an emissions cap based on historical operating data and source specific emission rates determined by Chapter 117. New stationary sources would be required to identify a source(s) of allowances equal to allowable emissions prior to commencing operation. All sources subject to this division would be required to hold a quantity of allowances in their compliance account by February 1 following the end of a control period, which is equal to or greater than the total emissions from the preceding control period. The cost of allowances in similar programs nationwide has ranged from approximately \$500 to \$5,000 per allowance (ton), depending on availability and demand. Actual costs in the HGA nonattainment area will be dependent upon market demand and availability. The commission is proposing these sections as part of a strategy to reduce and permanently cap emissions of NO<sub>x</sub> to a level which would allow the HGA nonattainment area to attain the NAAQS for ozone. This is based on the analysis provided in the rule proposal preamble which was published in the August 25, 2000 issue of the ~~Texas Register~~ (25 TexReg 8137), including the discussion in the Public Benefit and Costs section.

These rules do not exceed an express standard set by federal law, since they implement requirements of the FCCA. 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. 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 the FCCA, Chapter 85, Air Pollution Prevention and Control). It is true

that the FCAA 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 the FCAA. The provisions of the FCAA 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 the FCAA allows states to develop their own programs, this flexibility does not relieve a state from developing a program that meets the requirements of 42 USC, §7410. 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. 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 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 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 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, the FCAA 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 adopted 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.

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 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, the 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, and 382.017 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.

Comments received during the comment period regarding the draft RIA are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

#### TAKINGS IMPACT ASSESSMENT

The commission evaluated this rulemaking action and performed an analysis of whether the rules are subject to Texas Government Code, Chapter 2007. The following is a summary of that analysis. These sections are adopted as part of a strategy to reduce and permanently cap emissions of NO<sub>x</sub> to a level which would allow the HGA nonattainment area to attain the NAAQS for ozone. Promulgation and enforcement of the rules will not burden private real property. The new sections do not affect private property in a manner which restricts or limits an owner's right to the property that would otherwise exist in the absence of a governmental action. Additionally,

the credits and allowances created under these rules are not property rights. Consequently, these sections do not meet the definition of a takings under Texas Government Code, §2007.002(5).

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 the adopted rules since they are reasonably taken to fulfill an obligation mandated by federal law. Specifically, the emission limitations and control requirements within this adoption were developed in order to meet the ozone NAAQS set by the EPA under the FCAA, §7409. States are primarily responsible for ensuring attainment and maintenance of the NAAQS once the EPA has established them. Under the FCAA, §7410 and related provisions, states must submit, for approval by the EPA, 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 rule adoption is to implement a NO<sub>x</sub> strategy which is necessary for the HGA area to meet the air quality standards established under federal law as NAAQS. 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 is only one step among many

necessary for attaining the ozone standard. Consequently, the exemption which applies to these rules is that of an action reasonably taken to fulfill an obligation mandated by federal law. Therefore, these revisions do not constitute a takings under Texas Government Code, Chapter 2007.

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 has 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's rules in 30 TAC Chapter 281, Subchapter B, concerning Consistency with the Texas Coastal Management Program. As required by 30 TAC §281.45(a)(3) and 31 TAC §505.11(b)(2), 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 has reviewed this action for consistency with the CMP goals and policies in accordance with the regulations of the Coastal

Coordination Council, and has determined that the adopted rules are consistent with the applicable CMP goal expressed in 31 TAC §501.12(1) of protecting and preserving the quality and values of coastal natural resource areas, and the policy in 31 TAC §501.14(q), which requires that the commission protect air quality in coastal areas. If adopted, the new sections will reduce and cap emissions of NO<sub>x</sub> in the HGA nonattainment area to a level that would allow attainment of the NAAQS for ozone. No new contaminants will be authorized by these rules, and a reduction of NO<sub>x</sub> emissions should occur.

Comments received during the comment period regarding the Coastal Management Program Consistency Review are addressed in the ANALYSIS OF TESTIMONY section of this preamble.

#### EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMIT PROGRAM

The new sections under Divisions 1, 3, and 4, will become part of the state's ozone attainment strategy; therefore, these amendments will be submitted as part of the SIP. As a result, the new sections and any allowances allocated under these sections would become applicable requirements under the federal operating permit program.

#### HEARINGS AND COMMENTERS

The commission held public hearings on this adoption at the following locations: September 18, 2000, in Conroe and Lake Jackson; September 19, 2000 in Houston (2 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; and September 25, 2000, in Austin and Corpus Christi. The comment period closed at 5:00 p.m. on September 25, 2000. The following commenters provided oral testimony and/or submitted written testimony: Avista-Steag, LLC

(Avista-Steag), BASF Corporation (BASF), Business Coalition for Clean Air (BCCA), Calpine Central LP (Calpine), Chevron Phillips Chemical Company (Chevron), City Public Service of San Antonio (CPS), City of Spring Valley (Spring Valley), Clean Air Action Corporation (CAAC), Coalition for Gas-Based Environmental Solutions (Coalition), Diamond Koch (Diamond-Koch), Dow Chemical Company (Dow), Dynegy, Inc. (Dynegy), Enron Corporation (Enron), Entergy Services, Inc. (Entergy), Enterprise Products Operating, LP (Enterprise), Environmental Defense (ED), Equistar Chemicals, LP (Equistar), ExxonMobile Corporation (ExxonMobile), FPL Energy (FPL), Fuel Tech, Inc. (Fuel Tech), Gas Processors Association (GPA), Goodyear Tire and Rubber Company (Goodyear), Houston Galveston Area Council (HGAC), Houston Metropolitan Planning Organization's Transportation Policy Council (The Council), Kinder Morgan, Inc. (Kinder Morgan), League of Women Voters of Texas (LWV-TX), Lyondell Chemical Company (Lyondell), Lyondell-Citgo Refining, LP. (LCR), National Aeronautics and Space Administration (NASA), Pasadena Paper (Pasadena), Peco Energy Company (Peco), Phillips 66 Company (Phillips 66), Printing and Image Association of Texas (PIAT), RMT, Inc. (RMT), Regional Air Quality Consensus Group (RAQCG), Reliant Energy, Inc. (Reliant), Sierra Club Houston Regional Group (Sierra-Houston), Solutia (Solutia), Stolt-Nielsen Transportation Group Ltd. (SNTG), Texas Industrial Project (TIP) via Baker Botts, LLP, TXI Operations, LP. (TXI), TXU Business Services (TXU), Tennessee Gas Pipeline Company (TGP), Texas Chemical Council (TCC), Texas Eastern Transmission Corporation (Texas Eastern), Texas Oil and Gas Association (TxOGA), Texas Pulp and Paper Industry Environmental Council (TPIEC), Trunkline Gas Company (TGC), U.S. Environmental Protection Agency (EPA), Valero Refining Company-Texas (Valero) and twenty three individuals. The companies and organizations expressed general support for the cap and trade concept but opposed many parts of the proposed implementation and suggested changes. These comments are detailed under ANALYSIS OF TESTIMONY. Fifteen individuals opposed the cap and trade concept. Eight individuals expressed general support for the cap and trade concept.

#### ANALYSIS OF TESTIMONY

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, Dynegey, Equistar, ExxonMobil, Goodyear, Harris County Judge Robert Eckels, Phillips 66, TCC, TPIEC, TxOGA, Valero, 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. 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 II/Tier III 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 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 emission 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 emission 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 credit in the SIP 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 wherein the District of Columbia Circuit has approved the EPA's flexibility with respect to statutory deadlines under the FCAA when the EPA has failed to meet its own deadlines, and this failure was deemed to upset the balanced federal/state responsibilities under the FCAA. ExxonMobil commented that it supports 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 Judge Robert Eckels 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. TPIEC commented that the proposal should incorporate an appropriate level of federally preempted programs to address the proposal's undue reliance on state regulated sources.

The rule has not been revised based on these comments. 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 the 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 EPA to determine an appropriate federal contribution credit available for the HGA SIP.

BCCA, Entergy, Equistar, ExxonMobil, Goodyear, GPA, Kinder Morgan, Lyondell, PECO, Phillips 66, REI, TPIEC, and TXI, 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 the 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, the rule 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's 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 the 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 (NSPS), RACT, best available control technology (BACT), or lowest achievable emission rate (LAER) 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.

TXI stated that the NAAQS does not provide in and of themselves any standards applicable to the regulated community, and that a state with an approved SIP has broad flexibility on how to meet the NAAQS. TXI stated that the commission failed to cite "an 'express requirement of state law' that justifies the promulgation of the proposed rule without complying with the mandates of §2001.0225." TXI stated that none of the state laws cited in the rule proposal preamble (TCAA, §§382.011, 382.012, and 382.017) is "an 'express requirements of state law' to adopt these NO<sub>x</sub> emission rules."

TXI commented that ~~The Senate Natural Resources Committee, Interim Report to the 73rd Legislature, Use of Cost Benefit Analysis in Environmental Regulation~~ (September 1996) regarding §2001.0225 states on page 8 that "The heightened scrutiny approach would be applied only to the environmental regulations that are **not specifically required** by federal law, a federally-delegated program agreement or an express requirement of state law. Obviously, if the agency has **no discretion about whether to adopt regulations** it should not be required to prepare a heightened scrutiny document." (TXI's emphasis added)

TXI stated that the commission must quantify the costs associated with the proposal either for the purpose of determining the reasonableness of the proposed NO<sub>x</sub> controls for achieving the commission's desired result or for complying with the specified requirements of §2001.0225. TXI asserted that the commission did not perform a study of the costs associated with the proposed rule for lightweight aggregate kilns. TXI also asserted that the commission did not perform a quantitative analysis of the estimated cost to the Texas lightweight aggregate industry and that without such an analysis, the commission cannot determine the reasonableness of the proposed rule from an economic perspective.

The commenters stated that the rule proposal preamble acknowledges that the rule proposal's components 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 rules have not been revised based on these comments. The commission agrees that the cap and trade portion of the rules meets the definition of a major environmental rule; however, the commission disagrees that its interpretation of the exemption for federally mandated standards

is legally flawed. While the rules may limit growth of emissions from point sources in the HGA nonattainment area, that alone is not enough to trigger the RIA requirements. 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. Texas Government Code, §2001.035. This rule does not exceed an express standard set by federal law because the cap and trade rules 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 FCAA, 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 the FCAA 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 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 commissions photochemical modeling and other analysis indicates 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 reductions in ozone emissions in the HGA non-attainment areas. Specifically, as noted elsewhere in this rule preamble, the emission reductions associated with this rule are a necessary element of the attainment demonstration required by the FCAA.

This conclusion is supported by the legislative history for Texas Government Code, §2001.0225. During the 75th Legislative Session, Senate Bill (SB) 633 amended the Texas Government Code to require agencies to perform a regulatory impact analysis 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 Legislative Budget Board (LBB). 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 the FCAA. In other words, the proposed rule is 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 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 §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, this rulemaking does not exceed state requirements, and is not adopted solely under the general powers of the

agency because the provisions of the TCAA, §§382.011, 382.012, and 382.017 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, Entergy, ExxonMobil, Equistar, Goodyear, Lyondell, Phillips 66, REI, and TPIEC stated that the proposed rules did not include an adequate TIA as required under Texas Government Code, §2007, with Goodyear stating that the proposal amounts to a taking of its engines (including a recently retrofitted engine) "not supported by adequate scientific support, public participation, or legal process." 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 is infeasible (25 TexReg 8137 and 8291), 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 rules have not been revised based on these comments. 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. The allowances created under these rules, like other authorizations to emit, are not property rights and therefore cannot be the basis for a takings claim. Generally, these rules themselves should not impose any requirements on point sources, but only requirements of recordkeeping and reporting. In fact, these rules provide flexibility for meeting the requirements of the revisions to Chapter 117 regarding NO<sub>x</sub> reductions from point sources in the HGA nonattainment area which are adopted concurrent with this rulemaking. To the extent that the commenters are concerned about takings implications of the requirements of the Chapter 117 rule revisions, they may review the response to this comment in the preamble for those rule revisions which are published elsewhere in this version of the **Texas Register**.

In its analysis, the commission also found that the rules are exempt from Chapter 2007 pursuant to §2007.003(b)(4) because they are reasonably taken to fulfill an obligation mandated by federal law. 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. This rulemaking therefore meets the requirements of §2007.003(b)(4). 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 and they therefore meet the requirements of §2007.003(b)(13) as well. For these reasons the rules do not constitute a takings under Chapter 2007 and does not require additional analysis.

BCCA, Entergy, ExxonMobil, Equistar, Goodyear, Lyondell, Phillips 66, REI, and TPIEC 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 the 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 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's assessments fall short of what Texas law requires and that it is not sufficient for the agency 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 the rule 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 the rule 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's impact on small and large businesses, using the specified standards, for public review and comment before adoption.

The rules have not been revised based on these comments. The agency has estimated, to the extent possible, the costs to small businesses and has determined that there is no cost of the voluntary portion of these rules, Divisions 1 and 4, and that the cost of compliance with the cap and trade program will be minimal. The only costs created by this rulemaking are the costs of recordkeeping and reporting. These costs are mitigated for smaller facilities by excluding those

facilities which are ten tons or less. In fact, these rules provide flexibility for meeting the requirements of the revisions to Chapter 117 regarding NO<sub>x</sub> reductions from point sources in the HGA nonattainment area which are adopted concurrent with this rulemaking. To the extent that the commenters are concerned about the costs of the Chapter 117 rule revisions to small businesses, they may review the response to this comment in the preamble for those rule revisions which are published elsewhere in this version of the ~~Texas Register~~.

The comments which state there are critical gaps did not identify what these gaps are or how that results in inadequate notice. The commission is unaware of any requests for additional information to which it was not completely responsive.

BCCA, Entergy, ExxonMobil, Equistar, Goodyear, Lyondell, Peco, Phillips 66, REI, and TPIEC stated that the proposed rules did not include the local employment impact statement required under Texas Government Code, §2001.022. The commenters stated that Texas Government Code, 2001.022, requires the commission to determine whether the rule proposal has the potential to affect a local economy before proposing the rules for adoption. The commenters stated that if answered affirmatively, the commission must request that the Texas Employment Commission to prepare a local employment impact statement describing in detail the probable effect of the rules on employment in each geographic area affected by the rules for each year of the first five years that the rules will be in effect. The commenters further asserted that the commission failed to make the required initial determination and ignored the potential for the proposal to adversely affect the local economy. The commenters stated that a local employment impact statement should have been requested and prepared in advance of the proposal.

The rules have not been revised based on these comments. The commission agrees with the commenters that the proposed rulemaking 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 a rule may affect a local economy before proposing a rule for adoption. If the agency determines that a proposed rule may affect a local economy, the agency must send a copy of the proposed rule and other information to the Texas Workforce Commission before the agency files notice of the proposed rule with the secretary of state. The APA requires the Texas 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 rulemaking might affect a local economy, and sent the proposed rules and other requested information to the Texas Workforce Commission. The commission received a letter from the Texas Workforce Commission, indicating that the Texas Workforce Commission did not have the ability to determine the potential local employment impacts from the proposed rules.

BCCA, Entergy, ExxonMobil, Equistar, Goodyear, Lyondell, Peco, Phillips 66, REI, and TPIEC stated that the proposed rules did not include adequate notice as required under Texas Government Code, §2002.024. The commenters stated that Texas Government Code, §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 were 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 of the notice of a proposed rule include

certain information. Texas Government Code, §2001.024(5) requires that the notice 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 the rule. Adequate notice is essential for fairness as well as a meaningful opportunity to comment on a proposed rule. *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 of the proposed rules. Therefore, the commission believes this goal has been achieved and that the notice includes sufficient information to constitute adequate notice.

The commission has determined that there is no cost of the voluntary portion of these rules, Divisions 1 and 4, and that the cost of compliance with the cap and trade program will be minimal. The only costs created by this rulemaking are the costs of recordkeeping and reporting. In fact, these rules provide flexibility for meeting the requirements of the revisions to Chapter 117 regarding NO<sub>x</sub> reductions from point sources in the HGA nonattainment area which are adopted concurrent with this rulemaking. To the extent that the commenters are concerned about the costs of the Chapter 117 rule revisions, they may review the response to this comment in the preamble for those rule revisions which are published elsewhere in this version of the ~~Texas~~ Register.

The comments which state there are critical gaps did not identify what those gaps are or how that results in inadequate notice. The commission is unaware of any requests for additional information to which it was not completely responsive.

Sierra-Houston and one individual commented that the proposed rules should be adopted statewide. Others generally comment that the commission should be doing more than what is proposed in this rulemaking.

The rules have not been revised based on these comments. The commission appreciates the commenters' support for statewide applicability of the 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 the Federal Clean Air Act. Three of the proposed measures contain emission reduction strategies that have been proposed for statewide applicability: California Large-Spark Ignition Engines; Emissions Banking and Trading Program (that portion of the proposed rule which relates to the trading of emission reduction credits and discrete emission reduction credits); and Cleaner Diesel Fuel (that portion of the proposed rule which relates to on-highway 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 statewide mandates. The commission analyzed where emission reduction

measures are most needed and where emission reduction measures will be most effective in order to demonstrate attainment.

An individual stated that the SIP should require reductions in the range of 90% of VOC and NO<sub>x</sub> for all of East Texas.

The rules have not been revised in response to this comment. The commission has not determined that reductions of this magnitude are required in East Texas in order for the HGA area to attain the ozone standard. The cap and trade program will only affect the HGA eight-county nonattainment area and will only be used to limit NO<sub>x</sub> emissions. The commission may investigate the validity of expanding the cap and trade program to other counties, including East Texas. The commission may also consider expanding the program to cap other criteria pollutants. If it is determined that additional counties and/or pollutants should be controlled under the cap and trade program, further rule making would be required.

One individual commented that these rules are being set up to embarrass Texas and the Governor, and that he hopes that State Legislators and Congress would investigate these plans.

The rules have not been revised based on this comment. The commission's intent is not to embarrass Texas and the Governor, but instead to comply with the timelines provided in 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.

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.

The rules have not been revised based on this comment. 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 ~~Texas Register~~ .

The EPA commented that authorizations under Chapters 106 and 116 should be approved as SIP revisions before limits under these Chapters can be used in the setting of allowances.

The rules have not been revised based on this comment. The commission does not believe that it is necessary to submit authorizations under Chapters 106 and 116 as SIP revisions. On August 13, 1982, (47 Federal Register 35183), the EPA published its approval of several revisions to 30 TAC Chapter 116 that were submitted to the EPA for SIP approval on May 9, 1975. Part of that May 9, 1975 submittal included §116.6, Exemptions. Although §116.6 has since been revised, the version that existed at the time of the August 13, 1982 SIP approval has not been withdrawn from the SIP. Thus, the basic regulatory authority for exemptions, now permits by rule, is in the SIP. In a letter dated June 4, 1990 from Merrit Nicewander, Chief, New Source Review Section, EPA Region VI, to

Lawrence Pewitt, Director of the Texas Air Control Board (TACB) Permits Division, the EPA stated that where the TACB issues standard exemptions pursuant to state regulations that were developed in accordance with the Texas SIP, the standard exemptions themselves are federally enforceable. Additionally, since Chapter 116 itself has been submitted and approved as part of the SIP, authorizations made under 116 are enforceable by the EPA.

Thus, since permits and permits by rule are federally enforceable, there is no need to submit each authorization individually as a SIP revision.

Under the definition of "source" the executive director has the authority to determine whether multiple processes exhausting from single point is treated as a single or multiple source. The EPA stated the commission should address how this definition is consistent with new source review and prevention of significant deterioration requirements.

The commission has made no changes in response to this comment. The definition of "Source" in both §101.300 and §101.370 are consistent with §101.1 which states that a source is a "point of origin of air contaminants, whether privately or publicly owned or operated." The definition in these sections goes on further to state "Upon request of a source owner, the executive director shall determine whether multiple processes emitting air contaminants from a single point of emission will be treated as a single source or as multiple sources." The definition is accurate for its

intended purpose for defining a source of emissions when determining the generation and use of emission credits under Subchapter H, Divisions 1 and 4. For NSR and PSD purposes, if a permit were to rely on an emission reduction or emission credit then that reduction or credit would be applied to the applicable "source" as described under the NSR or PSD rules and regulations. Since the definition in these sections applies only to these sections, it does not have to be identical to the definitions in NSR and PSD programs.

