The Texas Natural Resource Conservation Commission (commission) adopts amendments to §101.1, Definitions, §101.350, Definitions, §101.352, General Provisions, §101,353, Allocation of Allowances, §101.354, Allowance Deductions, §101.356, Allowance Banking and Trading, §101.360, Level of Activity Certification, §101.370, Definitions; §101.372, General Provisions; §101.373, Protocols; and new §101.363, Program Audits and Reports. The amended and new sections will be submitted to the United States Environmental Protection Agency (EPA) as revisions to the state implementation plan (SIP). Sections 101.1, 101.350, 101.353, 101.354, 101.356, 101.360, and 101.373 are adopted *with changes* to the proposed text as published in the June 15, 2001 issue of the *Texas Register* (26 TexReg 4380). Sections 101.352, 101.363, 101.370, and 101.372, are adopted *without changes* and will not be republished.

BACKGROUND AND SUMMARY OF THE FACTUAL BASIS FOR THE ADOPTED RULES

On December 6, 2000, the commission adopted amendments to Chapter 101, General Air Quality Rules, that established a program for the trading of nitrogen oxides (NO_x) emission allowances in the Houston/Galveston (HGA) ozone nonattainment area. The trading of these allowances takes place under an area-wide cap on NO_x emissions established under the SIP in order to meet the national ambient air quality standard (NAAQS) for ozone. Each allowance is equal to the emission of one ton of NO_x per year. The program requires incremental reductions in NO_x emissions every year beginning in calendar year 2003 and continuing through calendar year 2007, when the full reductions of the program are to be achieved.

HGA is a severe ozone nonattainment area. When fully implemented the program will place stringent area-wide limits on the emission of NO_x from stationary sources, and the trading program is intended to provide as much flexibility in meeting these limits as possible. Following adoption of the program, the agency continued discussions to determine the most effective way to implement the reduction and trading programs as smoothly and economically as possible while meeting emission reduction goals. The agency also continues to evaluate its own procedures used to implement the program for efficiency and effectiveness. These amendments are the result of these discussions and evaluations and also would correct typographic errors, outdated rule references and citations.

SECTION BY SECTION DISCUSSION

The amendments to §101.1 remove outdated references to §101.29, Emission Banking and Trading, which was repealed on December 6, 2000, and replace them with references to Chapter 101, Subchapter H, Division 1. Section 101.1 is changed from proposal to make minor editorial changes for clarity.

The amendments to §101.350 change the definition of "level of activity" to apply to facilities instead of sources. The amendments also remove the requirement that the units used to determine level of activity have a direct correlation with the economic output and emission rate of the source. The level of activity is only one factor used to determine allowance allocation and is not an emission rate. These changes are adopted to ensure the use of consistent terms and to clarify the current interpretation of the defined term. In response to a comment that the commission clarify the rule concerning level of activity certification for existing facilities, the commission is adding a definition of "existing facility." A description of what would be considered an existing facility was stated in the body of the rule language for the proposal. By

including the term in the definitions the commission is able to reduce the volume of rule language and simplify the organization of §101.360. After consideration of another public comment, the commission is including a definition of "adjustment period" to address that period of time from first start-up to establishment of normal operating conditions for a new facility. All definitions have been renumbered to accommodate the two new definitions.

The amendments to §101.352 specify that only an owner or operator of a facility may certify emission reductions from the facility as emission reduction credits (ERCs), if approved by the executive director and the owner or operator meets all the requirements of Chapter 101, Subchapter H, Division 1, Emission Credit Banking and Trading. This language clarifies who may apply for certification.

In consideration of public comments, the commission is modifying the method of determining level of activity for existing facilities not in operation prior to January 1, 1997. This language is found in the equation variables located in the figure in §101.353(a), variable (2)(C). Owners or operators of facilities that are in this category may average any two consecutive years of activity within the first five years of operation. Under extenuating circumstances, the owner or operator may petition the executive director for an additional two calendar years. A principal goal of the cap and trade program is to provide incentive to make emissions reductions. The commission believes that owners or operators who install and operate cleaner equipment should have the opportunity to fully integrate that equipment at a realistic level of operation that is representative of the demands that will be placed on the equipment. The commission believes that a five-year period to establish a baseline will allow this integration.