The EPA commented that the rule should address environmental justice issues for VOC trades such as specific notice of trades to nearby communities. Sierra-Houston commented that cap and trade programs are not set up to account for environmental justice issues.

The rules have not been revised based on these comments. Sections 101.302(e) and 101.372(f) of the adopted rules provide for the executive director to halt trading for a certain area if problems result from trading in a localized area of concern. Under §101.373(f)(6)(A), increases in emissions by use of credits are allowed only on a temporary basis, not perpetually, and are limited to 25 tons for NO<sub>x</sub> and five tons for VOC in any 12-month period. Additionally, the only time credits may be used to increase emissions, the conditions of 30 TAC §106.261(3) or (4) or §106.262(3) must be met without a specific impacts review, pursuant to §101.373(f)(7). All other uses would allow sources only to remain at the current emission rates or lower. Therefore, the commission believes that notice for each trade is unnecessary and furthermore would significantly hinder the trading procedures and would discourage use of the trading program.

The EPA commented that it is concerned about creating replicable procedures for the substitution of VOC for NO<sub>x</sub> reductions and stated that if the commission's final rules contained such a provision the determination of VOC substitutions would need the EPA approval.

The commission agrees that interpollutant trading should be approved by both the executive director and the EPA. The rules have been changed accordingly in §§101.302(a), 101.356(f), and 101.372(a).

The EPA commented that in the absence of an outlined procedure for demonstrating an improvement in air quality in the "county of use" of a credit, the EPA approval would be required for each trade.

The commission agrees that trading between different nonattainment areas or between attainment and nonattainment areas should be approved by both the executive director and the EPA. The rules have been changed accordingly in §101.302(e) and §101.372(e)(5).

The EPA requested confirmation that the provision in §101.303(a) requiring the EPA approval for deviation from the EPA protocol would limit the clause "or other model as applicable" in the definition of mobile baseline activity.

No change has been made to the rules in response to this comment. The commission confirms that §101.303(a) requires the EPA approval of the use of any mobile model in determining mobile baseline activity. The clause "or other model as applicable" was meant to incorporate the

possibility of models which may be created and approved in the future without having to identify them at the present.

The EPA commented that §101.303(e)(3)(I) references regulatory requirements and should also reference statutory requirements.

The rules were revised to incorporate this comment.

The EPA commented that there appears to be a typographical error in §301.303(e)(4)(I) and should read..... that is not prohibited.

The rules were revised to incorporate this comment.

The EPA commented that, if an agreed order is used to make a reduction enforceable, the agreed order should be submitted to the EPA and approved as a SIP revision before the credits are valid for trading.

The rules have not been revised based on this comment. The commission believes that agreed orders which are entered by the commission are enforceable by the EPA through the Texas Clean Air Act which is part of the SIP and through the specific provision for making reductions enforceable through agreed order in this rule and therefore do not need to be submitted individually as SIP revisions.

An individual commented the rules go far beyond what is necessary to protect the environment. Another individual said the banking rules are illegal.

The rules were not revised in response to these comments. The cap and trade portion of the banking rules are a method of compliance with NO<sub>x</sub> emission limits that have been demonstrated as necessary to bring the HGA area into attainment with the ozone standard. The commission acknowledges that the limits on growth are strict but disagrees that they go beyond what is required to attain the federal ozone standard. The commission believes the banking and trading rules are consistent with its statutory authority to develop a plan for control of the state's air and its authority to issue permits. Banking and other economic incentive programs are also authorized for use in the SIP by the FCAA, §110(a)(2).

An individual commented that leak reduction at refineries would remove the need for strict rules on the public.

The rules were not revised in response to this comment. The commission requires leak detection as a condition of issuing permits for refineries. Generally leaks at refineries cause the release of volatile organic compounds. The principal focus of these adopted rules is a reduction in NO<sub>x</sub> which is generally emitted due to combustion. The commission believes that actions are required to reduce NO<sub>x</sub> from both stationary and mobile sources in order to achieve attainment with federal air quality standards.

An individual stated that trading makes emission limits more difficult to enforce and allows emissions to be hidden.

The rules were not revised in response to this comment. The commission disagrees with this comment. The commission will have a system of tracking and accounting for allowances at individual sources and therefore will know what a sources authorized emission limits are at any time similar to the enforcement methodology of permit allowables. The cap and trade system will not introduce any new difficulties in enforcing those limits.

An individual stated that the trading program should be supported by continuous emission monitoring. Periodic monitoring should not be allowed.

The rules were not revised in response to this comment. The commission believes that it is unrealistic to require all facilities involved with emissions trading to have continuous monitors installed. The cost and need for this requirement is undocumented. If continuous monitoring data is available, it will be used to calculate actual emission reductions. If continuous monitoring is not available, the commission will utilize the best replicable data available, including periodic monitoring, stack sampling, and mass balance calculations. The monitoring requirements for each category of facility is generally set by the rules which apply specifically to those facilities, not by the banking rules. In this way the commission has been able to consider whether the cost of continuous monitoring is outweighed by the benefits for each category of facility.

Two individuals suggested a moratorium on permits.

The rules were not revised in response to this comment. The cap and trade program is designed to cap emissions of NO<sub>x</sub> at a level determined to result in attainment of the ozone air quality standard. Because emissions will be capped, no significant increase in overall emissions can occur from permitting activity thus a moratorium on permits is unnecessary.

BCCA, LCR, and Chevron commented that the commission should establish emission trading programs for federally preempted mobile and non-road sources. Such a program should allow for the trading among source categories. HGAC, RAQCG, and The Council commented that certain mobile source emission control programs such as Diesel Emulsion, Accelerated Purchase of Tier II/III Diesel, and NO<sub>x</sub> Control Systems be transferred to a voluntary mobile emission reduction program in order to generate NO<sub>x</sub> credits for trading. TPIEC commented that the proposal should incorporate an appropriate level of federally preempted programs to address the proposal's undue reliance on state regulated sources.

The rules were not revised based on these comments. The rules will allow any source, including stationary, mobile on-road, and mobile off-road, to bank reductions that are beyond local, state, and federal rules and regulations, provided that the requirements of Chapter 101, Subchapter H, Divisions 1 and 4 are met. To the extent that the control strategies mentioned by the commenters are not already required of the source, they could potentially be creditable.

HGAC commented that the commission should better define what emission reductions are available outside the proposed controls so generators have a greater certainty that they can enter into legitimate trades.

No changes have been made in response to this comment. The rules allow for any reduction that goes beyond any mandatory state or federal requirement to be banked as a credit so long as the reduction meets the requirements of 30 TAC Chapter 101, Subchapter H. Each individual source will have to review its own processes to determine the potential for reduction which can be banked.

LWV-TX commented that any emissions banking and trading program should result in reductions within the same airshed.

No changes have been made in response to this comment. The banking and trading program is designed to reduce NO<sub>x</sub> within, and is currently limited to, the eight-county HGA area. The program does not allow for the trading of allowances (emissions) into the area from outside the designated eight counties. Additionally, the ERC and DERC trading programs allow only credits created within a nonattainment area to be used within that same nonattainment area until such time as a demonstration can be made that there is an equivalent air quality benefit to trading between these areas.

Sierra-Houston opposed trading of credits between nonattainment areas and the trading of credits generated in the county, state, or nation. They preferred the actual reduction of emissions.

No changes have been made in response to this comment. The commission only supports trading of credits between counties, states, or nations if it does not adversely affect air quality for any given area. Such a demonstration would require approval of the executive director and the EPA. Trading provides an incentive to reduce emissions since reductions result in an allowance saving that has market value.

Sierra-Houston opposed the trading of one contaminant for another and allowing the executive director discretion in determining the amount of allowances allocated to a source. They stated these provisions of the rules would not result in real reductions.

The commission has not changed the rules in response to this comment. The commission disagrees that trading will not result in real reductions. To the extent that it enables the commission to achieve more overall reduction through other rules, the trading program provides a benefit to air quality. Additionally, trading of ERCs and DERCs in many cases requires the retirement of 10% of the credits used to benefit air quality.

The commission will allow the trading of one contaminant for another if it is demonstrated that an equal environmental benefit is accomplished. For example, if it is sufficiently demonstrated that a reduction of ten tons of VOC would reduce ozone formation in the same way as a reduction of one ton of NO<sub>x</sub>, the rule would allow for interpollutant trading at a ratio of ten to one. This demonstration can only occur if a real reduction is made and must be approved by the executive director and the ED. Given the continuing development of the science of ozone and the

fact that both VOC and NO<sub>x</sub> are precursors to the formation of ozone, it is possible that this flexibility will provide a mechanism to better reduce ozone in nonattainment areas.

Regarding the executive director's discretion to deviate from the standard allocation for allowances, the executive director plans to detail the factors which may be considered for deviation from allocation methodology in a guidance document. The executive director plans to limit deviations to extraordinary circumstances, for example a catastrophe which required a facility to shut down during the historic period upon which allocations would normally be based. The intent of this provision is to prevent significantly low allocations due to the fact that the historic period is not representative a plant's emissions.

SNTG commented that creditable reductions from mobile sources be calculated between the low emitting technology used and the lower of the conventional emission rate and the most stringent allowable emission rate.

There has been no change to the rules in response to this comment. The commission believes that the rules as adopted already accomplish the goal of the commenter. The definition of "surplus" allows only reductions beyond existing requirements to be creditable. So in the event that there is an allowable emission rate which is more stringent than the conventional emission rate, that allowable emission rate would determine how much of the reduction is surplus and therefore creditable.

SNTG commented that emission credits should be generated by comparing an emission reduction strategy to emissions that would otherwise occur without the strategy. This would eliminate the need for a baseline and allow reductions to be accomplished earlier.

The commission has made no changes in response to this comment. The SIP requires that the generation of allowances and credits be accomplished through comparison to a baseline of emissions. Surplus credits can only be generated when an emission control strategy results in reductions not required by any rule, regulation, or order.

TIP, Texas Eastern, TxOGA, Valero, and REI commented that the term baseline emissions should be defined as a source's actual emissions averaged over any consecutive 24-month period between the beginning of the SIP year and the emission reduction strategy period. Fixing the emission baseline to the SIP year is arbitrary and capricious. Where 24 months of data is not available, the executive director may consider any consecutive 12-month period. The definition of baseline activity should be similarly constructed based on operating hours, production rates, types of material processed or combusted. They also commented that the adopted rule should contain a definition of SIP Year as the year of emission inventory data on which applicable SIP provisions are based.

The rule has not been revised based on these comments. The trading programs were developed to provide flexibility to facilities that choose to purchase emission credits in lieu of making actual reductions that would otherwise be needed as part of an attainment strategy. By allowing facilities to use higher baseline emissions, the total number of credits generated from an

emission reduction would exceed the facility's emissions as listed in the baseline year which was relied upon for planning purposes of the SIP strategy. Under the commenters' recommendation, double counting of emission reductions in the SIP would be possible. The commission must link the baseline to the SIP year in order to have a stable point from which to plan and therefore the requirement is not arbitrary and capricious.

TIP, TxOGA, Valero, and REI commented that the requirement for an emission reduction to have occurred after the most recent year of emission inventory used for SIP determination in order to be creditable lacks reasoned justification. The timing of reductions should not be limited in this manner.

No change was made in response to this comment. The commission believes that any reduction that occurs prior to a year in which the emissions inventory was relied upon for a SIP demonstration should not be creditable because that reduction, unless already in the bank, will have been relied upon as part of the emission inventory. It would be considered "double counting" if the same reduction were relied upon for SIP purposes and also banked as a credit which could be relied upon to add emissions back to the atmosphere.

HGAC commented that the commission should reconsider allowing trades of VOC and particulate matter (PM) across source types as these contaminant categories contain several toxic elements.

No change was made in response to this comment. There are restrictions on use of VOC discrete credits in §101.373(f)(7) to protect against the potential impact of different types of VOC and PM.

Facilities trading PM or VOCs may be subject to a health effects review for any increase in emissions. Any review would be conducted independently of the trade and can result in a restriction on the use of credits regardless of the amount of credits transferred during the trade.

Owners of facilities trading PM or VOCs should be aware that this restriction may be applied upon use thus reducing the value of their trade.

TIP, TxOGA, Valero, and REI commented that the Protocols section of the proposal is confusing and that the subjects of the section, credit generation, calculation, registration, and certification should be moved to their own sections. SNTG commented that the rule should be subdivided into divisions for ERCs, MERCs, DERCs, and MDERCs for clarity in terminology.

The rules were not revised in response to these comments. This adoption is the first step of consolidation and reorganization of emission banking and trading rules into one subchapter.

The commission agrees that there is a need for further refinement and reorganization and intends to address these issues in future rulemaking.

TIP, REI, TxOGA, Valero, and PIAT commented that the usable life of ERCs should remain at 120 months and the proposal lacks reasoned justification for the reduction in usable life to 60 months.

No changes have been made in response to this comment. The commission has chosen to limit the life of ERCs registered after the effective date of this rulemaking to 60 months from the date the reduction occurred. This change is made to reduce the effect of older reductions on future

SIP strategies. The commission has received comments in the past regarding the use of credits for new projects which were five to ten years old. Based on this public concern and the concept that credits generated ten years ago are too remote to allow resurrection of the emissions, the commission has reduced the life of unused ERCs to five years. ERCs registered prior to the effective date of this rulemaking will continue in effect for 120 months.

TIP, TxOGA, Valero, and REI commented that there is no reasoned justification for the requirement to register reductions within 180 days of generation. Such registration should be annual. They further commented that the rule should be clear that failure to register only prevents a source from taking credit for its reduction and is not a matter for enforcement.

The commission has not revised the rule in response to these comments. The commission believes that it is crucial for SIP planning purposes to know which reductions will be banked and thus relied upon in the future for emission growth and which reduction can be relied upon as a permanent reduction. By requiring a project to be registered within 180 days of the reduction, the commission will be able to accurately make that decision. It is possible for air quality strategies to be developed from concept to adopted rule in a six-month period therefore the commission believes the 180 days is needed to provide adequate information on the potential emission reduction credits which could effect the decision making for that strategy. Since participation in the banking program is voluntary, the commission agrees that it should not be an enforcement issue if the 180-day deadline is missed; it simply means the generator has lost the opportunity to bank that reduction as a credit.

One individual stated that there should be no pooled reductions. PIAT requested the option to combine credits into larger blocks for sale to larger companies.

No changes have been made in response to these comments. Credits may be sold individually or in blocks, however, ERCs may not be grouped together and treated as a unit unless the reductions occurred on the same day since ERCs expire based on the generation date.

TIP, TxOGA, Valero, and REI commented that the proposal requires the EPA approval of deviations from emission credit protocols. There is no reasoned justification for this requirement given the commission's responsibility for administering the program.

No change was made in response to this comment. The EPA has established or approved state protocols for emissions trading programs, and, under their guidance document, deviations from those protocols must be EPA approved. Since this banking program is part of the state SIP the commission believes that it is prudent to require the EPA approval to ensure that the program will remain viable under the SIP.

Spring Valley commented that the commission should establish an offset ratio for mobile source emission reduction credits because the generation of mobile emission credits is cheaper than credit generation at stationary sources. RAQCG commented that the commission should consider making the mobile source credit program a separate economic incentive program.

The rules were not revised in response to these comments. The commission believes that establishing an offset ratio for mobile credits would reduce the incentive to develop mobile source control programs and technology and chooses not to implement an offset ratio. If the commenter is correct that mobile emission credits are cheaper to generate the commission expects the market to generate enough incentive to bring about those reductions to be used by point sources. The commission desires to provide maximum flexibility within the cap and trade program and promote mobile source control programs. Therefore the commission will allow unlimited use of MDERCs by sources under the cap and trade program.

TIP, TxOGA, Valero, and REI commented that the proposal prohibits ERC generation from emission reductions resulting from transferring emissions to another piece of equipment. As drafted, the proposal is ambiguous and may interfere with the use of reductions in netting or offsets. They recommend that the definition of "real reduction" be modified so that a transfer of emissions to another unit would be considered a real reduction if it is used in offsetting under §116.150, New Major Source or Major Modification in Ozone Nonattainment Area.

No changes have been made in response to these comments. The rules as proposed allow internal reductions to appear within a netting window but do not allow transferred reductions to be creditable as banked emission reductions. Further clarification will be available through technical guidance after adoption of the rules.

TIP, TxOGA, Valero, and REI commented that the rule should make clear that reductions resulting from the application of state reviewed best available control technology are surplus.

No changes have been made in response to this comment. The commission understands the commenters' concern and the commission will continue to review this issue to determine if best available control technology is relied upon for the SIP and should not be creditable. If a rule change is determined to be necessary it will be proposed in the future.

TIP, TxOGA, Valero, and REI commented that the enforce ability of ERCs following registration using the OPCRE-1 Form should not be limited to grandfathered sources or those sources that use a permit by rule.

No changes have been made in response to this comment. The commission believes that the enforceable mechanism for a permitted facility should be a modification to that facility's permit. The OPCRE-1 Form is strictly used as an alternative to obtaining an agreed board order for grandfathered sources. Sources authorized under permits by rule have always been restricted to using the PI-8 Form.

The EPA commented that the equation in §101.303(f)(8) does not contain variables for a nonattainment area offset ratio or the 10% environmental benefit. The equation should match the rule text.

No change has been made to the rules in response to this comment. The equation in §101.303(f)(8)(C) applies to the limited circumstances where credits are used to exceed a source cap under Chapter 117. In those instances the nonattainment area offset ratio and the 10% environmental benefit do not apply. The text in §101.303(f)(8)(A), (B), and (D) apply to other types of credit uses and specifies what the offset ratio and environmental benefit should be.

Peco commented that the equation in §101.303(f)(8)(C) divides credit into 365-daily increments. This eliminates most credit for units that operate a few weeks or days per year. They also commented that electric generating facilities constructed after January 1, 1999 should be able to use authorized daily heat input as specified by §117.210(c)(1) to determine activity.

The equation that Peco refers to is not applicable to Peco's proposed new facility located in HGA.

The equation was developed for use in emission reduction credit trading for sources operating under the source cap, §117.223. The source cap of §117.223 is a voluntary compliance mechanism for industrial, commercial and institutional (ICI) facilities complying with NO<sub>x</sub> RACT in BPA, DFW, or HGA, or the attainment demonstration emission specifications for ICI facilities in DFW or BPA.

The system caps in §117.108 and §117.210 are compliance mechanisms for EGFs complying with the emission specifications for the attainment demonstration in BPA, DFW and HGA. Participation in these caps for EGFs are voluntary in BPA and DFW, and mandatory in HGA. The commission did not propose a procedure for system cap emission trading for EGFs in HGA in the August, 2000 proposal to these adopted rules. However, a system cap emission trading rule for EGFs in DFW was proposed in the December 1, 2000 issue of the ~~Texas Register~~ (25 TexReg 11886). Final action will be taken on this rule proposal by May 31, 2001. In a future rulemaking, the commission may develop system cap trading rules for EGFs in HGA.

#### *Cap and Trade Comments*

TXI commented that the program lacked flexibility.

The commission has made no changes in response to this comment. The commission believes that it has provided considerable flexibility within the framework of a stringent cap on NO<sub>x</sub> emissions. This flexibility is accomplished through the unrestricted trading of allowances and the ability to use DERCs and MDERCs within the cap. This is an alternative to enforcing emission standards on a facility-by-facility basis which provides the facility operators significant flexibility.

TxOGA and Valero requested the adopted rule contain a statement that allowances and trades are not applicable requirements under Federal Clean Air Act Title V (Title V) requirements.

The commission has made no changes in response to this comment. The cap and trade program is submitted as a revision to the SIP and, as such, the restrictions under this program are applicable requirements under Title V.

TIP, TxOGA, Valero, Peco, REI and BCCA objected to the daily and monthly NO<sub>x</sub> limits for utility sources in addition to the annual cap. These limits render the cap and trade flexibility meaningless.

The commission disagrees with this comment and has made no changes to the rules. The 30-day average system cap emission limit functions as a flexible but controlling limit which ensures that a specified emission level is achieved during a typical peak ozone season day. The much less stringent daily maximum limit ensures that the 30-day average is not manipulated to allow higher NO<sub>x</sub> emissions on a single day when ozone may be a problem. An annual limit can not

assure the level of control required on the hot summer days when ozone is most likely to form. For example, a cost effective compliance strategy with annual limits would be to import additional power and thereby reduce operations and emissions within HGA during the non-peak ozone season. Then, when meeting the peak electric demands of a hot summer day, the peaking units would be free to emit uncontrolled, adding to ozone levels. There would be a strong economic incentive to operate in this manner, because the peaking units include both the least efficient and oldest equipment, for which it is harder to justify adding emission controls. The system cap addresses the ozone problem while allowing the source owners to determine the most cost effective compliance strategy. For these reasons the commission has determined that the daily and monthly limits are necessary elements of the HGA SIP.

Note that the commission has modified the system cap requirements in §117.210 to exclude cogeneration units whose electric output entirely serves one or several dedicated industrial customers, except when the industrial customers are not operating. These sources are base load sources and are not operated at higher levels on hot summer days to meet electric demand and would not contribute additional emissions during these periods.

The commission disagrees that these daily and monthly limits render the ability to trade meaningless because trading can still be useful to meet annual limits. As discussed in a previous response, in a future rulemaking, the commission may develop system cap trading rules for EGFs in HGA which would enable trades to occur among companies. This development would enhance the flexibility of cap and trade compliance.

Sierra-Houston generally opposed the concept of the cap and trade system and stated that it allows some sources to escape reductions. An individual commented that the cap and trade program should be limited in duration and credits should be generated and used only by companies that make actual emission reductions. Two other individuals added that large companies could buy their way out of reductions. Four individuals commented that banking and trading only allows shifting of emissions and that all industries should be required to reduce. Three individuals stated that trading will leave emissions in the poorer neighborhoods.

The commission made no changes to the rule in response to these comments. The cap and trade program is applicable in all eight counties of the HGA area so that reductions are made throughout the nonattainment area. The underlying goal of the program, in conjunction with the Chapter 117 limitations on point source emissions, is to reduce the overall amount of NO<sub>x</sub> emitted from point sources by approximately 90%. This reduction of NO<sub>x</sub> will then reduce the formation of ozone in the area. The reductions of NO<sub>x</sub> and the formation of ozone are not localized problems in the way that VOCs can be. NO<sub>x</sub> itself does not have a health impact on nearby neighborhoods. The reductions of NO<sub>x</sub> emissions will benefit the nonattainment area as a whole by reducing the amount of ozone formed in the atmosphere.

The cap and trade program is designed to give owners the option of making reductions or purchasing additional allowances. If allowances are for sale, that means the holder of those allowances did not actually emit the amount of NO<sub>x</sub> that it had historically. This in turn means that a facility using allowances in lieu of making real reductions is able to do so because another facility in the same area has lowered its emissions by the same amount. Because there will be a

finite number of allowances available the overall emissions in the HGA area, NO<sub>x</sub> will remain at levels that are necessary to demonstrate attainment of the ozone standard. As the implementation schedule proceeds, the HGA area will have fewer allowances available on the market which means that some reductions are likely to occur at all facilities as emission standards are tightened and allowances become more expensive.

The commission believes that the flexibility provided by the trading program provides the commission, in part, the ability to require the level of reductions required of the point sources in the HGA area.

TIP, Chevron, Dow, Dynegy, Entergy, Enterprise, Equistar, ExxonMobil, Goodyear, Lyondell, NASA, Peco, Phillips 66, REI, Texas Eastern, TxOGA, TPIEC, Valero, and BCCA commented that the proposed NO<sub>x</sub> reductions that the cap and trade rule are intended to implement are not technologically or economically feasible and will not result in an economic incentive under the cap and trade rule because there will be insufficient surplus allowances. The cap and trade system should be based on current California point source controls, which are the most stringent achieved in practice. TCC commented that Emission Specifications for Attainment Demonstrations should be achievable with proven technology.

The commission made no changes in response to these comments. Point source NO<sub>x</sub> reductions in the range of 90% require the combined use of combustion modification and flue gas controls on the majority of large combustion units. The capabilities of both combustion modifications and flue gas controls are well documented in the NO<sub>x</sub> control literature, including the EPA ACTs,

papers at numerous meetings of research and trade organizations for industry, NO<sub>x</sub> control vendors, constructors, and the government. These documents report combustion-based reductions from minimal to over 90%, and flue gas controls in the range of 75% to 95%. Reduction capabilities as reported in the literature continue to improve and technology has developed rapidly since the late 1980s when a number of California districts set retrofit NO<sub>x</sub> control standards. Both combustion modifications and flue gas cleanup are established technologies. Technology is replicable, so in a true sense, the first successful SCR project was sufficient to demonstrate its feasibility. With more than 500 applications of SCR reported by 1997 and growing rapidly, in many different exhaust streams with widely varying degrees of temperature and contaminants, its technical feasibility is not a question. The combination of combustion and flue gas controls can provide overcompliance with the standards in a number of cases and will allow for meaningful choices in the selection of control strategies. Examples of units which have been retrofit to levels below the adopted emission specifications and further details of the technical feasibility of the emission specifications can be found in the analysis of testimony of the Chapter 117 rules published concurrently in a separate section of this issue of the ~~Texas Register~~ **Texas Register**. Overcontrol on some units will enable others to be under controlled, which will result in substantial cost savings. Although the exact degree of cost savings is not determinable, one vendor has estimated the number of SCRs at 800, rather than the approximately 1200 that the Chapter 117 cost note contemplated. Although the number of SCRs is expected to be unprecedented, the ultimate number installed is virtually certainly going to be lower as a result of the cap and trade rules, representing significant cost savings. The market-based approach embodied in the adopted rules give nearly complete freedom on how to achieve the goals and

based on experience from California, will stimulate the development of new and innovative reduction technologies and strategies.

NASA commented that because they have multiple small sources which constitute a major source, it is unlikely that they will have any emission reductions to trade. They stated that the program will create uncertainty for future allowance costs which would create a hardship on an agency that has its budget decided years in advance. They also expressed concern that the compliance time frame was unreasonably short, roughly two years, as opposed to the acid rain or RECLAIM programs.

The rules have been revised to address the concerns of the commenter. NASA operates a number of gas-fired boilers which are subject to the emission specifications. These boilers all operate at relatively low capacity factors. The commission has adopted a less stringent emission standard for low capacity factor units which operate less than 14 days per year, which will reduce NASA's costs of compliance. In addition, the compliance schedule has been lengthened, which will allow NASA at least three years to develop an emission reduction strategy. The adopted compliance time frame allows the maximum feasible time under the federal requirement to attain the ozone standard in HGA by 2007.

FPL commented that the extremely low NO<sub>x</sub> emission limitations simultaneously proposed in Chapter 117 means that very few surplus allowances will be available on the market. The proposed requirement to obtain allowances before a new source can operate means that these new sources can only obtain allowances if an existing source shuts down. The proposal therefore does not allow for any growth in the HGA area. FPL

recommended that the commission set aside a number of allowances for use by new sources. Enron and Coalition recommended that allowances be set aside for new sources to bring new and cleaner sources into the program.

No changes have been made in response to these comments. The commission believes that sources will be able to generate additional allowances not only through shutdowns, but also by improving emission control technology. The commission also believes that allowing the use of discrete emission reduction credits (DERCs) and mobile discrete emission reduction credits (MDERCs) will allow stationary sources to find flexibility for growth from NO<sub>x</sub> sources not subject to the cap and trade program. The commission agrees that the intent of the rule is to stop growth of emissions, but disagrees that the rule will stop economic growth. With cleaner technology always being developed, the commission anticipates that point sources will be able to grow while keeping their emissions low. The commission disagrees that allowances should be set aside for growth as this would create a first come first serve scenario putting undue pressure on staff to determine who should receive allowances first and it could give new facilities sources a significant benefit at the expense of existing entities.

CAAC commented that cap and trade systems have fallen short of anticipated environmental benefits and that the commission should continue with the trading system currently in operation. They also recommend that the commission adopt third party verification of emission credits as opposed to executive director approval which could cause delays in approval.

The rules were not revised in response to these comments. The cap on NO<sub>x</sub> emissions provides a finite limit on NO<sub>x</sub> which has been demonstrated as a necessary part of the overall HGA attainment strategy. The cap and trade program will limit the total emissions of NO<sub>x</sub> from point sources as opposed to the limitation on NO<sub>x</sub> emission rates required by the point source rules alone. The commission wishes to provide as much flexibility as possible within these admittedly tight emission standards and believes the cap and trade program provides this. The commission disagrees that executive director verification of credits will cause delays within the system. Such verification can often be accomplished in one business day or less.

CAAC commented that the cap and trade system will encourage purchase of power generated from higher emitting sources outside the area of the program. They also stated that the allocation of allowances is not necessary and credits should only be generated when a source remains below its established cap.

The rules were not revised in response to these comments. The cap and trade program does not prohibit the purchase of power outside the affected area of cap and trade. This will be a business decision of the buyer and will depend on their cost of reducing emissions, allowance availability and cost, and availability of power outside the HGA area. Allowances provide a convenient, flexible, and timely method for facility operators and the commission to track a facility's status in relation to its emission cap.

An individual opposed the cap and trade program based on the argument that it strengthens an argument that there is a right to pollute and that it allows sources to avoid reducing their emissions. The individual supports the command and control method of achieving reductions.

The rules were not revised in response to this comment. The permit system is based on the concept that owners of facilities obtain an authorization to emit contaminants. The preamble clearly states that permits and authorizations are not property rights and are therefore not protected as such under the law. The cap and trade program will not eliminate the need for prior authorization to construct and operate significant sources of air contaminants nor for rules which could be considered command and control strategies.

TIP, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, GPA, Kinder Morgan, Lyondell, Peco, Phillips 66, REI, TxOGA, TPIEC, TGC, Valero, and BCCA stated that the requirement to trade allowances in whole tons lacks reasoned justification. The number of allowances is rounded up or down whichever provides the holder or buyer less credit. Some credits have been traded with a value of \$80,000 per ton and rounding can result in the taking of considerable value. They recommend that trading occur in one-tenth tons. This is consistent with ERC trading. Texas Eastern also recommended allowances be traded in tenths of a ton. TGP recommended that fractions of allowances be rounded up rather than down. During the years of target allowances, rounding down can result in zero allowances.

The commission has modified §101.350(1) to divide allowances into tenths of a ton. The commission agrees that there is a potential for the need to trade and use allowances in smaller

quantities than whole tons thus the rule has been revised to state that allowances will be allocated, transferred, or used in tenths of a ton. The rounding methodology was not changed from the normal mathematical rounding procedures however, by allocating, transferring, and using allowances in tenths of tons will reduce the impact of rounding.

An individual commented that the cap should be limited to the central urban county (Harris).

The rules were not revised in response to this comment. The modeled attainment demonstration conducted by the commission indicates that reductions are required over a wider geographic area other than Harris County in order for the Houston/Galveston to attain the ozone standard. As discussed in the background of the preamble to this rule, scientific study has clearly demonstrated that ozone is more of a regional problem than a local one. Emissions from the surrounding seven-nonattainment counties contribute to the ozone formation within Harris county and must be reduced significantly in order for the entire eight-county nonattainment area to demonstrate attainment with the ozone standard. Applying the cap and trade program to the entire eight-county nonattainment area ensures that there is not an excess of allowances available for trade back into the central county.

Enron commented that the cap and trade program should be expanded to areas out of the eight-county Houston/Galveston nonattainment area to promote a high volume of allowance transactions. Kinder Morgan and Pasadena recommended including minor sources in the trading program.

The rules have not been revised based on these comments. The intent of this program is to cap emissions in the HGA area at existing levels. The commission has not yet determined that this restriction is necessary outside of the HGA area. The commission may determine at a later date that including surrounding counties into the cap and trade program would benefit the air quality and help the HGA area reach attainment. The cap and trade program will include minor facilities, with standards under Chapter 117, down to a design capacity of ten tons of NO<sub>x</sub> per year. The commission intends to revise the cap and trade rules to include minor facilities at sites that collectively have a design capacity of ten tons per year or more.

BASF commented that the ten tons per year (tpy) applicability threshold for the cap and trade system should apply to accounts or sites rather than individual sources. Because sources under ten tpy would not receive allowances they would be required to meet NO<sub>x</sub> emission limits through cost-ineffective controls. They suggest replacing the term "source" in §101.351 with the term "NO<sub>x</sub> cap account." TIP, Chevron, Dow, Dynegy, Entergy, Equistar, Peco, Phillips 66, and BCCA commented that the term "source" is used to denote an overall site over the ten-ton applicability trigger but is also used to denote a single emitting unit. TIP, BCCA, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, Phillips 66, REI, Solutia, Texas Eastern, TxOGA, TPIEC, Valero, and BASF commented that sources not subject to emission specification for attainment demonstration (ESAD) rates under the SIP that can make cost effective reductions should have the option to participate in the cap and trade program and its allowances allocated in the same manner for current ESAD sources.

The rules have not been revised based on these comments. The commission had intended the cap and trade program to apply to all facilities at sites that have emission specifications under

Chapter 117 and collectively have a design capacity of ten tons or more of NO<sub>x</sub> emissions per year. However, due to the use of the term source in the proposal, that intent was not clear from the rule language. In order to ensure that all potentially impact entities have the opportunity to comment on their inclusion, the commission intends to propose a revision to the cap and trade rule in the near future which would clarify that the applicability of the cap and trade program is determined by the collective emissions at a site and that the ten-ton per year applicability requirement does not apply to individual facilities. Facilities not subject to the cap and trade program will be able to generate DERCS which are allowed to be used along with allowances under the cap and trade system. They will also be able to create and to use ERC under the existing banking program.

Dynegy and RMT recommended replacing the term "design capacity to emit" in §101.351 with "potential to emit." as the terms appear to be identical. Calpine commented that the commission should define the term "design capacity to emit." It is not clear if emissions are pre- or post-control.

There were no changes to the rules in response to these comments. The term "design capacity to emit" refers to the capabilities of particular equipment regardless of enforceable limitations. The term "potential to emit" is a term of art which is commonly used in reference to the Title V operating permits program and means the capability to release air contaminants as limited by pollution control equipment and authorized levels of release. Since there are specific nuances of the term "potential to emit" that do not apply to this program, such as synthetic minors, the commission is not using this term.

TIP, Chevron, Dow, Dynegey, Entergy, Equistar, ExxonMobil, Lyondell, Peco, Phillips 66, REI, TxOGA, TPIEC, Valero, and BCCA believe that one month is an inadequate period to calculate a control period's emissions and compare those emissions to cap and trade activity for the control period to balance the account. They recommend April 1 of the succeeding year as the deadline for reconciling accounts. Calpine and RMT recommended a one month extension to March 1. Calpine and RMT also commented that the deadline of March 31 for submitting compliance reports is too short as CEMS data must be manually quality controlled. They suggest a one month extension.

No changes have been made in response to this comment. It is the commission's intent that facilities should actually have the allowances in their compliance account to cover emissions prior to their actual withdrawal. It is not the commission's intent to allow facilities to emit and then try to obtain allowances after the fact. Although this is not prohibited under the rules, it is discouraged by the limitation of the true-up period to one month. As proposed, the rules are on the conservative side and will allow facilities a 30-day grace period to obtain allowances to balance emissions. In addition, the final reporting deadline has not been revised and currently parallels the commission's emission inventory reporting guidelines.

TIP, Chevron, REI, TCC, TxOGA, and BCCA commented that the rule should be modified to allow compliance with an emission cap to satisfy both nonattainment new source review and prevention of significant deterioration.

No changes have been made in response to this comment. The commission agrees that the cap is being permanently set at a level for stationary facilities for the HGA area to reach attainment. The commission believes that if all stationary facilities operate under the cap that performing

netting and requiring offsets for new or modified facilities may not be necessary to attain and maintain the federal air quality standard. However, because these are specific federal statutory requirements, removing the netting and offset mandates would require amendments to the Federal Clean Air Act. The commission also believes that any facility having major increases of NO<sub>x</sub> should undergo a nonattainment/prevention of significant deterioration review to ensure they are meeting BACT or LAER as applicable, regardless of whether the facility operates under the cap.

Calpine and RMT requested clarification or an example where an allowance could be simultaneously used to satisfy an offset requirement as well as used for cap and trade purposes.

The rules were revised based on this comment to clarify the language in §101.352(e). Compliance with the cap and trade program requires industry to retire one allowance for every ton of NO<sub>x</sub> emitted. Offset requirements are under a separate program and require in the HGA nonattainment area 1.3 tons of NO<sub>x</sub> credits to be retired for every ton of NO<sub>x</sub> proposed to be emitted from a new major source or modification in the HGA area. Under these adopted rules, in §101.352(e), and under proposed changes to Chapter 106 as published in (25 TexReg 10445) and Chapter 116 in (25 TexReg 10449), compliance with the NO<sub>x</sub> cap and trade program (retiring one allowances for every ton of actual NO<sub>x</sub> emissions) may be used for the one-to-one portion of the NO<sub>x</sub> offset requirement. The additional 0.3 portion of the NO<sub>x</sub> offset requirement may be met by retiring additional NO<sub>x</sub> DERCs, MDERCs, ERCs or MERCs. This rule only applies to NO<sub>x</sub> and not to other criteria pollutants requiring offsets.

For example, if a new major facility was constructed in the HGA nonattainment area which would emit 100 tons per year of NO<sub>x</sub>, the source would have to satisfy the cap and trade requirements by obtaining 100 tons of allowances. Those allowances could also count toward the facility's offset requirement so that only 30 tons of NO<sub>x</sub> DERCs, MDERCs, ERCs or MERCs would be needed to satisfy offset requirements for NO<sub>x</sub>.

The EPA commented that any baseline for determining allowances should be adjusted downward for any state and federal laws enacted since the last emission inventory used for an attainment demonstration.

The commission has included language in the provision regarding initial allocations, as listed in variable (3) of Figure §101.353(a) to ensure that allowances will not exceed existing federal or state regulations, rules, or permit allowables.

Avista-Steag commented that portions of the allowance calculations for 2003 and 2004 are ambiguous and subject to differing interpretations and requests that the commission provide additional and adequate public notice so that affected parties can determine the effect of the rules and comment meaningfully. TIP and BASF commented that the calculations to achieve equal third reductions must be revised. FPL and LCR commented that the equations reducing a source's allowances do not result in equal third reductions and should be revised. Calpine and RMT commented that the equations did not result in equal third reductions and the wording of the calculation methodology is unclear.

The commission has revised the rule to remove the ambiguity concerning allowance calculations, however, the commission did state in the preamble the clear intent to reduce allowances by a third of the difference between the initial allocation for 2002 and the calculated final allocation for 2005. The commission believes this statement served its intended purpose of soliciting comments on the allocation concept and the need for clarification to the rule language is not sufficient cause for re-notification. The equation in §101.353 has been revised to require all boilers, auxiliary steam boilers and stationary gas turbines within an electric power generator system, as defined in §117.10 to reduce their emissions by an average 44% beginning January 1, 2003, another average 44% by December 31, 2003, and another average 5% by December 31, 2006, for a total of an average 93% overall reductions. All other facilities subject to the cap will be required to reduce their emissions by an average 40% by December 31, 2003, another an average 40% by December 31, 2004, and another average 10% by December 31, 2006, for a average total of 90% reductions.

BASF commented that the commission should clarify what method will be used to determine allowances for a newer source where two years of activity data is not available.

No changes have been made based on this comment. As stated in the response to the previous comment, the rules have been clarified, however, the methodology for new or modified facilities has not changed with the exception of the percentage reduction requirements. Facilities that are not in the 1997 - 1999 inventories and that do not have two years of actual data will receive allowances based on that facility's authorized level as stated in the permit or permit by rule until

such time as it accumulates two years of actual data. This method is stated in variables (2)(B) and (3)(B) in Figure 30 TAC §101.353(a).

Avista-Steig encourages the commission to adopt an allowance distribution program based on a source's overall effect on air quality.

No change was made based on this comment. The commission will distribute allowances based on a facility's emissions as adjusted for the required reductions. The commission is seeking to accomplish an overall reduction in NO<sub>x</sub> for the HGA area of approximately 90%. The commenter is not clear whether allocations for larger facilities should be reduced in greater proportion than a smaller facility because of the larger facility's greater air quality effect or whether the larger facility should continue to receive more allowances based on its size and activity level or whether different categories of facilities should be treated different. Allowances under the cap and trade program are established under the regional cap for the HGA area. The initial allowances will be based upon historical data while Chapter 117 will determine the final allocation amount.