The amendments to §101.353(a) correct typographical errors in the variables of the allocation equation and replace the term "source" with "facility." The commission used language in several places in the section that described an existing facility. In order to reduce the amount of rule language and better organize the section, the commission is replacing this language with the term "existing facility" which is now defined in §101.350. In response to comments, the commission is including language within the section that allows for a 180-day adjustment period in order to establish facility operating characteristics before the determination of baseline activity. Also in response to comments, the commission is modifying the emission factor variables used to determine the beginning allowances of a facility. As a result of this modification, the level of activity is either determined through the calculated emission factor or the emission specification for attainment demonstration (ESAD), whichever is higher. This change will allow facilities that operate at emission levels lower than those required under the SIP to receive allowances based on their ESAD rate and not be penalized for operating a cleaner facility. Because the attainment demonstration was based on the modeled ESAD rates, any allowance allocated based on the difference between actual emission rates and the ESAD will not jeopardize the demonstration because available allowances will not exceed the ESAD based cap. Based on the stringency of ESAD rates and the expense of controlling emissions below ESAD rates, the commission has concluded that a relatively few, if any, facilities will receive allowances in excess of their actual emissions. The commission has corrected the designation of emission factors, which were incorrectly labeled for years 1998 and 1999, in the equation in variable (A)(2) located in the figure in subsection (a) as a response to public comment.

The amendments to the figure in §101.353(a), variable (3)(A), adjust the factors for allocation of allowances to boilers, auxiliary stream boilers, and stationary gas turbines within an electric power

generating system and add a more complete reference to 30 TAC §117.10(13)(A)(iii), Definitions. The commission is also adding language to include duct burners in turbine exhaust ducts as equipment within an electric power exhaust duct for consistency with 30 TAC §117.106(c)(3), Emission Specifications for Attainment Demonstrations. The adjustment would result in the allocation of allowances consistent with the following: 44% reduction beginning April 1, 2003; 88% reduction beginning April 1, 2004; and 90% reduction of NO_x emissions from these facilities by April 1, 2007. These reduction percentages are based on the baseline emissions as reported in the 1997 emissions inventory. The commission's analysis of the air quality situation in the HGA area indicates that this reduction, along with reductions in NO_x from other sources and from grandfathered facilities in east Texas, will result in a fully approvable attainment demonstration which shows attainment in the HGA area by November 2007.

The commission also adopts a new set of factors in a new variable (3)(B) for boilers, auxiliary steam boilers, and stationary gas turbines within an electric power generating system. These factors would become effective if the executive director determines that the science confirms the benefit during the mid-course review process. This process will involve a thorough evaluation of all modeling, inventory data, and other tools and assumptions used to develop the attainment demonstration. It will also include the ongoing assessment of new technologies and innovative ideas to incorporate into the plan. If such benefit is confirmed, then it is the intent of the commission to implement such a program through a SIP revision which will first offset NO_x reductions from industrial sources down to the 80% (535 tons per day (tpd)) level. The commission, in its discretion, may allocate any additional benefit beyond 80% to other SIP strategies and/or to the point source NO_x control strategy. Based upon current analysis, this 80% from utility and non-utility sources would result in a total reduction of not less than 535 tpd of NO_x

emissions from industrial sources in the HGA area. This alternative schedule would provide for overall reductions of NO_x emitted from these facilities by 44% by April 1, 2003, and 88% by April 1, 2004. These reduction percentages are based on the baseline emissions as reported in the 1997 emissions inventory.