BCCA, Dow, Dynegy, Entergy, Equistar, ExxonMobil, GPA, Kinder Morgan, Lyondell, Pasedena, Phillips 66, TCC, TPIEC, Valero, and Chevron commented that a consecutive 12-month period would more accurately reflect activity levels and would reduce requests for case-by-case reviews. Kinder Morgan and TGC recommended an alternative where the most representative three year period during the span 1995 - 1999 be used to determine activity level. Chevron commented that the baseline for allocation of allowances should be the six months of highest activity from 1995 to rule promulgation. As an alternative they suggest using an average level of activity determined

during periods when equipment is operating as a substitute for periods of equipment turnaround or shutdown in the calculation of allowances. Texas Eastern commented that using an average of three years activity for baseline calculations does not allow for extended maintenance. Calpine and RMT commented that using an activity average for two years will cause a steady loss of allowances due to mechanical outages, economic conditions, or natural disasters. New sources will also reduce the pool of available allowances. Eventually sources may have to curtail activity because of scarcity of allowances. Calpine and RMT recommended that allowances be based on the higher activity level for the first two years of operation. FPL and TCC commented that basing allowances on activity level imposes an additional emission restriction over that contained in Chapter 117 and recommended that allowances be based on permitted or authorized activity levels. Diamond-Koch also recommended that allowances be based on potential or authorized activity levels. TGP recommended using the average of the two highest years of actual activity for 1997, 1998, and 1999. CPS commented that the commission should establish a baseline of the highest activity year since 1990 for the determination of allowances. They suggest 1995 as an alternative because accurate NO<sub>x</sub> data is available as that was the first year that CEMS were required for acid rain facilities. The EPA commented that §101.353(a)(4) seems to allow sources to determine the amount of their allowances. The EPA requested the commission address how the cap will be limited to the emission inventory of an EPA approved attainment demonstration.

No changes have been made in response to these comments. The commission has based the SIP strategy on the 1997 emissions inventory. To alleviate restrictions on any one given facility, for example a facility down for maintenance during 1997, the commission chose to use a three-year average to determine the activity level. However, if all facilities were allowed to choose either the highest 12-month or three-year activity level, the cap would be based on activity levels much

higher than those used for determining the level of reductions necessary for the HGA area to reach attainment. The commission has chosen to use the 1997, 1998, and 1999 because they are the most recent and should best represent the emissions of facilities currently in operation. As noted in the rules, the executive director may deviate from using the average from these three years in extenuating circumstances.

An individual stated that sources should not be allowed to determine their own activity rate, thus their allowances, and emission inventories are not a reliable source to determine activity.

There have been no changes to the rules in response to this comment. The commission disagrees that facilities will be determining their own activity level. Emissions inventories do not generally contain the activity data that is required by the rule. That is why §101.360 requires that the source owner certify the activity level to the executive director. The commission will evaluate the historical activity submitted by facilities to determine the amount of allowances. The activity data for calculating allocations is primarily annual fuel usage or product output. These parameters are fundamental to most companies' cost and profit structure and are usually verifiable by other data. This information will be audited by commission staff for accuracy based upon historical records, testing, emissions inventory, and other replicable emission calculation methodologies as available.

TIP, BCCA, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, Phillips 66, REI, TxOGA, TPIEC, Valero, and BASF commented that there is no reasoned justification for the rate of NO<sub>x</sub> emission reduction in one-third

increments and this rate of reduction is not needed to meet rate-of-progress requirements. TIP and BASF suggested a 10% reduction each year from 2003 - 2006 followed by the target allocation in 2007. Texas Eastern commented that the implementation schedule is too aggressive. TCC commented that the phase in period should be extended until 2007. TGC recommended the rule include an option for sources of less than 25 tons per year to propose an alternative compliance schedule which demonstrates compliance by January 1, 2005. Kinder Morgan recommended that deadline for achieving the initial one-third reduction for interstate pipeline companies be moved from December 31, 2002 to December 31, 2003. This would allow time to obtain necessary approvals for design and construction of the modified facilities. TIP, Goodyear, TxOGA, and GPA commented that a three-year implementation schedule is not technologically practical or economically feasible and recommended a five-year (2002 - 2007) implementation schedule. GPA also suggested that the rule contain a provision for an alternative implementation schedule for IC engines with allowances of 25 tons per year or less. The alternative schedule must demonstrate compliance with the rule by January 1, 2005. An individual stated that the implementation schedule for the cap and trade system is too short and yearly emission reductions do not realistically reflect the operational and planning schedules of companies.

The rules have been revised based on these comments. The commission believes that phasing in compliance with these rules is critical to the success of the program for many reasons including availability of equipment needed to make reductions as well as the need to satisfy the SIP requirement that reductions are made as soon as practicable. The designated attainment year in the HGA area is 2007, and the rules have been revised to require a less rapid reduction of NO<sub>x</sub> from affected facilities and allow phase in between 2002 and 2007. The new schedule as described in

§101.353 will ensure that NO<sub>x</sub> emission from stationary facilities will be reduced to a level necessary to reach attainment.

CAAC commented that the establishment of a final cap should take into account the controls established to date. A 90% reduction may not be feasible for a source currently using best available control technology.

The rules were not revised in response to this comment. The 90% reduction is an estimate of the overall reductions to be achieved from the 1997 emission inventory for stationary facilities throughout the entire HGA nonattainment area. The actual requirement which applies to each facility depends upon the type of facility and is stated in terms of an emission rate, generally not a percentage reduction. The commission recognizes that some facilities may have made reductions subsequent to that inventory. These facilities would only be required to additionally reduce emission to a point that complies with individual emission specifications contained in the applicable Chapter 117 requirement. In this way, cleaner facilities are not penalized.

Enron and Coalition commented that emission levels under the cap and trade system should not be established by the type of fuel used but rather by the industry type, for example power generation. This will encourage the use cost-effective approaches to emission reductions. Emissions should also be regulated based on output such as lb/MWh to encourage efficiency. Direct credit should be available for the benefits of combined heat and power generation.

The rules were not revised in response to this comment. The adopted cap and trade rules allocate allowances based on the heat input of a facility, not the production output. This is consistent with the methodology used in developing the SIP. Because the cap and trade program is a SIP compliance and flexibility tool for stationary facilities, it is necessary to base the cap and trade program on identical methodology. Credit for the dual generation of heat and power is built into the cap and trade program if this results in reduced emissions. Any facility that achieves a dual result with the same energy input will use less allowances as a result of this efficiency.

The proposal allows sources newly authorized by permit application or permit by rule to receive allowances based on their permitted or actual activity levels. TIP, BCCA, Chevron, Dow, REI, TxOGA, Valero, and BASF support this concept but commented that newly modified sources should be treated identically.

The rules have been revised based on this comment. The commission agrees with this comment and has revised §101.353(a) to refer to new and modified facilities. By "modified facilities" the commission is referring to the modification itself. For example if an existing facility is modified to double its capacity in 1998, the emissions from the original facility will be allocated in the same way as facilities existing before 1997. The increase in emission allowable associated with the modification will be treated as a facility which did not exist before 1997.

Calpine and RMT requested clarification of the term "...the source's emission factor listed in Chapter 117" as it appears in §§101.353(a)(1)(A), 101.353(a)(1)(B), 101.353(a)(2)(B)(i), 101.353(a)(2)(B)(ii), and 101.353(a)(3)(B)(ii). The commission

should clarify §101.353(a)(1)(C) to state the deadline for submitting an administratively complete application is January 2, 2001.

The rules have been revised in response to this comment. The revised rules cite the specific sections of Chapter 117 which are relevant. The rules have also been revised to include the deadline of January 2, 2001 for submitting an administratively complete application.

Avista-Steag commented that newer and cleaner facilities should not pay a disproportional amount of the cost to reduce emissions at older facilities. Because new facilities must obtain allowances prior to operation, they must purchase allowances from operating facilities that may have upgraded their equipment to generate surplus allowances. The new facility therefore pays for a portion of the older facility's upgrade. They also stated that the requirement for new electric generating plants to purchase allowances before operation will deter the construction of electric generating capacity in the Houston area because the purchase must be added onto the cost of implementing lowest achievable emission rate controls. ED commented that three to five percent of all allowances be set aside for allocation to operators of sources that carry out qualifying energy efficiency projects in the region.

No change was made based on this comment. Owners that retrofit older facilities can recover some costs through the sale of allowances. The commission intended this as an incentive to reduce emissions from these facilities. While owners of newer facilities must purchase allowances prior to operation, these facilities can be constructed to operate cleaner than the older retro-fitted facilities thus reducing their need for allowances. In some cases, the newer

facilities are at an economic advantage in complying with the point source rules due to their ability to install state-of-the-art technology instead of retrofitting older technology. The commission believes this will provide a balanced program that allows owners to make the appropriate business decision for their facility within the framework of the required reductions. The commission disagrees that the need to acquire allowances prior to operation of new facilities will deter the construction of new electric generating capacity. A growing market demand for electricity that would support new generating capacity will allow for a profitable expansion. Operators of facilities that complete energy efficiency projects that directly affect emissions from their facilities will be able to generate allowances based on their emission reductions.

The EPA commented that the rule should contain enforcement provisions to make the rule enforceable and without the provisions the rule cannot be approved. One individual stated that the program does not have a penalty policy.

The rules were revised in response to this comment. In the event that an account does not contain a sufficient number of allowances on February 1, the rules already provide for the automatic subtraction of the amount lacking plus 10% of a facility's exceedence of its allocations from the subsequent year's allocations. Additionally violations of this rule are subject to the normal enforcement actions of the commission for violating rules and regulations which are subject to administrative penalties up to \$10,000 per violation per day. This was clarified by adding rule language to §101.353(c). The commission penalty policy is not contained within each

rule but is a separate policy implemented by the enforcement branch of the agency. Penalties are not generally detailed in the rule so that enforcement staff has flexibility to make case-by-case decisions.

TIP, Chevron, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, Phillips 66, REI, TxOGA, TPIEC, Valero, and BCCA commented that allowances should be allocated for a stream of 30 years or more rather than allocated yearly to allow for more fluid trading and a defined period, greater than one year, of overcontrol or undercontrol for participating sites. This methodology would also simplify allocations.

The commission has made no changes to the rule in response to this comment. The intent of the HGA SIP, of which this rule is a part, is to attain the ozone standard. Subsequent to attainment, the commission will be responsible for a maintenance plan for HGA air quality. Allocation of allowances on a yearly basis provides the commission the ability to plan and anticipate effects on air quality. It also provides the commission an enforcement mechanism for facilities whose actual emissions exceed the allowances in their compliance account through the reduction of subsequent yearly allocations. The commission has decided not to allocate a stream of allowances into the future for many reasons including the amount of tracking that would entail for agency staff. The commission disagrees that this methodology would simplify allocations. However, nothing would not prohibit facilities from entering private agreements for the sale of future allocations or rights to allocations.

The EPA stated that in the absence of an established procedure for the executive director to approve deviations from allocation methodology, such deviations will require the EPA approval.

There have been no changes to the rule in response to this comment. The executive director plans to detail the factors which may be considered for deviation from allocation methodology in a guidance document which will be shared with the EPA upon its completion. The executive director plans to limit deviations to extraordinary circumstances. The commission has revised the rule to include a deadline for applications for deviation.

TIP, BCCA, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, REI, TxOGA, TPIEC, Valero, and BASF commented that the commission should clarify that target allocation based on 1997 - 1999 activity will not change despite shutdowns, replacements or changes to equipment. Calpine and RMT stated that the proposal does not address what happens to allowances allocated to sources that shut down during a control period. They suggest retaining the allowances in the emission cap to help sustain economic activity and promote replace of older units with new, cleaner equipment

The rules have been revised based on this comment. The commenters are correct, the allocations will not change unless the program is revised in the future. The commission has added §101.353(h) to state and clarify that allowances will not change despite shutdowns, replacements, or changes to equipment assuming the allowances are based on historical activity levels. However, facilities which obtain allocations based upon allowables but never constructs will not continue to receive allocations.

BCCA, Phillips 66, RAQCG, and Chevron supports an additional incentive program that would provide funds for use by a wide range of source categories to assist compliance with SIP required reductions. Such a fund would be competitive and, if funded by private sources, would provide appropriate credit or benefit to the parties providing the funding. The plan should incorporate broad executive director authority to approve credits on a case-by-case basis.

The rules were not revised based on this comment. The establishment of a private fund for pollution control projects is outside the scope of the adopted rules and will be left to the discretion of affected industries. If projects completed under such a fund result in emission reductions then the subsequent surplus allowances may be banked or traded under the provisions of this adoption. The rules are intended to provide market-based flexibility in meeting emission standards, and the commission prefers to let the market set the cost of allowances.

Calpine and RMT commented that rule language should be added to specify that banked allowances will be deducted from accounts before subtracting allowances calculated under §101.353.

The commission revised §101.354 based on this comment, however the rule was revised to require allowances most recently allocated to be subtracted from the compliance account prior to other allowances. By first subtracting allowances issued for a facility's current control period and limiting the life of banked allowances to one-year the commission prevents an accumulation of banked allowances in compliance accounts that would soon jeopardize the overall system cap.

The subtraction of newer credits first ensures that facilities can't rotate or accumulate credits to circumvent the one-year carryover limit.

BASF, BCCA, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, LCR, Peco, Phillips 66, REI, TCC, TxOGA, TPIEC, Valero, and TIP commented that emission reduction credits (ERCs) should be convertible to allowances and the proposal lacks reasoned justification why this is not allowed. By definition all recognized emission credits are real, quantifiable, and surplus to the SIP. Diamond-Koch recommended including a method of converting ERCs to DERCs for use as allowances.

No change has been made based on this comment. ERCs and MERCs were intentionally excluded from §101.356(f) because they would allow a permanent increase to the NO<sub>x</sub> emission cap that was determined necessary for the HGA area to reach attainment of the ozone standard. DERCs and MDERCs were included to provide additional flexibility to the cap because their use would be short term and not permanent. Additionally, the use of DERCs is limited during the years 2005, 2006, and 2007 to ensure that the compliance monitoring is not impacted. For these reasons, the rule was also not revised to allow ERCs to be converted into DERCs.

TIP, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, Phillips 66, REI, TxOGA TPIEC, Valero, and BCCA commented that the existing discrete emission reduction credit (DERC) trading rules require a 10% environmental contribution and a 5% compliance margin. This requirement has been extended to the use of DERCs in lieu of allowances. They stated that there is not a reasoned justification for this requirement and that it is not necessary to meet a region wide cap.

The commission revised §101.356 based on this comment. The commission agrees that the cap was set at a level necessary for stationary facilities as part of the overall attainment strategy for the HGA nonattainment area. The requirement of retiring an additional 10% of DERCS and MDERCS for an environmental contribution and an additional 5% for a compliance margin is not required when using DERCS and MDERCS in lieu of allowances under the HGA cap and trade program.

TIP, Chevron, Dow, Dynegy, Entergy, Equistar, ExxonMobil, Lyondell, Pasedena, Peco, Phillips 66, REI, TxOGA, TPIEC, Valero, and BCCA commented that the rule should contain a provision allowing volatile organic compound (VOC) reductions in the place of NO<sub>x</sub> allowances where the VOC reductions are demonstrated to reduce ozone an equal amount.

The commission has modified §101.356 based on this comment. The rule now states that VOC DERCS or MDERCS may be used in lieu of NO<sub>x</sub> allowances provided that a demonstration has been made and approved by the executive director and the EPA to show that the use of VOC DERCS or MDERCS is equivalent to the use of NO<sub>x</sub> allowances in reducing ozone.

ED commented that sources subject to the cap and trade program should not be able to use DERCS and MDERCS generated outside the area of program applicability.

The rules were not revised in response to this comment. The commission agrees that only DERCS and MDERCS generated in the HGA nonattainment area may be used under the cap and trade

program until such time as a demonstration is made and approved to show that credits generated elsewhere improve the air quality within the nonattainment area. This ensures that any emissions in excess of the cap are compensated for in the same air shed. The restriction may already be found in Chapter 101, Subchapter H, Division 4 and applies to credits used under the cap.

The EPA commented that the commission should justify the use of mobile emission credits to meet cap allowances for stationary sources.

The commission has made no changes in response to this comment. The commission believes that any reduction that is quantifiable, surplus, and real regardless of the source will result in an improvement in air quality. The commission further believes that if a reduction occurs that is not relied upon as a reduction in the SIP, and if that reduction is not required by local, state, or federal rules and regulations, then that reduction is truly surplus to the SIP and may be available for use by facilities subject to SIP requirements for flexibility.

The commission has taken measures to ensure that use of credits under the cap will not impact the attainment demonstration. ERCs and MERCs were intentionally excluded from use in the cap and trade program because they would allow a permanent increase to the NO<sub>x</sub> emission cap that was determined necessary for the HGA area to reach attainment of the ozone standard. DERCs and MDERCs were included to provide additional flexibility to the cap because their use would be short term and not permanent. Additionally, the use of DERCs is limited during the years 2005,

2006, and 2007 to ensure that the compliance monitoring is not impacted. The ability to use DERCs, especially MDERCs, will also encourage the development of cleaner technologies for NO<sub>x</sub> emissions which are not covered by the cap and trade system. The commission will audit the cap and trade program on a three year cycle and that audit will include a determination on the effect of using discrete credits in the program.

The EPA commented that the commission should determine at the end of each year the effectiveness of the regulation in meeting the emission cap. One individual stated that the program does not have an ongoing evaluation of its benefits. TxOGA and Valero recommended the cap and trade program contain provisions for executive director review and modification, including cost thresholds for allowances, if the program does not provide the intended flexibility.

The commission has added §101.356(g) based on the EPA's comment. The new subsection modifies the cap and trade rule to require an audit of the program every three years. The executive director will also complete a thorough review of account activity, including quantification of actual emissions, every year. Any necessary rule changes to improve the cap and trade program will be made in response to the results of the audit. Since the overall cap will be shrinking, compliance with the cap will mean a reduction in actual emissions. Additionally, as noted in the SIP, the commission is planning to perform a mid-course review of the entire SIP in the 2003 - 2004 time-frame. At that time the commission will have information regarding the effectiveness of the cap and trade program, especially as it applies to certain utilities. The commission does

not believe that it is appropriate to identify cost thresholds now which would be used to evaluate the flexibility provided by the program in the future.

ED recommended that the commission closely follow the guidance in the EPA's publication of "NO<sub>x</sub> Budget Trading Program for State Implementation Plans" in order to gain approval of the plan from the EPA. They also stated that the program should be reviewed after three years to determine its effectiveness in reaching the NO<sub>x</sub> emission target.

The rules were revised in response to this comment. The commission reviewed the EPA guidance and has based this adoption on methodology that is approvable by the EPA. The commission has also responded to the EPA comments regarding this adoption. The commission has added §101.356(e) to require an internal program audit every three years to evaluate the effectiveness of the cap and trade program.

CAAC commented that allowances should only be banked for one year and that there should be no credit for curtailment of activity.

The rules were not changed in response to this comment. The proposal requires that banked allowances expire after one-year. If curtailment of activity results in reduced emissions and thus, unused allowances, those allowances may be banked or traded within the requirements of this division. The cap for stationary facilities was set at a level necessary as part of an overall strategy for the HGA area to reach attainment. It is the commission's intent to allow

unrestricted use of allowances regardless of why they were not used. This would include a facility curtailing its operations so as to not use all of its allowances. One typical concern with curtailment of activity is that it is temporary and should not be creditable as an ERC. However, since allowances are for one-year only, that concern is not relevant. Another concern has been that the activity is simply shifted to other facilities. However, since the emissions from point sources are capped that concern is addressed as well.

ED commented that the commission should require emission monitoring no less stringent than that required under the federal acid rain program.

The rules were not revised in response to this comment. The cap and trade program has no specific monitoring requirements. Facilities participating in the program use or will be required to use, if applicable, monitoring methods required by other state rules and regulations to quantify their actual emissions. The federal acid rain program applies to a more discrete group of facilities so creating emission monitoring requirements is more meaningful. However, NO<sub>x</sub> point sources vary widely and monitoring requirements should be made in the rule that addresses each category of sources.

TIP, Chevron, Dow, Equistar, REI, TxOGA, Valero, and BCCA commented that the installation of enhanced monitoring equipment should be delayed until the cap and trade target allocation year of 2005, and there is no reasoned justification for advancing the monitoring requirement to 2001, well ahead of the substantive reductions needed for attainment.

The rules have been changed in response to this comment. The commission proposed a December 31, 2001 compliance date for installation of emissions monitors and fuel meters in order to improve the consistency of the value of a NO<sub>x</sub> allowance at the start of the trading program and to improve the inputs used in the commission's air quality planning tools. However, the proposed schedule did not take into account the practicalities identified by the commenters. Both PEMS and CEMS vendors indicated that the number of monitors required in one-year would strain their abilities to provide the equipment. The owners identified clear benefits of installing the monitors in conjunction with the control equipment. If a CEMS is installed before the flue gas controls are fully constructed, the CEMS will probably need to be uninstalled during construction and possibly relocated after NO<sub>x</sub> controls. A PEMS will need to be retrained after the installation of control equipment. Phasing in CEMS/PEMS with the emission control equipment is a more rational and cost effective approach and the commission has modified §117.520(c) to reflect this. Therefore, the rules have been revised to require that the monitors will be phased over a four-year period, at the earlier of installing emission controls or December 31, 2004. This phase-in will achieve the end result benefits of specified emissions reduction by 2005. Because the first reduction period has been extended to 2004, the greater uncertainty about NO<sub>x</sub> emissions in the first two years of the program (compared to monitors in place by 2002) will be of less consequence.

TIP, TxOGA, Valero, and REI commented that the rule should allow the documentation of allowance trading be accomplished electronically in keeping with modern commercial practice.

No change was made in response to this comment. The commission agrees with this comment but it currently limited by available resources. The commission intends to review the feasibility of implementing this type or similar tracking as resources become available.

#### ~~Discrete Emission Reduction Credits Comments~~

FPL requested clarification as to whether a DERC has an indefinite life or expires after one-year if it is used as a banked allowance under the cap and trade program. CPS requested clarification on whether a DERC has an indefinite period of existence or expires after 60 months as does an ERC.

No changes have been made in response to this comment. DERCs are quantified as a mass of emissions and may be used until they are gone. Unused DERCs do not expire after one-year as do allowances under the cap and trade program. Nor do they expire after 60 months as unused ERCs do.

CPS commented that §101.373(f)(8)(B) be modified to allow the use of DERCs by any facility regulated under Chapter 117.

No changes have been made in response to this comment. Section 101.373(f)(8) simply defines the calculation methodology for Chapter 117 sources. It does not determine which sources may utilize banking to meet Chapter 117 requirements. The availability of the option to use banking is determined in the section of the commission's rules which applies the control requirement. For

facilities not already allowed to utilize credits under Chapter 117, a change would require revisions to the applicable section of Chapter 117.

CPS commented that the formula in §101.373(f)(8)(B) for calculating DERCs seems to be unnecessary and meaningless because there is no definition for "proposed level of activity" or "proposed emission rate."

The rules were revised based on this comment. The definition of "level of activity" was added to §101.370. The commission believes that it is clear that "proposed" refers to the project being proposed for the generation of credits.

CPS and TXU commented that the commission should remove the restriction against the use of DERCs during ozone season in areas of ozone seasons of less than twelve months.

The rules were not changed in response to this comment. It is crucial in attainment with the ozone standard that facilities not be able to make reduction outside of the ozone season which may be used during the ozone season. This is especially true for sources that have their peak usage during months when ozone exceedances are most likely.

Sierra-Houston opposed the trading of DERCs outside the area in which they are generated and stated that each airshed should make its own reductions.

The commission has made no changes in response to this comment. DERCs may be traded from nonattainment counties to attainment counties and among attainment counties. Since the area of use is in attainment with the federal air quality standards, such trading should not harm air quality in these areas and could help reduce problems in nonattainment areas if the reductions are made there. DERCs and MDERCs may only be generated and used in nonattainment areas and no trading may occur between nonattainment areas unless it is shown that emission reductions in the county of generation will improve air quality in the nonattainment area of use.

Sierra-Houston opposed the creation of MERCs.

The commission has made no change to the rules in response to this comment. The generation and use of MERCs and MDERCs provides additional flexibility for both mobile and stationary sources without impeding progress toward air quality goals. Additionally, allowing for MERC and MDERC will help to encourage new mobile source emission reductions technologies which are badly needed. The emergence of these technologies may allow for requirement of them in the future if they are needed to meet the NAAQS.

Sierra-Houston oppose DERCs being used to exceed permit allowables.

The commission has made no change to the rules in response to this comment. The ability to use DERCs to exceed permit allowables is very limited. It is meant for temporary, short-term increases only. There are restrictions on use of discrete credits in §101.373(f)(7) to protect against

the potential health impact of the increased uses. Facilities increasing their emissions by use of DERCs may be subject to a health effects review for any increase in emissions. Any review would be conducted independently of the trade and can result in a restriction on the use of credits regardless of the amount of credits transferred during the trade.

#### STATUTORY AUTHORITY

The repeal is adopted under Texas Health and Safety Code, TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop a plan for control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA, and 42 USC, §7410(a)(2)(A), which requires SIPs to include enforceable emission limitations and other control measures or techniques, including economic incentives such as fees, marketable permits, and auction of emission rights.

SUBCHAPTER A: GENERAL RULES

§101.29

§101.29. Emission Credit Banking and Trading.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 1: EMISSION CREDIT BANKING AND TRADING

§§101.300 - 101.304

STATUTORY AUTHORITY

The new sections are adopted under Texas Health and Safety Code, TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop a plan for control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA, and United States Code, §7410(a)(2)(A), which requires SIPs to include enforceable emission limitations and other control measures or techniques, including economic incentives such as fees, marketable permits, and auction of emission rights.

§101.300. Definitions.

The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Activity - The amount of activity at a source measured in terms of production, use, raw materials input, vehicle miles traveled (VMT), or other similar units that have a direct correlation with the economic output and emission rate of the source (i.e., mass emitted per unit of activity).

(2) Actual emissions - Actual emissions as of a particular date shall equal the total emissions during the selected time period, using the unit's actual daily operating hours, production rates, types of materials processed, stored, or combusted during the selected time period.

(3) Applicable emission point - The source which is either generating an emission reduction or using an emission credit.

(4) Area source - Any source included in the agency emissions inventory under the area source category.

(5) Baseline - Emissions that occur prior to an emission reduction strategy, considering all limitations required by applicable state and federal regulations. The baseline may not exceed the quantity of emissions reported in the most recent year of emissions inventory used for state implementation plan (SIP) determinations.

(6) Baseline activity - The source's level of activity based on the unit's actual daily operating hours, production rates, or types of materials processed, stored, or combusted averaged over any consecutive two calendar year period following or including the most recent year of emissions inventory used for SIP determinations or subsequent year(s) which precede the emission reduction strategy or credit use period. For sources in existence less than 24 months or not having two complete calendar years of activity data, a shorter time period of not less than 12 months may be considered by the executive director.

(7) Baseline emission rate (BER) - The source's rate of emissions per unit of activity during the baseline activity period.

(8) Baseline emissions - The source's total actual emissions based on the product of baseline activity and BER.

(9) Certified - Any emission reduction that is determined to be creditable upon review and approval by the executive director.

(10) Curtailment - A reduction in activity level at any stationary or mobile source.

(11) Emission Credit - An emission reduction credit (ERC) or mobile emission reduction credit (MERC).

(12) Emission Reduction - An actual reduction of emissions from a stationary or mobile source.

(13) Emission reduction credit (ERC) - A certified emission reduction that is created by eliminating future emissions, quantified during or before the period in which emission reductions are made, and expressed in tons per year.

(14) Emission reduction strategy - The method implemented to reduce the source's emissions which are surplus.

(15) Generator - The owner or operator of a source that creates an emission reduction.

(16) Mobile emissions baseline - Mobile emissions that occur prior to a mobile emission reduction strategy, considering all limitations required by applicable state and federal regulations. A valid mobile emission baseline can be calculated by either using measured emissions of an appropriately sized sample of the participating mobile sources using an approved United States Environmental Protection Agency (EPA) test procedure or by using estimated emissions of the participating mobile sources using the most recent edition of EPA's on-road or non-road mobile emissions factor models, or other model as applicable. To ensure that mobile credits are surplus, mobile source baseline emissions estimates for each year of the proposed mobile source control program must be the same as, or lower than, those used, or proposed to be used, in the SIP in which the control program is proposed.

(17) Mobile emission reduction credit (MERC or mobile credit) - A credit representing the amount of emission reductions from a mobile source strategy. These emission reductions are voluntary and must be in addition to compliance with requirements of state and federal regulations. MERCs are any enforceable, permanent, and quantifiable emission reduction (exhaust and/or evaporative) generated by a mobile source, which has been banked in accordance with the rules of the commission. MERCs can be banked, purchased, traded, and sold to meet clean air mandates for specified air programs, and MERCs may be applied to the emission reduction obligations of another air quality source or to air quality attainment goals. MERCs are expressed in tons per year.

(18) Mobile source - On-road (highway) vehicles (e.g., automobiles, trucks and motorcycles) and non-road vehicles (e.g., trains, airplanes, agricultural equipment, industrial equipment, construction vehicles, off-road motorcycles, and marine vessels).

(19) Mobile source baseline activity - Will be based on an estimate for each year for which the credits are to be generated. After the initial year, the annual estimates should reflect:

(A) the change in the mobile source emissions to reflect any deterioration in the emission control performance of the participating source;

(B) the change in the number of mobile sources resulting from normal retirement or attrition, and the replacement of retired mobile sources with newer and/or cleaner mobile sources;

(C) the change in usage levels, hours of operation or VMT in the participating population;  
and

(D) the change in the expected useful life of the participating population.

(20) Mobile source baseline emission - The source's total actual mobile source emissions based on the product of mobile source action and the mobile source emissions rate.

(21) Most stringent allowable emissions rate - The emission rate of a source, considering all limitations required by applicable local, state, and federal regulations.

(22) Ozone season - The portion of the year when ozone monitoring is federally required to occur in a specific geographic area.

(23) Permanent - An emission reduction that is long-lasting and unchanging for the remaining life of the source. Such a time period must be enforceable.

(24) Protocol - A replicable and workable method of estimating emission rates or activity levels used to calculate the amount of emission reduction generated or credits required for stationary or mobile sources.

(25) Quantifiable - An emission reduction that can be measured or estimated with confidence using replicable methodology.

(26) Real reduction - A reduction in which actual emissions are reduced as opposed to a reduction in allowable emissions.

(27) Shutdown - The permanent cessation of an activity producing emissions at a facility.

(28) Source - As defined in §101.1(90) of this title (relating to Definitions).

(29) Surplus - An emission reduction that is not otherwise required of a source by any local, state or federal law, regulation, or agreed order.

(30) User - The owner or operator of a source that acquires and uses emission credits to meet a regulatory requirement, demonstrate compliance, or offset an emission increase.

§101.301. Purpose.

The purpose of this division is to allow the operator of a source to generate emission credits by reducing emissions beyond the level required by any local, state, and federal regulation and to allow the operator of another source to use these credits. Participation under this division is strictly voluntary.

§101.302. General Provisions.

(a) Applicable pollutants. Reductions of volatile organic compounds (VOCs) and nitrogen oxides ( $\text{NO}_x$ ) may qualify as emission credits. Reductions of other pollutants do not qualify as emission credits under this division. Reductions of one pollutant may not be used to meet the requirements of another pollutant, except at such time as urban airshed modeling demonstrates that one ozone precursor may be substituted for another, subject to executive director and the United States Environmental Protection Agency approval.

(b) Emission reduction requirements.

(i) emission reduction credits (ERCs) are generated from reductions beyond those required. To be certified as an emission credit, an emission reduction must be enforceable, permanent, quantifiable, real, and surplus. The emission credit must be surplus at the time it is created, as well as when it is used. The certified reduction must have occurred after the most recent year of emissions inventory used for state implementation plan (SIP) determinations for VOC and  $\text{NO}_x$ , and the source's annual emissions prior to the emission credit application must have been reported or represented in the emissions inventory used for SIP determinations.

(2) mobile emission reduction credits (MERCs) are generated from reductions beyond those required, and derived from a calculation of the annual difference between the mobile source emissions baseline and the projected emissions level after the MERC strategy has been put in place. To be certified as a MERC, an emission reduction must be enforceable, permanent, quantifiable, real, and surplus. The emission credit must be surplus at the time it is created, as well as when it is used. The certified reduction must have occurred after the most recent year of emissions inventory used for SIP determinations for VOC and NO<sub>x</sub>, the mobile source's emissions must have been represented in the emissions inventory used for SIP determinations, and the applicable mobile sources must have been included in the attainment demonstration baseline.

(3) Emission reductions from a source which are certified as emission credits under this division cannot be recertified in whole or in part as credits under another division within this subchapter.

(c) Eligible sources. The following sources are eligible to generate emission credits:

(1) stationary sources (including area sources);

(2) any mobile source;

(3) any stationary source (including area sources) or mobile source associated with actions by federal agencies under §10130 of this title (relating to Conformity of General Federal Actions to State Implementation Plans).

(d) Life of an emission credit.

(1) If an ERC is used prior to its expiration date, the ERC is effective for the life of the applicable user source.

(2) Effective January 2, 2001, an ERC is available for use for 60 months from the date of the emission reduction except to the extent regulatory changes occur after the date of reduction that reduce the certified amount or invalidate the entire reduction for affected emission points. ERCs certified or applied for prior to January 2, 2001 shall be available for use for 120 months from the date of the emission reduction except to the extent regulatory changes occur after the date of the emission reduction that reduce the certified amount or invalidate the entire reduction for affected emission points.

(e) Geographic scope. Only emission reductions generated in ozone nonattainment areas can be certified. The trading of emission credits may be discontinued by the executive director in whole or in part and in any manner, with commission approval, as a remedy for problems resulting from trading in a localized area of concern. An emission credit must be used in the nonattainment area in which it is generated unless:

(1) a demonstration has been made and approved by the executive director and the United States Environmental Protection Agency (EPA) to show that the emission reductions achieved in another county, state, or nation provide an improvement to the air quality in the county of use; or

(2) the emission credit was generated in an ozone nonattainment area which has an equal or higher nonattainment classification than the ozone nonattainment area of use, and a demonstration has been made and approved by the executive director and the EPA to show that the emissions from the ozone nonattainment area where the emission credit is generated contribute to a violation of the national ambient air quality standard in the ozone nonattainment area of use; or

(3) the user has obtained prior written approval of the executive director and the EPA.

(f) The registry. All emission credit generators and users must register with the executive director. A notice submitted by a generator or user will be posted to the registry. The registry will assign a unique number to each certificate which will include the amount of emission reductions generated. The registry will maintain current listings of all credits available or used for each ozone nonattainment area.

(g) Recordkeeping. The user must maintain a copy of all notices and backup information submitted to the registry during, and for at least two years after, the beginning of the use period. The user must also make such records available upon request to representatives of the executive director, United States Environmental Protection Agency (EPA), and any local enforcement agency. The records shall include, but not necessarily be limited to:

(1) the name, emission point number, and facility identification number of each unit using emission credits;

(2) the amount of emission credits being used by each unit; and

(3) the specific number, name, or other identification of emission credits used for each unit.

(h) Public information. All information submitted with a notice or report regarding the nature and quantity of emissions associated with the use or generation of an emission credit is public information and may not be submitted as confidential. Any claim of confidentiality for this type of information, or failure to submit all information, may result in the rejection of the emission reduction. All non-confidential notices and information regarding the generation, use, and availability of emission credits may be obtained from the executive director.

(i) Authorization to emit. An emission credit created under this division is a limited authorization to emit VOC and/or NO<sub>x</sub>, unless otherwise defined, in accordance with the provisions of this section, the Federal Clean Air Act, and the Texas Clean Air Act, as well as regulations promulgated thereunder. An emission credit does not constitute a property right. Nothing in this division may be construed to limit the authority of the commission or the EPA to terminate or limit such authorization.

(j) Program participation. The executive director has the authority to prohibit an organization from participating in emission credit trading either as a generator or user, if the executive director determines that the organization has violated the requirements of the program or abused the privileges provided by the program.

#### §101.303. Protocols.

(a) All source categories must use a EPA approved protocol if one exists for the applicable source. If the source wants to deviate from an EPA approved protocol, EPA approval is required before the protocol can be used.

(b) If an EPA approved protocol does not exist, the following applies.

(1) Emission reduction credits (ERC) - The amount of emission credits in tons per year will be determined and certified based on actual monitoring results, when available, or otherwise calculated using good engineering practices including calculation methodologies in general use in new source review (NSR) permitting. The source must collect relevant data sufficient to characterize the process emissions of the affected pollutant and the process activity level for all representative phases of source operation during the period under which emission credits are created or used.

(2) Mobile emission reduction credits (MERC) - The amount of emission credits in tons per year will be determined and certified based on actual monitoring results, when available, or otherwise calculated using good engineering practices. The generator must collect relevant data sufficient to characterize the process emissions of the affected pollutant, and the process activity level for all representative phases of mobile source operation during the period under which mobile credits are created.

(c) Emission credit generation.

(1) ERCs may be generated using one of the following methods or any other method that is approved by the executive director:

(A) the permanent shutdown of a facility which causes a loss of capability to produce emissions;

(B) the installation and operation of pollution control equipment which reduces emissions below the level required of the emission source;

(C) a change in a manufacturing process which reduces emissions below the level required of the emission source;

(D) the permanent curtailment in production, which reduces the source's capability to produce emissions;

(E) pollution prevention projects that produce surplus emission reductions.

(2) MERCs may be generated by any mobile source emission reduction strategy that creates actual mobile source emission reductions under this rule, and subject to the approval of the commission.

(d) Emission credit calculation.

(1) The quantity of ERCs is determined by subtracting the source's new allowable emission limit (tons per year) from the emission source's baseline emissions. The source's new allowable emission limit equals the enforceable emission limit for the applicable emission point after the emission reduction strategy has been implemented.

(2) The quantity of MERCs must be calculated from the annual difference between the mobile source emissions baseline and the projected emissions level after the MERC strategy has been put in place. The projected emissions must be based on the best estimate of the actual in-use emissions of the replacement or substitute on-road or non-road vehicles or transportation system. Any estimate of a projected annual mobile source emissions level based on an assumption of reduced consumer service or transportation service would not be allowed without the support of a convincing analytical justification of the assumption. Emission baselines for quantifying MERCs should include the following information and data as appropriate, but not be limited to:

(A) the emission standard to which the mobile source is subject or emission performance to which the mobile source is certified;

(B) the estimated or measured in-use emissions levels per unit of use from all significant mobile source emissions sources;

(C) the number of mobile sources in the participating group;

(D) the type or types of mobile sources by model year;

(E) the actual or projected activity level, hours of operation or miles traveled by type, and model year; and

(F) the projected remaining useful life of the participating group of mobile sources.

(3) Emission credits cannot be generated from a source if the emissions have been transferred from that source to another source.

(e) Emission credit registration and certification.

(1) Stationary sources with potential ERCs must submit an ERC application (EC-1 Form), within 180 days of the implementation of the emission reduction strategy to the executive director. Sources that have implemented a strategy prior to the effective date of this rule, must submit an application by June 1, 2001. Applications will be subjected to a review to determine the credibility of the reductions. Reductions determined to be creditable will be certified by the executive director and an ERC certificate will be issued to the owner.

(2) Mobile sources with potential MERCs must submit an emission credit application (EC-1 Form), within 180 days of implementation of the strategy to the Executive director if an obligation is exceeded, or if it is clearly demonstrated that actual mobile emission reductions are generated. Sources that have implemented a strategy prior to the effective date of this rule, must submit an application by June 1, 2001. The commission will then issue a MERC certificate(s) to the person, company, business, organization, or public entity generating the mobile emission reduction, upon approval of the application. A MERC certificate will be issued by the executive director which indicates the total amount of certified emission credits, the quantity available on an annual basis, and the date upon which the last annualized emission reduction expires.