The amendments to §101.353(a) in variable (3)(C) of the figure adjust the allowance allocation schedule for non-utility facilities by requiring annual reductions in allowances to be spread over a five-year period, thus requiring smaller annual reductions. The commission adopts this adjustment to allow the affected industries more options for planning and implementing incremental reductions in emissions. The amendments do not affect the April 1, 2007 date of final allocation levels, nor increase final allocations or change the final emission reductions as required by the SIP. The formulas in §101.353(a), variable (3)(C) provide for overall reductions of NO_x emitted from non-utility facilities by 35% by April 1, 2004; 60% by April 1, 2005; 70% by April 1, 2006; and 90% by April 1, 2007. These reduction percentages are based on the baseline emissions as reported in the 1997 emissions inventory.

The commission also adopts a new set of factors in a new variable (3)(D) in the figure in §101.353(a) for non-electric utility facilities. These factors become effective if the executive director determines that the science confirms the benefit during the mid-course review process. This process will involve a thorough evaluation of all modeling, inventory data, and other tools and assumptions used to develop the attainment demonstration. It will also include the ongoing assessment of new technologies and innovative ideas to incorporate into the plan. If such benefit is confirmed, then it is the intent of the commission to implement such a program through a SIP revision which will first offset NO_x reductions from industrial sources down

to the 80% (535 tpd) level. The commission, in its discretion, may allocate any additional benefit beyond 80% to other SIP strategies and/or to the point source NO_x control strategy. Based upon current analysis this 80% from utility and non-utility sources would result in a total reduction of not less than 535 tpd of NO_x emissions from industrial sources in the HGA area. This alternative schedule would provide for overall reductions of NO_x emitted from non-utility facilities by 35% by April 1, 2004; 60% by April 1, 2005; 70% by April 1, 2006; and 75% by April 1, 2007. These reduction percentages are based on the baseline emissions as reported in the 1997 emissions inventory. The amendments to the figure in §101.353(a), variable (6) correct references to concurrently adopted rule citations in Chapter 117.

The amendments to §101.353(g) allow the executive director to give owners/operators up to an additional two years to establish a baseline of activity that better represents normal operation. The previous rule required the request to be submitted to the executive director by June 30, 2001. The amendment extends this option for owners or operators of facilities that have not completed two calendar years of activity by June 30, 2001, so that new facilities may also have this option.

Owners or operators applying for extenuating circumstances will be limited to an additional two calendar years to establish normal baseline activity for new or modified facilities if the first two calendar years of historical activity were not complete by June 30, 2001. Under the amendment, requests for this additional time must be submitted no later than 90 days from completion of the first two calendar years of actual activity.

The commission concludes that any allowances added to a facility to represent normal operation will not exceed the number of allowances subtracted from the cap due to the difference between allowances issued to new facilities based on allowable emissions and the number of allowances issued to those same facilities based on actual emissions once a two-year baseline is established. A review of emission inventory records shows that a majority of facilities operate well below their allowable emissions which supports the commission's conclusion that facilities which obtain allowances which represent normal operation will not increase the cap beyond the level modeled in the attainment demonstration. The commission will reconcile the total number of allowances during annual reports and audits of the program to ensure that the program is meeting its expected goals.

The amendments to §101.354(a) add language clarifying that established protocols in 30 TAC Chapter 117 should be used when quantifying actual emissions for facilities subject to the cap and trade program unless the executive director approves the use of the existing formula in §101.354(a) or another method. This establishes a protocol to demonstrate compliance that has been reviewed and approved by the EPA and thus satisfies the EPA concerns relating to using an EPA-approved protocol for a regulation which is a SIP requirement. In response to public comment, the commission is modifying §101.354(a) to include specific references to those sections of Chapter 117 that address monitoring and testing protocols used in the cap and trade program.

The commission is adding a new §101.354(b) that provides a procedure which may be followed to determine actual emissions in the event the data required under §101.354(a) is missing or unavailable. The procedure establishes the order of missing data methods that must be used as follows: continuous

monitoring; periodic monitoring; stack or vent testing data; manufacturer's emissions data; and *EPA Compilation of Air Emission Factors* (AP-42). These methods must be demonstrated to most accurately represent actual emissions. The figure that was located in subsection (a) has been moved to subsection (b).