(3) The application for a stationary source generator must include the following information, where applicable for either an ERC or MERC, on the EC-1 Form for each pollutant reduced at each applicable emission point:

(A) the name, address, county, telephone number, contact person, permit or permit by rule numbers, account number of the generator, and the unique facility identification number and emission point number of the applicable emission points;

(B) the name of the owner and/or operator of the generator source;

(C) the date of the reduction;

(D) a complete description of the generation activity;

(E) for shutdown or permanent curtailment emission reduction strategies, an explanation as to whether production shifted from the shut down facility to another facility in the same nonattainment area;

(F) the amount of emission credits generated;

(G) for volatile organic compound (VOC) reductions, a list of the specific compounds reduced;

(H) the baseline emission activity, baseline emission rate, baseline total emissions, emissions inventory data from the most recent year of emissions inventory used for state implementation plan determinations and emissions inventory data for the two consecutive years used to determine baseline activity for each applicable pollutant and emission point;

(I) the most stringent emission rate and the most stringent emission level for the applicable emission point, considering all the local, state, and federal applicable regulatory and statutory requirements,

(J) a complete description of the protocol used to calculate the emission reduction generated;

(K) the actual calculations performed by the generator to determine the amount of emission credits generated; and

(L) a statement that the emission reductions on which the emission credits are based are real, surplus, and are based on an eligible emission reduction strategy listed in subsection (c)(1) of this section.

(4) The application for a mobile source strategy must include the following information, where applicable for either an ERC or MERC, on the EC-1 Form for each pollutant reduced at each applicable mobile source strategy:

(A) the name, address, county, telephone number, and contact person;

(B) the name of the owner and/or operator of the generator source;

(C) the date of the reduction;

(D) a complete description of the generation activity;

(E) the amount of emission credits generated;

(F) the mobile source baseline emission activity, mobile source baseline emission rate, mobile source baseline total emissions, and the mobile source strategy;

(G) a complete description of the protocol used to calculate the emission reduction generated;

(H) the actual calculations performed by the generator to determine the amount of emission credits generated; and

(I) a statement that the emission reductions on which the emission credits are based are real, surplus, and based on an eligible emission reduction strategy that is not prohibited.

(5) The applicant will be notified in writing if the executive director denies the emission credit application. The applicant may submit a revised application at any time.

(f) Emission credit practices.

(1) The amount of emission credits in tons per year will be determined and certified, to the nearest tenth of a ton per year.

(2) ERCs are based on EPA methodologies, when available, actual monitoring results, when available, or otherwise calculated using good engineering practices including calculation methodologies in general use and accepted in NSR permitting. The executive director shall have the authority to inspect and request information to assure that the emissions reductions have actually been achieved.

(3) MERCs will be determined and certified using:

(A) EPA methodologies, when available;

(B) actual monitoring results, when available;

(C) otherwise calculated using the most current EPA MOBILE model or other model as applicable; or

(D) otherwise calculated using credible emission reduction measurement or estimation methodologies which satisfactorily address the analytical uncertainties of mobile source emissions reduction strategies.

(4) All emission credits are deposited in the registry and reported as available credits by the Emissions Banking and Trading Program until they are used, withdrawn, or expire.

(5) Compliance burden and enforcement.

(A) ERCs will be made enforceable by one of the following methods:

(i) amending or altering an NSR permit to reflect the emission reduction and set a new maximum allowable emission limit;

(ii) voiding an NSR permit when an emission source has been shut down;

(iii) registering on a PI-8 form the emission reduction and the new maximum allowable emission limit for any facility which is authorized by a standard exemption or permit by rule;

(iv) registering on an OPCRE-1 Form the emission reduction and the new maximum allowable emission limit for any facility which is not required to have a permit or qualifies for a permit by rule; or

(v) obtaining an agreed order which sets a new maximum allowable emission limit for a facility which is not required to have a permit or qualify for a permit by rule.

(B) MERCs will be made enforceable by one of the following methods:

(i) by registering on a commission-provided form (MERC-1), that the MERCs are permanent, quantifiable, real, and surplus; or

(ii) by obtaining an agreed order which sets a new maximum allowable mobile source emission limits, which is not required to be implemented by a rule.

(6) Unless there are permits under the same commission account number which contain a condition or conditions precluding such use, ERCs may be used as the following:

(A) offsets for a new source or major modification to an existing source;

(B) mitigation offsets for action by federal agencies under §101.30 of this title (relating to Conformity of General Federal Actions to State Implementation Plans);

(C) an alternative means of compliance with VOC and NO<sub>x</sub> reduction requirements as provided in Chapter 115 of this title (relating to the Control of Air Pollution from volatile organic compounds (VOCs)) and Chapter 117 of this title (relating to the Control of Air Pollution from Nitrogen Compounds);

(D) netting by the original applicant, if not used, sold, or otherwise relied upon; or

(E) other provisions as allowable within the guidelines of local, state, and federal laws.

(7) MERCs may only be used for the following purposes:

(A) an alternative means of compliance with VOC and NO<sub>x</sub> reduction requirements as provided in Chapters 115 and 117 of this title;

(B) complying with fleet requirements to the extent allowed by the Texas Clean Fleet Program requirements for motor vehicle fleets;

(C) providing offsets for a new major source or major modifications;

(D) mitigation offsets for action by federal agencies under §101.30 of this title; or

(E) other provisions as allowable within the guidelines of local, state, and federal laws.

(8) The calculation of the number of ERCs or of MERCs needed by the user for offsets or for compliance with Chapter 115 or Chapter 117 of this title are as follows:

(A) for emission credits used as offsets, the method for determining the number of emission credits needed by the user for offsets is provided in §116.150 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Area); or

(B) for emission credits used as compliance with Chapter 114, Chapter 115, or Chapter 117 of this title, the number of emission credits needed should be determined in accordance with the requirements of this section plus an additional 10% to be retired as an environmental contribution; or

(C) for emission credits used to comply with §117.210 of this title (relating to Source Cap) and §117.223 of this title (relating to Source Cap), sources may reduce the amount of emission reductions otherwise required by complying with the following equations instead of the equations in §117.210(c)(1) and (2) and §117.223(b)(1) and (2) of this title.

Figure: 30 TAC §101.303(f)(8)(C)

Figure: 30 TAC §101.303(f)(8)(C)

$$\begin{array}{l} \text{New 30-day rolling} \\ \text{average emission limit} \\ \text{(lb/day)} \end{array} = \sum_{i=1}^N \left[ (H_i \times R_i) + \left( EC_i \times \frac{2000}{365} \right) \right]$$

Where:

$R_i$  in lb/MMBtu, is defined as in §117.223(b)(1) of this title

$i$  = each emission unit in the source cap

$N$  = the total number of emission units in the source cap

$H_i$  = actual daily heat input, in MMBtu per day, as calculated according to §117.223(b)(1) of this title

$EC_i$  = emission credit used for each unit, in tons per year (for ERCs or MERCs), generated in accordance with subsection (b) of this section. If  $EC_i$  is from a unit not subject to the emission specifications of §117.105 or §117.205 of this title, this term becomes  $EC_i/F$ , where  $F$  is the offset ratio for the ozone nonattainment area where the unit is located (e.g. 1.2 for Beaumont/Port Arthur and 1.3 for Houston/Galveston).

$d$  = the number of days in the use period

and

$$\begin{array}{l} \text{New maximum daily} \\ \text{emission limit} \\ \text{(lb/day)} \end{array} = \sum_{i=1}^N \left[ (H_M \times R_i) + \left( EC_i \times \frac{2000}{365} \right) \right]$$

Where:

$i$  and  $N$  are defined as in the first equation in this paragraph

$R_i$  in lb/MMBtu, is defined as in §117.223(b)(1) of this title

$H_M$  = the maximum daily heat input, in MMBtu/day, as defined in §117.223(b)(2) of this title.

$d$  = the number of days in the use period

(D) emission reductions used as compliance with any other applicable program should be determined in accordance with the requirements of the appropriate chapter and section and must contain at least 10% extra to be retired as an environmental contribution.

(9) Review schedule.

(A) For emission credits which are to be used for compliance with the requirements of Chapter 114, Chapter 115, or Chapter 117 of this title, the user must submit a Notice of Intent to Use, (EC-3 Form) at least 90 days prior to the planned utilization of the emission credit. Emission credits may be utilized only after the executive director grant approval of the notice of intent to use.

(B) For emission credits which are to be used as offsets in accordance with Chapter 116 of this title, the user must submit a Notice of Intent To Use Form (EC-3 Form), along with the emission credit certificate when providing the emission credits as offsets.

(10) Emission credits are freely transferable in whole or in part, and may be traded or sold to a new owner any time before the expiration date of the emission credit. The Emissions Banking and Trading Program must

be notified by means of an EC-4 Form prior to the transfer. The old certificate must be submitted to the registry. The executive director will issue a new certificate to the emission credit purchaser reflecting the emission credits purchased by the new owner, and a revised certificate to the emission credit seller showing any remaining emission credits available to the original owner. Emission credits may be transferrable only after the executive director grants approval of the transaction.

(11) Emission credits may be withdrawn from the registry by the owner at any time prior to the expiration date of the credit and may be held by the owner. Emission credits may still be used by the original owner as an emission reduction for netting purposes after the emission credits have expired, as provided in §116.150 of this title.

(12) Recording use of emission credits.

(A) Emission credits to be used as offsets in an NSR permit must be identified prior to permit issuance. The original certificate must be submitted prior to operation.

(B) Use of emission credits for purposes other than those specified in subparagraph (A) of this paragraph may not commence until the user has received approval from the executive director. The user must also keep a copy of the emission credit certificate, the notice, and all backup in accordance with §101.303(e) of this section.

(C) If the executive director denies the stationary source's use of emission credits, any person affected by the executive director's decision may file a motion for reconsideration within 60 days of the denial. Notwithstanding the applicability provisions of §50.31(c)(7) of this title (relating to Purpose and Applicability), the requirements of §50.39 of this title (relating to Motion for Reconsideration) may apply. Only a person affected may file a motion for reconsideration.

§101.304. Program Audits.

(a) No later than three years after the effective date of this division, and every three years thereafter, the executive director will audit this program.

(b) The audit will evaluate the timing of credit generation and use, the impact of the program on the state's attainment demonstration and the emissions of hazardous air pollutants, the availability and cost of credits, compliance by the participants, and any other elements the executive director may choose to include.

(c) The executive director will recommend measures to remedy any problems identified in the audit. The trading of emission credits may be discontinued by the executive director in part or in whole and in any manner, with commission approval, as a remedy for problems identified in the program audit.

(d) The audit data and results will be completed and submitted to the EPA and made available for public inspection within six months of the date the audit begins.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 3: MASS EMISSIONS CAP AND TRADE PROGRAM

§§101.350 - 101.354, 101.356, 101.358 - 101.360

STATUTORY AUTHORITY

The new sections are adopted under Texas Health and Safety Code, TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop a plan for control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA, and United States Code, §7410(a)(2)(A), which requires SIPs to include enforceable emission limitations and other control measures or techniques, including economic incentives such as fees, marketable permits, and auction of emission rights.

§101.350. Definitions.

The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Allowance - The authorization to emit one ton of nitrogen oxides (NO<sub>x</sub>), expressed in tenths of a ton, during a control period.

(2) Authorized account representative - The responsible person who is authorized, in writing, to transfer and otherwise manage allowances.

(3) Banked allowance - An allowance which is not used to reconcile emissions in the designated year of allocation, but which is carried forward for up to one year and noted in the compliance or broker account as "banked."

(4) Broker - A person not required to participate in the requirements of this division who opens an account under this division for the purpose of banking and trading allowances.

(5) Broker account - The account where allowances held by a broker are recorded. Allowances held in a broker account may not be used to satisfy compliance requirements for this division.

(6) Compliance account - The account where allowances held by a facility or multiple facilities at a single site are recorded for the purposes of meeting the requirements of this division.

(7) Control period - The 12-month period beginning January 1 and ending December 31 of each year. The initial control period begins January 1, 2002.

(8) Houston/Galveston (HGA) ozone nonattainment area - As defined in §101.1 of this title (relating to Definitions).

(9) Level of activity - The amount of activity at a source measured in terms of production, fuel use, raw materials input, or other similar units that have a direct correlation with the economic output and emission rate of the source (i.e., mass emitted per unit of activity).

(10) Person - For the purpose of issuance of allowances under this division, a person includes an individual, a partnership of two or more persons having a joint or common interest, a mutual or cooperative association, or a corporation.

(11) Site - As defined in §122.10 of this title (relating to General Definitions).

§101.351. Applicability.

This division applies to all stationary facilities which emit nitrogen oxides ( $\text{NO}_x$ ) in the Houston/Galveston nonattainment area and are subject to the emission specifications under §§117.106, 117.206, and 117.475 of this title (relating to Emission Specifications for Attainment Demonstration; Emission Specifications for Attainment Demonstration; and Emission Specifications) and which have a design capacity to emit ten tons or more per year of  $\text{NO}_x$ .

§101.352. General Provisions.

(a) Allowances are valid only for the purposes described in this division and cannot be used to meet or exceed the limitations of any annual emission limitation authorized under Chapter 116, Subchapter B, of this title (relating

to New Source Review Permits), or any other applicable rule or law.

(b) Beginning February 1, 2003, and no later than February 1 following the end of every control period, each site shall hold a quantity of allowances in its compliance account that is equal to or greater than the total emissions of nitrogen oxides emitted during the control period just ending. Compliance with this division will begin with the initial control period beginning January 1, 2002.

(c) Unused allowances can be certified as emission reduction credits (ERCs), provided that:

(1) an enforceable and permanent reduction of annual allowances is approved by the executive director; and

(2) all applicable requirements of Division 1 of this subchapter (relating to Emission Credit Banking and Trading) are met.

(d) Allowances cannot be used for netting requirements under Chapter 116, Subchapter B, Divisions 5 and 6 of this title (relating to Nonattainment Review and Prevention of Significant Deterioration Review).

(e) Allowances may be used simultaneously to satisfy the correlating one to one portion of offset requirements for new or modified facilities subject to federal nonattainment NSR requirements as provided in Chapter 116, Subchapter B, Division 7 of this title (relating to Emission Reductions Offsets).

(f) An allowance does not constitute a security or a property right.

(g) All allowances will be allocated, transferred, or used in tenths of tons. To determine the number of allowances, the number of allowances will be rounded down to the nearest tenth when determining excess allowances and rounded up to the nearest tenth when determining allowances used.

(h) One compliance account shall be used for multiple facilities required to participate under this division and located at the same site and under common ownership or control.

(i) The commission will maintain a registry of the allowances in each compliance account. The registry will not contain proprietary information.

§101.353. Allocation of Allowances.

(a) Allowances will be deposited into compliance accounts according to the following equation except as provided in subsection (g) of this section.

Figure: 30 TAC §101.353(a)

Figure: 30 TAC §101.353(a)

$$A = [B] - X \left[ B - \left( \frac{LA_{HA} * EF_{final}}{2000} \right) \right]$$

Where: (1) A = number of allowances rounded to tenths of tons

(2) B = the facility's baseline emission rate and is calculated as follows:

(A) For facilities in operation prior to January 1, 1997,

$$B = \frac{(LA_{97} * EF_{97}) + (LA_{98} * EF_{98}) + (LA_{99} * EF_{99})}{3(2000)}$$

Where:  $LA_{97}$  = the facility's level of activity, as certified by the executive director for 1997

$LA_{98}$  = the facility's level of activity, as certified by the executive director  
for 1998

$LA_{99}$  = the facility's level of activity, as certified by the executive director

for 1999

$EF_{97}$  = the facility's emission factor, in pounds per unit of activity, (not to exceed any applicable federal or state regulation, rule, or permit limit), as certified by the executive director, for 1997.

$EF_{98}$  = the facility's emission factor, in pounds per unit of activity, (not to exceed any applicable federal or state regulation, rule, or permit limit), as certified by the executive director, for 1997.

$EF_{99}$  = the facility's emission factor, in pounds per unit of activity, (not to exceed any applicable federal or state regulation, rule, or permit limit), as certified by the executive director, for 1997.

- (B) For new and modified facilities not in operation prior to January 1, 1997 and either have submitted, under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), an application which the executive director has determined to be administratively complete before January 2, 2001, or have qualified for a permit by rule under Chapter 106 of this title (relating to Permits by Rule) and have commenced construction before January 2, 2001 and that have been in operation less than two complete consecutive calendar years;

$$B = \frac{LA_{\text{Allowable}} * EF_{\text{Allowable}}}{2000}$$

Where  $LA_{\text{Allowable}}$  = The level of activity authorized by the executive director until such time two consecutive calendar years of actual level of activity data is available

$EF_{\text{Allowable}}$  = The emission factor authorized by the executive director until such time two consecutive calendar years of actual emission data is available

- (C) For new and modified facilities not in operation prior to January 1, 1997 and either have submitted, under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), an application which the executive director has determined to be administratively complete before January 2, 2001, or have qualified for a permit by rule under Chapter 106 of this title (relating to Permits by Rule) and have commenced construction before January 2, 2001; and that have been in operation for two complete consecutive calendar years;

$$B = \frac{(LA_{\text{Year} - 1} * EF_{\text{Year} - 1}) + (LA_{\text{Year} - 2} * EF_{\text{Year} - 2})}{2(2000)}$$

Where:  $LA_{\text{Year-1}}$  = the facility's level of activity, as certified by the executive director, for its first complete calendar year of operation

$LA_{\text{Year-2}}$  = the facility's level of activity, as certified by the executive director, for its second complete calendar year of operation

$EF_{\text{Year-1}}$  = the facility's emission factor, in pounds per unit of activity, (not to exceed any applicable federal or state regulation, rule, or permit limit), as certified by the executive director, for its first complete calendar year of operation

$EF_{\text{Year-2}}$  = the facility's emission factor, in pounds per unit of activity, (not to exceed any applicable federal or state regulation, rule, or permit limit), as certified by the executive director, for its first complete calendar year of operation

- (3) **X** = reduction factor, where:
- (A) For all boilers, auxiliary steam boilers and stationary gas turbines within an electric power generating system, as defined in §117.10 of this title (relating to

Definitions), located in HGA

- (i) for January 1, 2002 through March 31, 2003,  $X = 0.00$
  - (ii) for April 1, 2003 through March 31, 2004,  $X = 0.47$
  - (iii) for April 1, 2004 through March 31, 2007,  $X = 0.95$
  - (iv) on or after April 1, 2007,  $X = 1.00$
- (B) For all other sources
- (i) for January 1, 2002 through March 31, 2004,  $X = 0.00$
  - (ii) for April 1, 2004 through March 31, 2005,  $X = 0.44$
  - (iii) for April 1, 2005 through March 31, 2007,  $X = 0.89$
  - (iv) on or after April 1, 2007,  $X = 1.00$
- (C) For calendar years which include two different reduction factors, the reduction factor shall be adjusted using the appropriate ratio to reflect the number of months covered by each reduction factor.
- (4)  $LA_{HA}$  = historical average level of activity, where:
- (A) for facilities in operation prior to January 1, 1997, the average level of activity, as certified by the executive director, for 1997, 1998 and 1999, or

(B) for new and modified facilities not in operation prior to January 1, 1997 and either have submitted, under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), an application which the executive director has determined to be administratively complete before January 2, 2001, or have qualified for a permit by rule under Chapter 106 of this title (relating to Permits by Rule) and have commenced construction before January 2, 2001; LA is

(i) The level of activity authorized by the executive director until such time two consecutive calendar years of actual level of activity data is available; or

(ii) When two complete consecutive calendar years of actual level of activity data is available, the level of activity becomes the average of the facility's actual level of activity over those two consecutive calendar years of actual level of activity data.

(5)  $EF_{\text{final}}$  = emission factor, as listed in §§117.106, 117.206, or 117.475 of this title.

(6) For facilities using alternative emission specifications as allowed in §117.106(c)(2), §117.206(c)(17), or §117.475(c)(3) of this title (relating to Control of Air Pollution from Nitrogen Compounds), the level of activity for any formula will be the lowest of the level of activity

as calculated in variables (2)(A), (2)(B), or the level of activity limited by an enforceable limit or commitment necessary to qualify alternative emission specification in §117.106(c)(2) or §117.206(c)(17).

(b) For a new and/or modified facility that has submitted, under Chapter 116 of this title, an application which the executive director has not determined to be administratively complete before January 2, 2001, or has qualified for a permit by rule under Chapter 106 of this title and has not commenced construction before January 2, 2001, allowances for each control period or the annual allocation rights shall be acquired from facilities already participating under this division, or in accordance with §101.356(d) of this title (relating to Allowance Banking and Trading).

(c) If actual emissions of  $\text{NO}_x$  during a control period exceed the amount of allowances held in a compliance account on February 1 following the control period, allowances for the next control period will be reduced by an amount equal to the emissions exceeding the allowances in the compliance account plus an additional 10%. This does not preclude additional enforcement action by the executive director.

(d) Allowances will be allocated by the executive director, who will deposit allowances into each compliance account:

(1) initially, by January 1, 2002;

(2) subsequently, by January 1 of each following year.

(e) The annual deposit for any control period may be adjusted by the executive director to reflect new or existing state implementation plan requirements.

(f) Allowances may be added or deducted by the executive director from compliance accounts following the review of reports required under §101.359 of this title (relating to Reporting).

(g) In extenuating circumstances, the executive director may deviate from the requirements of this section to determine the amount of allowances to be allocated to a facility. Applications to seek deviation must be submitted by the owner or operator of the facility in discussion to the executive director no later than June 30, 2001.

(h) Allowances calculated under subsection (a) of this section will continue to be based on historical activity levels, despite subsequent reductions in activity levels. If allowances are being allocated based on allowables and the facility does not achieve two complete consecutive calendar years of actual level of activity data, then allowances will not continue to be allocated if the facility ceases operation or is not built.

#### §101.354. Allowance Deductions.

(a) Allowances will be deducted in tenths of a ton from a site's compliance account for a control period based upon the following equation or other method as determined by the executive director.

Figure: 30 TAC §101.354(a)

Figure: 30 TAC §101.354(a)

$$A = \frac{LA_{CP} * EF_{CP}}{2000}$$

Where:

A = Allowances to be subtracted from the compliance account in tenths of tons

$LA_{CP}$  = the level of activity during the control period

$EF_{CP}$  = the emission factor for the control period in lb of nitrogen oxides ( $NO_x$ ) per unit of activity

(b) When deducting allowances from a site's compliance account for a control period, the executive director will deduct the allowances beginning with the most recently allocated allowances before deducting banked allowances.

(c) Allowances allocated in accordance with the variables in (a)(2)(B) listed in §101.353(a) of this title (relating to Allocation of Allowances) may only be used by the facility for which they were allocated and may not be used by other facilities at the same site during the same control period.

(d) On February 1 after every control period, a site shall hold a quantity of allowances in its compliance account that is equal to or greater than the total  $NO_x$  emissions emitted during the prior control period.

§101.356. Allowance Banking and Trading.

(a) Allowances not used for compliance at the end of a control period may be banked for use in the following control period in compliance with §101.354 of this title (relating to Allowance Deductions) or traded except as provided in subsection (c) of this section.

(b) Allowances which have not expired or been used may be traded at any time during a control period after they have been allocated except as provided in subsection (c) of this section.

(c) Allowances not used for compliance during a control period which were allocated in accordance with the variables in (a)(2)(B) and (3)(B) listed in §101.353(a) of this title (relating to Allocation of Allowances) may not be banked for future use or traded.

(d) Only authorized account representatives may trade allowances.

(e) Trades shall be completed by the executive director following the submittal of a completed ECT-2 Form, Application for Transfer of Allowances. The completed ECT-2 shall include the price paid per allowance and shall be submitted to executive director at least 30 days prior to the allowances being deposited into the transferee's broker or compliance account. The executive director will issue a letter to the purchaser and seller reflecting this trade. The trade will be considered finalized upon issuance of this letter.

(f) Sites may use nitrogen oxides (NO<sub>x</sub>) discrete emission reduction credits (DERCs) or mobile discrete emission reduction credits (MDERCs) which have been generated and, acquired, in accordance with Division 4 of this subchapter (relating to Discrete Emission Credit Banking and Trading) in place of allowances for compliance with this division in accordance with paragraphs (1) - (7) of this subsection. Sites may use volatile organic compound (VOC) DERCs or MDERCs which have been generated and acquired in accordance with Division 4 of this subchapter, in place of allowances for compliance with this division in accordance with paragraphs (1) - (7) of this subsection provided that demonstration has been made and approved by the executive director and the United States Environmental Protection Agency to show that the use of VOC DERCs or MDERCs is equivalent, on a one to one basis or other ratio, to the use of NO<sub>x</sub> allowances in reducing ozone.

(1) MDERCs may be used in lieu of allowances at a ratio of one MDERC for one allowance.

(2) Prior to January 1, 2005, DERCs generated prior to January 1, 2005 may be used at a ratio of one DERC for one allowance.

(3) Beginning January 1, 2005, DERCs generated prior to January 1, 2005 may be used in lieu of allowances at a ratio of ten DERCs for one allowance.

(4) DERCs generated on or after January 1, 2005 may be used in lieu of allowances at a ratio of one DERC for one allowance.

(5) Beginning January 1, 2005, no more than 10,000 DERCs may be used in any combination totaled

overall sites in the HGA ozone nonattainment area during a single calendar year. This restriction does not apply to MDERCs.

(6) The 10% environmental contribution and the 5% compliance margin of Division 4 of this subchapter shall not apply.

(7) DERCs or MDERCs submitted with a notice of intent to use, DEC-2 Form, for the purpose of compliance with this section, must be submitted to executive director at least 30 days prior to intended use.

(g) Program Audits. No later than three years after the effective date of this division, and every three years thereafter, the executive director will audit this program.

(1) The audit will evaluate the impact of the program on the state's attainment demonstration, the availability and cost of allowances, compliance by the participants, and any other elements the executive director may choose to include.

(2) The executive director will recommend measures to remedy any problems identified in the audit. The trading of allowances, discrete emission reduction credits, and/or mobile discrete emission reduction credits may be discontinued by the executive director in part or in whole and in any manner, with commission approval, as a remedy for problems identified in the program audit.

(3) The audit data and results will be completed and submitted to the United States Environmental Protection Agency and made available for public inspection within six months after the audit begins.

§101.358. Emission Monitoring and Compliance Demonstration.

(a) Monitoring data or other emission quantifications for facilities required to monitor or quantify emissions under any other federal or state program shall be used to show compliance with this division.

(b) Facilities not required to monitor or quantify nitrogen oxides emissions shall calculate emissions using good engineering practices, including calculation methodologies in general use and accepted in new source review permitting.

§101.359. Reporting.

Beginning March 31, 2003, for each control period, facilities under each compliance account shall submit a completed ECT-1 Form, Annual Compliance Report, to the executive director by March 31 of each year detailing the following:

- (1) the amount of actual nitrogen oxides (NO<sub>x</sub>) emissions during the preceding control period;
- (2) the method of determining NO<sub>x</sub> emissions, including but not limited to, any monitoring protocol and results, calculation methodology, level of activity, and emission factor; and

(3) a summary of all final trades for the preceding control period.

§101.360. Level of Activity Certification.

(a) The owner or operator of any facility subject to this division shall certify, no later than June 30, 2001, its historical level of activity by submitting to the executive director a completed ECT-3 Form, Level of Activity Certification, along with any supporting information such as usage records, testing or monitoring data, and production records as follows:

(1) for facilities in operation prior to January 1, 1997, the level of activity averaged over 1997, 1998, and 1999;

(2) for new and modified facilities not in operation prior to January 1, 1997 and either have submitted, under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), an application which the executive director has determined to be administratively complete before January 2, 2001, or have qualified for a permit by rule under Chapter 106 of this title (relating to Permits by Rule) and have commenced construction before January 2, 2001, the level of activity authorized by the executive director.

(b) The owner or operator of any facility subject to this division who has certified a facility's level of activity under subsection (a)(2) of this section shall certify, no later than 90 days from the end of its second complete calendar year of operation, its first two complete consecutive calendar years of actual level of activity by submitting to the

executive director a completed ECT-3 Form, Level of Activity Certification, along with any supporting information such as usage records, testing or monitoring data, and production records.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 4: DISCRETE EMISSION CREDIT BANKING AND TRADING

§§101.370 - 101.374

STATUTORY AUTHORITY

The new sections are adopted under Texas Health and Safety Code, TCAA, §382.011, which authorizes the commission to control the quality of the state's air; §382.012, which authorizes the commission to develop a plan for control of the state's air; §382.017, which provides the commission the authority to adopt rules consistent with the policy and purposes of the TCAA, and United States Code, §7410(a)(2)(A), which requires SIPs to include enforceable emission limitations and other control measures or techniques, including economic incentives such as fees, marketable permits, and auction of emission rights.

§101.370. Definitions.

The following words and terms, when used in this division, shall have the following meanings, unless the context clearly indicates otherwise.

(1) Activity - The amount of activity at a source measured in terms of production, use, raw materials input, vehicle miles traveled, or other similar units that have a direct correlation with the economic output and emission rate of the source (i.e., mass emitted per unit of activity).

(2) Actual emissions - Shall equal the total emissions during the selected time period, using the unit's actual daily operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(3) Applicable emission point - The emission point that is either generating an emission reduction or using a discrete emission credit.

(4) Area source - Any source included in the agency emissions inventory under the area source category.

(5) Baseline - Emissions that occur prior to an emission reduction strategy, considering all limitations required by applicable state and federal regulations. The baseline may not exceed the most recent level of emissions reported in the emissions inventory used for state implementation plan (SIP) determinations. For reduction strategies that exceed 12 months, the baseline is established after the first year of generation and is fixed for the life of the strategy. A new baseline is established for each emission reduction strategy.

(6) Baseline activity - The source's actual level of activity based on the unit's actual daily operating hours, production rates, or types of materials processed, stored, or combusted averaged over any consecutive two calendar year period including and following the most recent year of emissions inventory used for SIP determinations or subsequent year(s) which precede the emission reduction strategy or credit use period. For sources in existence less than two years, a shorter time period not less than 12 months may be considered by

the executive director.

(7) Baseline emission rate - The source's rate of emissions per unit of activity during the baseline activity period.

(8) Baseline emissions - The source's total actual emissions based on the baseline activity and baseline emission rate.

(9) Certified - Any emission reduction that is determined to be creditable upon review and approval by the executive director.

(10) Curtailment - A temporary or partial reduction in activity level at any facility or mobile source.

(11) Discrete emission credit - An emission reduction generated over a discrete period of time, and measured in tons. A creditable emission credit such as a discrete emission reduction credit (DERC) or mobile discrete emission reduction credit (MDERC).

(12) Discrete emission reduction credit (DERC) - A creditable emission reduction which is created during a generation period, quantified after the period in which emissions reductions are made, and expressed in tons.

(13) Emission reduction - An actual reduction of emissions from a stationary or mobile source.

(14) Emission reduction strategy - The method implemented to reduce the source's emissions beyond that required by state or federal law, regulation, or agreed order.

(15) Generation period - The discrete period of time, not exceeding 12 months, over which a DERC is created.

(16) Generator - The owner or operator of a source that creates an emission reduction.

(17) Level of activity - The amount of activity at a source measured in terms of production, fuel use, raw materials input, or other similar units that have a direct correlation with the economic output and emission rate of the source (i.e., mass emitted per unit of activity).

(18) Mobile discrete emission reduction credit (MDERC or discrete mobile credit) - A credit that is surplus, generated by a mobile source strategy. It is a creditable emission reduction that is created during a generation period, quantified after the period in which emissions reductions are made, and expressed in tons.

(19) Mobile emissions baseline - Mobile emissions that occur prior to a mobile emission reduction strategy, considering all limitations required by applicable state and federal regulations. A valid mobile

emission baseline can be calculated by either using measured emissions of an appropriately sized sample of the participating mobile sources using an approved United States Environmental Protection Agency (EPA) test procedure or by using estimated emissions of the participating mobile sources using the most recent edition of EPA's on-road or non-road mobile emissions factor models, or other model as applicable. To ensure that mobile credits are surplus, mobile source baseline emissions estimates for each year of the proposed mobile source control program must be the same as, or lower than, those used, or proposed to be used, in the SIP in which the control program is proposed.

(20) Mobile source - On-road (highway) vehicles (e.g., automobiles, trucks, and motorcycles) and non-road vehicles (e.g., trains, airplanes, agricultural equipments, industrial equipment, construction vehicles, off-road motorcycles, and marine vessels).

(21) Mobile source baseline activity - The mobile source's level of activity during the applicable mobile source baseline year.

(22) Mobile source baseline emissions - The mobile source's total emissions based on the product of mobile source baseline activity and mobile source baseline emission rate.

(23) Most stringent allowable emissions rate - The emissions rate of a source, considering all limitations required by applicable local, state, and federal regulations.

(24) Ozone season - The portion of the year when ozone monitoring is federally required to occur in a specific geographic area.

(25) Permanent - An emission reduction that is long-lasting and unchanging for the remaining life of the source.

(26) Protocol - A replicable and workable method of estimating emission rates or activity levels used to calculate the amount of emission reduction generated or credits required for stationary or mobile sources.

(27) Quantifiable - An emission reduction that can be measured or estimated with confidence using replicable techniques.

(28) Real reduction - A reduction in which actual emissions are reduced.

(29) Source - As defined in §101.1 of this title (relating to Definitions).

(30) Shutdown - The permanent cessation of an activity producing emissions at a facility.

(31) Strategy activity - The source's level of activity during the DERC generation period.

(32) Strategy emission rate - The source's level of activity during the DERC generation period.

(33) Surplus - An emission reduction that is not otherwise required of a source by a state or federal law, regulation, or agreed order.

(34) Use period - The period of time over which the user source applies discrete emission credits to an applicable emission reduction requirement.

(35) User - The owner or operator of a source that acquires and uses discrete emission credits to meet a regulatory requirement, demonstrate compliance, or offset an emission increase.

(36) Use strategy - The compliance requirement for which discrete emission credits are being used.

§101.371. Purpose.

The purpose of this division is to allow the operator of a source to generate discrete emission credits by reducing emissions beyond the level required by any local, state, and federal regulation, and to allow the operator of another source to use these credits. Participation under this division is strictly voluntary.

§101.372. General Provisions

(a) Applicable pollutants. Reductions of volatile organic compounds (VOCs), nitrogen oxides (NO<sub>x</sub>), carbon (CO), sulfur dioxide (SO<sub>2</sub>), and particulates with an aerodynamic diameter of less than or equal to a nominal ten microns (PM<sub>10</sub>) may qualify as discrete emission credits as appropriate. Reductions of other criteria pollutants are not creditable. Reductions of one pollutant may not be used to meet the reduction requirements for another pollutant, except at such time as modeling demonstrates that one may be substituted for another or as approved

by the executive director, and the United States Environmental Protection Agency (EPA).

(b) Discrete emission credit requirements.

(1) Discrete emission reduction credit (DERC) - To be creditable as a DERC, an emission reduction must be real, quantifiable, and surplus at the time the discrete emission credit is generated. The creditable reduction must have occurred after the most recent year of emissions inventory used for state implementation plan (SIP) determinations for all applicable pollutants and the source's annual emissions prior to the discrete emission credit application must have been reported or represented in the emissions inventory used for SIP determinations.

(2) Mobile discrete emission reduction credit (MDERC) - To be creditable as an MDERC, an emission reduction must be quantifiable, real, and surplus. The discrete emission credit must be surplus at the time it is created, as well as when it is used. The creditable reduction must have occurred after the most recent year of emissions inventory used for SIP determinations for all applicable pollutants, the mobile source's emissions must have been represented in the emissions inventory used for SIP determinations, and the mobile sources are in the attainment demonstration baseline. If a mobile reduction is implemented that is not in the baseline for emissions, this would not constitute an emission reduction.

(3) Emission reductions from a source which are certified as discrete emission credits under this division cannot be recertified in whole or in part as emission credits under another division within this subchapter.

(c) Eligible sources include the following:

(1) stationary sources (including area sources);

(2) mobile sources; or

(3) any stationary source (including area sources) or mobile source associated with actions by federal agencies under §101.30 of this title (relating to Conformity of General Federal Actions to State Implementation Plans).

(d) Life of a discrete emission credit. A discrete emission credit is available for use after the notice of generation, DC-1 Form, has been received and deemed creditable by the commission registry in accordance with subsection (h) of this section, and may be used anytime thereafter.

(e) Geographic scope. Emission reductions generated in the State of Texas may be creditable and used in the state with the following limitations.

(1) VOC and NO<sub>x</sub> discrete emission credits generated in an ozone attainment area may be used in any county or portion of a county designated as attainment or unclassified, but may not be used in an ozone nonattainment area.

(2) VOC and NO<sub>x</sub> discrete emission credits generated in an ozone nonattainment area may be

used either in the same ozone nonattainment area in which they were generated, or in any county or portion of a county designated as attainment or unclassified.

(3) VOC and NO<sub>x</sub> discrete emission credits generated in an ozone nonattainment area may not be used in any other ozone nonattainment area, except as provided in this subsection.

(4) CO, SO<sub>2</sub>, and PM<sub>10</sub> discrete emission credits must be used in the same metropolitan statistical area in which the reduction was generated.

(5) VOC and NO<sub>x</sub> discrete emission credits generated in other counties, states, or nations can be used in any attainment or nonattainment county provided a demonstration has been made and approved by the executive director and the EPA to show that the emission reductions achieved in the other county, state, or nation improves the air quality in the county where the credit is being used.

(f) Trading discontinuation. The trading of discrete emission credits may be discontinued by the executive director in whole or in part and in any manner, with commission approval, as a remedy for problems resulting from trading in a localized area of concern.

(g) Ozone season. In areas having an ozone season of less than 12 months, VOC and NO<sub>x</sub> discrete emission credits generated outside the ozone season may not be used during the ozone season.

(h) The registry. All required notices of discrete emission credit generators and users must be submitted

to the registry. A notice submitted by a generator or user will be reviewed for credibility and when deemed certified, posted to the registry. The registry will assign a unique number to each ton of emission reductions generated. The registry will maintain current listings of all credits available or used for each ozone nonattainment area. One combined listing for all the counties or portions of counties designated as attainment or unclassified will be provided by the registry.

(i) Recordkeeping. The generator must maintain a copy of all notices and backup information submitted to the registry for a minimum of five years, following the completion of the generation period. The user must maintain a copy of all notices and backup information submitted to the registry for a minimum of five years, following the completion of the use period. Other relevant reference material or raw data must also be maintained on-site by the participating sources. The user must also maintain a copy of the generator's notice and backup information for a minimum of five years after the use is completed. The records shall include, but not necessarily be limited to:

(1) the name, emission point number (EPN), and facility identification number (FIN) of each unit using discrete emission credits;

(2) the amount of discrete emission credits being used by each unit;

(3) the specific number, name, or other identification of discrete emission credits used for each unit.

(j) Public information. All information submitted with a notice or report regarding the nature and quantity of emissions associated with the use or generation of discrete emission credits is public information and may not be submitted as confidential. Any claim of confidentiality for this type of material or failure to submit all information may result in the rejection of the emission reduction. All non-confidential notices and information regarding the generation, use, and availability of discrete emission credits may be obtained from the registry.

(k) Authorization to emit. A discrete emission credit created under this division is a limited authorization to emit the specified pollutants in accordance with the provisions of this section, the Federal Clean Air Act, and the Texas Clean Air Act, as well as regulations promulgated thereunder. A discrete emission credit does not constitute a property right. Nothing in this division should be construed to limit the authority of the commission or the United States Environmental Protection Agency to terminate or limit such authorization.

(l) Program participation. The executive director has the authority to prohibit a company from participating in discrete emission credit trading either as a generator or user, if the executive director determines that the company has violated the requirements of the program or abused the privileges provided by the program.

§101.373. Protocols.

(a) All discrete emission credit source categories must use an United States Environmental Protection Agency (EPA) approved protocol if one exists for the applicable source. If the source wants to deviate from an EPA approved protocol, EPA approval is required before the protocol can be used.

(b) If an EPA approved protocol does not exist, the amount of discrete emission credits in tons will be determined and certified based on actual monitoring results, when available, or otherwise calculated using good engineering practices, including calculation methodologies in general use in new source review (NSR) permitting. The source must collect relevant data sufficient to characterize the process emissions of the affected pollutant and the process activity level for all representative phases of source operation during the period under which discrete emission credits are created or used.

(c) Discrete emission credit generation.

(1) Discrete emission reduction credits (DERCs) may be generated by any strategy that reduces a source's emission rate below its baseline and is approved by the executive director, except for the following:

(A) temporary curtailment of an activity at a source;

(B) modification or discontinuation of any activity that is otherwise in violation of a federal, state, or local law;

(C) emissions reductions required to comply with any provision under Title I of the Federal Clean Air Act (FCAA) regarding tropospheric ozone, or Title IV of the FCAA regarding acid rain;

(D) emission reductions of hazardous air pollutants, as defined in the FCAA, §112, from application of a standard promulgated under FCAA, §112;

(E) emission reductions which have occurred as a result of transferring the emissions to another source;

(F) emission reductions credited or used under any other emissions trading program;

(G) emission reductions occurring at a source which received an alternative emission limitation to meet a state reasonably available control technology requirement, except to the extent that the emissions are reduced below the level that would have been required had the alternative emission limitation not been issued; and

(H) emission reductions at a facility with a flexible permit, unless the reductions are made permanent and enforceable or the generator can demonstrate that the emission reductions were not used to satisfy the conditions for the facilities under the flexible permit.