The commission is adding a new §101.354(c) to establish consistency between the protocols used to allocate and deduct allowances. This will ensure that allowances are not deducted from compliance accounts at a higher or lower rate than they were allocated. For example, if the allocation of the allowances was based on assumed emission factors, and the facility subsequently installs a continuous emission monitoring system (CEMS) which shows a lower actual emission rate, the facility could state that it had achieved emission reductions simply by changing its method of measurement. Additionally, if a facility originally based its throughput on hours of operation, but changed the method of measurement to fuel consumption in order to use a more accurate measurement, the resulting difference in activity level may alter the number of allowances allocated because allowances are based on level of activity. The new subsection provides the executive director the discretion to determine the consistency between allocation and deduction protocols. It is the intent of the commission that the reductions achieved under the cap and trade program are real and not based solely on differences of measurement. All subsequent subsections are redesignated.

The amendment to the newly designated §101.354(f) requires that a site hold a quantity of allowances in its compliance account on March 1 that is equal to or greater than the total NO_x emissions for the prior control period. This extends the date one month from February 1, which is currently required. This

allows site owners or operators the entire month of January to complete trades of allowances to reconcile their compliance accounts for the prior control period as was the original intent of the commission. Because trades are required under §101.356(f) to be submitted to the executive director at least 30 days prior to being approved and deposited into compliance or broker accounts, trades requested on or after February 1 will not be reflected in the compliance determination for the prior control period.

The amendments to §101.356 add a new subsection (c) that allows the owner or operator of a site receiving allowances on an annual basis to permanently sell those rights to any person to eliminate the need to make an annual transaction. All subsequent subsections are redesignated. The commission also deletes subsection (g), which concerns program audits and places those requirements into the new §101.363.

The amendment to §101.356(f) states that the executive director will review trades of allowances for approval. This language is added to clarify that trades of allowances are not complete until approval by the executive director.

The amendments to §101.356(g) add two steps to the devaluation, in respect to emission allowances, of banked discrete emission reduction credits (DERCs) and extend for two years the date at which DERCs are devalued to a ratio of ten DERCs to one allowance. Use of DERCs will continue to be limited to 10,000 per year beginning January 1, 2005, under §101.356(g)(7). The commission extends this flexibility to preserve as much credit as possible for those industries that have made early emission reductions while still achieving the anticipated environmental benefits of the cap by 2007. Any substitution of DERCs for

allowances is subject to the approval of the executive director. The commission notes that the EPA has indicated in the *Federal Register*, when proposing approval of this division as an amendment to the SIP, that it will not approve the use of DERCs or mobile discrete emission reduction credits (MDERCs) in lieu of allowances until such time that Chapter 101, Subchapter H, Division 4, Discrete Emission Credit Banking and Trading, is approved as a SIP amendment. The EPA has also indicated to the commission that it anticipates approval of Division 4 well before January 2003. The EPA has indicated that if an owner or operator wished to use DERCs or MDERCs in lieu of allowances prior to approval that this could take place as a site-specific SIP revision. Based on the timeline for approval as indicated by the EPA and based on the fact that this date is in advance of the first annual reporting requirement of the cap and trade program, the commission does not anticipate a significant number of site-specific requests if required by the EPA.

In response to public comment, the commission is adding a new §101.356(h) to expand the use of emission credits, whether DERCs or ERCs, as allowances. The expanded use of emission credits allows the conversion of ERCs to a yearly allocation of allowances if the ERCs were generated prior to December 1, 2000. The ERCs generated prior to that date were included in the attainment demonstration modeling for the HGA on the assumption that the credited emissions would reappear once the ERC was sold or transferred. These ERCs would therefore not affect achievement of the final NO_x cap for the HGA area, so this will not be an attainment demonstration issue. The commission does not have the same level of confidence concerning the effect of ERCs generated after December 1, 2000, on the HGA NO_x cap and is not including these ERCs as eligible for conversion. The commission will continue to evaluate

their potential effect on the cap. The commission notes that the EPA has indicated that the use of ERCs will be treated similarly to the use of DERCs and MDERCs as explained in the previous paragraph.