(2) A mobile discrete emission reduction credit (MDERC) may be generated by any mobile source emission reduction strategy that creates actual mobile source emission reductions under this rule, and is subject to the approval of the commission.

(d) Discrete emission credits generation calculation.

(1) DERCs, except for shutdowns, are calculated as follows.

Figure: 30 TAC §101.373(d)(1)

Figure: 30 TAC §101.373(d)(1)

If  $SA > BA$ , then

$$(BER * BA) - (SER * SA) = \text{reduction generated}$$

Else if  $SA < BA$ , then:

$$(BER * BA) - (SER * BA) = \text{reduction generated}$$

where:

BER = the lower of the baseline emission rate or the most stringent emission rate

BA = baseline activity

SER = emission reduction strategy emission rate

SA = emission reduction strategy activity

(A) The amount of DERCs generated must be rounded down to the nearest ton.

(B) For shutdown emission reduction strategies, the quantity of emission reduction generated is equivalent to the baseline emissions.

(C) The generation period for a shutdown is five years. Shutdown DERCs must be generated and noticed to the registry on an annual basis.

(D) If a source's emissions exceed its allowable emission limit, the amount of emissions

exceeding the limit may not be certified as DERCS.

(2) An MDERC may be calculated from the annual difference between the mobile source emissions baseline and the actual emissions level after the MDERC strategy has been put in place. The MDERC must be based on actual in-use emissions of the replacement or substitute mobile source. Emission baselines for quantifying MDERCs should include the following information and data as appropriate, but not be limited to:

(A) the emission standard to which the mobile source is subject or emission performance to which the mobile source is certified;

(B) the measured in-use emissions levels per unit of use from all significant mobile source emissions sources;

(C) the number of mobile sources in the participating group;

(D) the type or types of mobile sources by model year; and

(E) the actual activity level, hours of operation or miles traveled by type, and model year.

(e) Registration and certification.

(1) A notice of generation and generator certification (DEC-1 Form), must be submitted to the executive director no later than 90 days after the discrete emission reduction strategy activity has been completed, or no later than 90 days after the completion of the first 12 months of generation, if the generation period exceeds 12 months, whichever is sooner. Submission of the DEC-1 Form should continue every 12 months thereafter for each subsequent year of generation.

(2) In the notice for a stationary source, including area source, the generator must include the following information for each pollutant reduced at each applicable emission point:

(A) the name, address, county, telephone number, contact person, permit or standard exemption numbers, account number of the generator, and the unique facility identification number (FIN) and emission point number (EPN) of the applicable emission points;

(B) the name of the owner and/or operator of the generator source;

(C) the generation period;

(D) a complete description of the generation activity;

(E) for shutdown emission reduction strategies, an explanation as to whether production shifted from the shut down facility to another facility in the same nonattainment area;

(F) the amount of emission credits generated;

(G) for volatile organic compound (VOC) reductions, a list of the specific compounds reduced;

(H) the baseline emission activity, baseline emission rate, emission reduction strategy emission rate, emission reduction strategy activity, emissions inventory data from the most recent year of emissions inventory used for state implementation plan determinations and emissions inventory data for the two consecutive years used to determine the baseline activity for each applicable pollutant and emission point;

(I) the most stringent emission rate for the applicable emission point, considering all the local, state, and federal applicable regulatory requirements;

(J) a complete description of the protocol used to calculate the emission reduction generated;

(K) the actual calculations performed by the generator to determine the amount of discrete emission credits generated; and

(L) a statement that the emission reductions on which the emission credits DERCs are based are real, surplus, and not based on an emission reduction strategy that is prohibited.

(3) The notice for a mobile source generator must include the following information to verify the credit calculation, but is not limited to:

(A) the name, address, county, telephone number, and contact person;

(B) the name of the owner and/or operator of the generator source;

(C) the date of the reduction;

(D) a complete description of the generation activity;

(E) the amount of discrete mobile source emission credits generated;

(F) the mobile source baseline emission activity, mobile source baseline emission rate, mobile source baseline total emissions, and the mobile source strategy;

(G) a complete description of the protocol used to calculate the discrete mobile source emission reduction generated;

(H) the actual calculations performed by the generator to determine the amount of discrete mobile source emission credits generated; and

(l) a statement that the discrete mobile source emission reductions on which the MDERCs are based are real, surplus, and not based on a mobile source emission reduction strategy that is prohibited.

(4) Registrations will be reviewed in order to determine the credibility of the reductions. Reductions determined to be creditable will be certified by the executive director.

(5) The applicant will be notified in writing if the executive director denies the notification. The applicant may submit a revised notification at any time.

(f) Discrete emission credit practices.

(1) The amount of DERCs, in tons, will be determined and certified based on actual monitoring results, when available, or otherwise calculated using good engineering practices, including calculation methodologies in general use in NSR permitting. The source must collect relevant data sufficient to characterize the process emissions of the affected pollutant and the process activity level for all representative phases of source operation during the period under which DERCs are created or used.

(2) The amount of MDERCs will be quantified in tons. MDERCs will be determined and certified based on: EPA methodologies, when available; actual monitoring results, when available; otherwise calculated using the most current EPA MOBILE model; or otherwise calculated using creditable emission reduction measurement or estimation methodologies which satisfactorily address the analytical uncertainties of mobile

source emissions reduction strategies. The generator must collect relevant data sufficient to characterize the process emissions of the affected pollutant and the process activity level for all representative phases of source operation during the period under which the MDERCs are created or used.

(3) All discrete emission credits are deposited in the registry and reported as available credits until they are used, withdrawn, or expire.

(4) Compliance burden and enforcement.

(A) The generator is responsible for assuring that the discrete emission credits generated are certified.

(B) The user is responsible for ensuring that discrete emission credits which currently reside in the registry and are not certified are certified prior to use.

(5) Discrete emission credits may be used if the following requirements are met.

(A) The user must have ownership of a sufficient amount of discrete emission credits before the use period for which the specific discrete emission credits are to be used.

(B) The user must hold sufficient discrete emission credits to cover the user's compliance obligation at all times.

(C) The user shall acquire additional discrete emission credits during the use period if the user determines that he does not possess enough discrete emission credits to cover the entire use period. The user must acquire additional credits as allowed under this section prior to the shortfall, or the user will be in violation of this section.

(D) Source operators may acquire and use only discrete emission credits listed on the registry.

(6) With the exception of uses prohibited in paragraph (7) of this subsection or strictly prohibited in other rules or regulations, discrete emission credits may be used to meet or demonstrate compliance with any mobile or stationary regulatory requirement including the following:

(A) to exceed any allowable emission level, if the following conditions are met:

(i) in ozone nonattainment areas, permitted facilities may use discrete emission credits to exceed permit allowables by no more than 25 tons for nitrogen oxides (NO<sub>x</sub>) or five tons for VOC in a 12-month period as approved by the executive director. This use is limited to one exceedance up to 12 months, within any 24-month period per use strategy. The use must extend beyond a 24-hour period; or

(ii) at permitted facilities in counties or portions of counties designated as attainment or unclassified, discrete emission credits may be used to exceed permit allowables by values not to exceed the prevention of significant deterioration significance levels as provided in 40 Code of Federal

Regulations, §52.21(b)(23), as approved by the executive director prior to use. This use is limited to one exceedance up to 12 months, within any 24-month period per use strategy. The user must demonstrate that there will be no adverse impacts from the use of discrete emission credits at the levels requested;

(B) as NSR offsets if the following requirements are met:

(i) the user must obtain the executive director's approval prior to the use of specific discrete emission credits to cover, at a minimum, one year of operation of the new or modified source in the NSR permit;

(ii) the NSR permit must contain an enforceable requirement that the source obtain at least one additional year of offsets before continuing operation in each subsequent year;

(C) compliance with NO<sub>x</sub> cap and trade requirements as provided in §101.356(d) of this title (relating to Allowance Banking and Trading).

(D) compliance with §115.950 of this title (relating to Emissions Trading) and §117.570 of this title (relating to Use of Emission Credits for Compliance), as allowed.

(7) A discrete emission credit, under this division, may not be used:

(A) before it has been acquired by the user;

(B) for netting to avoid the applicability of federal and state NSR requirements;

(C) to meet FCAA requirements for:

(i) new source performance standards under FCAA, §111;

(ii) lowest achievable emission rate standards under FCAA, §173(a)(2);

(iii) best available control technology standards under FCAA, §165(a)(4);

(iv) hazardous air pollutants standards under FCAA, §112, including the requirements for maximum achievable control technology;

(v) standards for solid waste combustion under FCAA, §129;

(vi) requirements for a vehicle inspection and maintenance program under FCAA, §182(b)(4) or (c)(3);

(vii) ozone control standards set under FCAA, §183(e) and (f);

(viii) clean-fueled vehicle requirements under FCAA, §246;

- (ix) motor vehicle emissions standards under FCAA, §202;
  - (x) standards for nonroad vehicles under FCAA, §213;
  - (xi) requirements for reformulated gasoline under FCAA, §211(k); or
  - (xii) requirements for Reid vapor pressure standards under FCAA, §211(h) and
- (i).
- (D) to allow an emissions increase of an air contaminant that exceeds the limitations of §106.261(3) or (4) or §106.262(3) of this title (relating to Facilities (Emission Limitations) and Facilities (Emission and Distance Limitations)) except as approved by the executive director;
  - (E) to authorize a source whose emissions are enforceably limited to below applicable major source threshold levels, as defined in §122.10 of this title (relating to General Definitions), to operate with actual emissions above those levels without triggering applicable requirements that would otherwise be triggered by such major source status;
  - (F) to exceed an allowable emission level where the exceedance would cause or contribute to a condition of air pollution as determined by the executive director.
- (8) Calculation of discrete emission credits.

(A) A user may use the following equation to calculate the amount of discrete emission credits necessary to comply with §117.223 of this title (relating to Source Cap) instead of the equations in §117.223(b)(1) and (2) of this title.

Figure: 30 TAC §101.373(f)(8)(A)

Figure: 30 TAC §101.373(f)(8)(A)

$$\text{New 30-day rolling average emission limit (lb/day)} = \sum_{i=1}^N \left[ (H_i \times R_i) + \left( \frac{DEC_i \times 2000}{d} \right) \right]$$

Where:

$R_i$  in lb/MMBtu, is defined as in §117.223(b)(1) of this title

$i$  = each emission unit in the source cap

$N$  = the total number of emission units in the source cap

$H_i$  = actual daily heat input, in MMBtu per day, as calculated according to §117.223(b)(1) of this title

$DEC_i$  = DEC used for each unit, in tons per year (for ERCs or MERCs) or tons (for DERCs), generated in accordance with subsection (b) of this section. If  $DEC_i$  is from a unit not subject to the emission specifications of §117.105 or §117.205 of this title, this term becomes  $DEC_i/F$ , where  $F$  is the offset ratio for the ozone nonattainment area where the unit is located (e.g. 1.2 for Beaumont/Port Arthur and 1.3 for Houston/Galveston).

$d$  = the number of days in the use period

and

$$\text{New maximum daily emission limit (lb/day)} = \sum_{i=1}^N \left[ (H_M \times R_i) + \left( \frac{DEC_i \times 2000}{d} \right) \right]$$

Where:

$i$  and  $N$  are defined as in the first equation in this paragraph

$R_i$  in lb/MMBtu, is defined as in §117.223(b)(1) of this title

$H_M$  = the maximum daily heat input, in MMBtu/day, as defined in §117.223(b)(2) of this title.

$d$  = the number of days in the use period

(B) Otherwise, the amount of discrete emission credits needed to demonstrate compliance or meet a regulatory requirement is calculated as follows.

Figure: 30 TAC §101.373(f)(8)(B)

Figure: 30 TAC §101.373(f)(8)(B)

$$(PLA * PER) - (ALA * AER) = \text{discrete emission credits needed}$$

where

PLA = proposed level of activity

PER = proposed emission rate

ALA = actual level of activity

AER = actual emission rate

(C) The amount of discrete emission credits needed must be rounded up to the nearest ton.

(D) The user must possess 10% more discrete emission credits than are needed, as calculated in subparagraph (B) of this paragraph, to ensure that the source's environmental contribution retirement obligation will be met.

(E) If the amount of discrete emission credits needed to meet a regulatory requirement or to demonstrate compliance is greater than ten tons, an additional 5.0% of the discrete emission credits needed, as calculated in subparagraph (B) of this paragraph, must be acquired to ensure that sufficient discrete emission credits are available to the user with an adequate compliance margin.

(F) The amount of discrete emission credits needed for NSR offsets equals the quantity of tons needed to achieve the maximum allowable emission level set in the user's NSR permit. The user must also purchase and retire enough discrete emission credits to meet the offset ratio requirement in the user's ozone nonattainment area. The user must purchase and retire either the environmental contribution of 10% or the offset ratio, whichever is higher.

(G) Discrete emission credits that are not used during the use period are surplus and remain available for transfer or use by the holder. In addition, any portion of the calculated environmental

contribution not attributed to actual use is also available.

(g) Notice of intent to use. A notice of intent to use, DEC-2 Form, must be submitted to the executive director in accordance with the following requirements:

(1) discrete emission credits may be used only after the user has submitted the notice to the registry;

(2) the notice must be submitted at least 45 days prior to the first day of the use period if the generator is a stationary source, and 90 days if the generator is a mobile source, and every 12 months thereafter for each subsequent year if the use period exceeds 12 months;

(3) a copy of the notice must also be sent to the federal land manager 30 days prior to use if the user is located within 100 kilometers of a Class I area;

(4) the notice for a stationary or area source user must include the following information for each use:

(A) the name, address, county, telephone number, contact person, permit or standard exemption numbers, and account number of the user, and the unique FIN and EPN identification numbers for each emission point;

(B) the name of the owner and/or operator of the user source;

(C) the applicable state and federal requirements that the discrete emission credits will be used to comply with and the intended use period;

(D) the amount of discrete emission credits needed;

(E) the baseline emission rate, activity level, and total emissions for the applicable emission points;

(F) the actual emission rate, activity level, and total emissions for the applicable emission points;

(G) the most stringent emission rate and the most stringent emission level for the applicable emission points, considering all applicable regulatory requirements;

(H) a complete description of the protocol used to calculate the amount of discrete emission credits needed;

(I) the actual calculations performed by the user to determine the amount discrete emission credits needed;

(J) the date on which the discrete emission credits were acquired or will be acquired;

(K) the discrete emission credit generator and the serial numbers of the discrete emission credits acquired or to be acquired;

(L) the price of the discrete emission credits acquired or the expected price of the discrete emission credits to be acquired; and

(M) a statement that due diligence was taken to verify that the discrete emission credits were not previously used, that the discrete emission credits were not generated as a result of actions prohibited under this regulation, and that the discrete emission credits will not be used in a manner prohibited under this regulation.

(5) the notice for a mobile source user must include the following information:

(A) the name, address, county, telephone number, and contact person;

(B) the name of the owner and/or operator of the user source;

(C) the applicable state and federal requirements that the discrete emission credits will be used to comply with and the intended use period;

(D) the amount of discrete emission credits needed;

(E) the mobile source baseline emission rate, mobile source activity level, and total mobile source emissions for the applicable mobile sources;

(F) the actual mobile source emission rate, activity level, and total emissions for the applicable mobile source;

(G) the most stringent mobile source emission rate and the most stringent mobile source emission level for the applicable emission points, considering all applicable regulatory requirements;

(H) a complete description of the protocol used to calculate the amount of MDERCs needed;

(I) the actual calculations performed by the user to determine the amount MDERCs needed;

(J) the date on which the MDERCs were acquired or will be acquired;

(K) the MDERC generator and the serial numbers of the MDERCs acquired or to be acquired;

(L) the price of the MDERCs acquired or the expected price of the MDERCs to be acquired;

(M) a statement that due diligence was taken to verify that the MDERCs DERCs were not previously used, that the MDERCs were not generated as a result of actions prohibited under this regulation, and that the MDERCs will not be used in a manner prohibited under this regulation; and

(N) a certification of use, which must contain certification under penalty of law by a responsible official of the user source of truth, accuracy, and completeness. This certification must state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete;

(6) a user may submit a notice late in the case of an emergency, but the notice must be submitted before the discrete emission credits can be used. The user must include a complete description of the emergency situation in the notice of intent to use. All other notices submitted less than 45 days prior, or 90 days prior for a mobile source, to use will be considered late and in violation;

(7) the user is responsible for determining the credits it will purchase and notifying the executive director of the selected generating source in the notice of intent to use. If the generator's credits are rejected or the notice of generation is incomplete, the use of discrete emission credits by the user may be delayed by the executive director. The user cannot use any discrete emission credits that have not been certified by the executive director. The executive director may reject the use of discrete emission credits by a source if the credit

and use cannot be demonstrated to meet the requirements of this section.

(A) Actual discrete emission credits use.

(i) The user shall calculate:

(I) the amount of discrete emission credits used, including the amount of discrete emission credits retired to cover the environmental contribution associated with actual use; and

(II) the amount of discrete emission credits not used, including the amount of excess discrete emission credits that were purchased to cover the environmental contribution but not associated with the actual use, and available for future use.

(ii) A report of use, DEC-3 Form, must be submitted to the registry in accordance with the following requirements:

(I) a report of use must be submitted within 90 days after the end of the use period;

(II) the report must be submitted within 90 days of the conclusion of each 12-month use period, if applicable;

(III) the report is to be used as the mechanism to update or amend the notice of intent to use and must include any information different from that reported in the notice of intent to use, including, but not limited to, the following items:

(-a) purchase price of the discrete emission credits obtained prior to the current use period;

(-b) the actual amount of discrete emission credits possessed during the use period;

(-c) the actual emissions during the use period for VOC and NO<sub>x</sub>;

(-d) the actual amount of discrete emission credits used;

(-e) the actual environmental contribution; and

(-f) the amount of discrete emission credits available for future use.

(iii) The user is in violation of this section if the user submits the report of use later than the allowed 90 days following the conclusion of the use period.

(iv) The registry shall not contain proprietary information.

(B) Compliance burden and enforcement.

(i) The user is responsible for assuring that a sufficient quantity of discrete emission credits is acquired to cover the applicable source's emissions for the entire use period. The user should ensure that the credits are real, surplus, and properly quantified discrete emission credits for purchase.

(ii) The user is in violation of this section if the user does not possess enough discrete emission credits to cover the credit need for the use period. If the user possesses an insufficient quantity of discrete emission credits to cover its compliance need, the user will be out of compliance for the entire use period, unless the user can demonstrate otherwise. Each day the user is out of compliance may be considered a violation.

(iii) Users may not transfer their compliance burden and legal responsibilities to a third party participant. Third party participants may only act in an advisory capacity to the user.

(C) Discrete emission credits are freely transferable in whole or in part, and may be traded or sold to a new owner anytime before the expiration date of the discrete emission credit. The Emissions Banking and Trading Program must be notified by means of an DC-4 Form prior to the transfer. The executive director will issue a letter to the discrete emission credit purchaser reflecting the discrete emission credits purchased by the new owner, and a letter to the discrete emission credit seller showing any remaining discrete

emission credits available to the original owner. Discrete emission credits may be transferrable only after the executive director grants approval of the transaction.

§101.374. Program Audits.

(a) No later than three years after the effective date of this division section, and every three years thereafter, the executive director will audit this program.

(b) The audit will evaluate the timing of credit generation and use, the impact of the program on the state's attainment demonstration and the emissions of hazardous air pollutants, the availability and cost of credits, compliance by the participants, and any other elements the executive director may choose to include.

(c) The executive director will recommend measures to remedy any problems identified in the audit. The trading of discrete emission credits may be discontinued by the executive director in part or in whole and in any manner, with commission approval, as a remedy for problems identified in the program audit.

(d) The audit data and results will be completed and submitted to the United States Environmental Protection Agency and made available for public inspection within six months after the audit begins.