The amendments to §101.360 clarify that owners or operators certifying their levels of activity will need to include emission factors in their report which will be used, along with level of activity, to establish the number of allowances the site will receive. The commission is revising the language in §101.360(b) for consistency with the method of determining activity level for existing facilities not in operation prior to January 1, 1997.

The commission adds a new §101.360(c), which requires the owner or operator of a site which becomes subject to the cap and trade program after April 1, 2001, to certify the site's level of activity no later than 90 days from the date the site becomes subject to the division. The commission adopts this subsection to include those sites that currently have facilities with a collective design capacity of less than ten tons per year of NO_x, that at some future date add facilities or capacity that brings the collective design capacity to ten tons or more. In response to public comment, the commission has reorganized this subsection for clarity.

The new §101.363 incorporates the audit requirements of the previous §101.356(g) which the commission is repealing, and adds a requirement for an annual program audit report from the executive director to be made available to the EPA and the public. The audit procedures remain unchanged. The procedures require the executive director to evaluate the effectiveness of the cap and trade program as implemented by Chapter 101, Subchapter H, Division 3, Mass Emissions Cap and Trade Program, on the ozone

attainment demonstration. The audit includes the availability and cost of allowances and compliance by participants. The executive director will recommend measures to remedy problems with the program, including the cessation of allowances, emission reduction credit, and discrete emission reduction credit trading. The new requirement for an annual report includes information on allowance allocation and trading by account and on the total number of allocations and trades completed. This report would be made available by June 30 after the end of each control period. The provision for an annual report is included in response to a request by the EPA.

The amendments to §101.370 state that the definitions of "activity" and "level of activity" apply to facilities instead of sources. The amendments remove the requirement that the units used to determine level of activity have a direct correlation with the economic output and emission rate of the source. The level of activity is only one factor used to determine allowance allocation and is not an emission rate. The commission is amending the definition of "strategy emission rate" to state that this term is the emission rate during a DERC generation period. The commission is adopting these changes to ensure the use of consistent terms and to clarify the current interpretation of the defined terms.

The amendment to §101.372(b)(2) removes the requirement that a MDERC be surplus when it is used, because MDERCs are not certified until after the reduction has actually occurred. This certification results from an evaluation of the MDERC, which is not perpetual, at the time of certification and removes the need for another evaluation at the time of use.

The amendment to §101.373(c)(1)(A) adds temporary shutdown of a source to the list of activities that cannot generate a DERC. This clarifies the existing DERC regulations that do not allow generation of DERCs from temporary curtailments. In order to allow greater credit for the generation of DERC fractions, the commission is revising §101.373(d)(1)(A) to state that the generation of DERCs will be rounded up to the nearest tenth of a ton.

The amendment to §101.373(f)(3) deletes the reference to the expiration of DERCs, because DERCs do not expire until used.

The amendments to §101.373(f)(6)(C) and (D) correct rule citations. In order to give more flexibility to the use of DERCs, the commission is revising §101.373(f)(8)(C) to allow the rounding up of DERCs needed to comply with 30 TAC §117.223, relating to Source Cap, to the nearest tenth of a ton.

The amendments to §101.373(g) require that an application to use DERCs be submitted to the executive director and that approval shall be received prior to use of the DERC. This allows the executive director to confirm that the DERC use complies with regulations. Several changes are made in the subsection to remove the term “notice of intent to use” and replace with “application of intent to use.” These changes clarify that approval is required before a DERC is used.

FINAL REGULATORY IMPACT ANALYSIS DETERMINATION

The commission reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code, §2001.0225 and determined that the rules do not meet the definition of “major

environmental rule." A "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 commission intends these amendments to provide additional planning options to affected industries during the five-year period in which allocations under the cap and trade program are reduced to their final levels. The schedule for full implementation and the final level of allocations would be unaffected. The amendments would allow participants in the program additional options for the permanent sale of allowances, an extension of the period to request deviations from allocation methods, and additional time to make final trade reports after the end of a control period. The amendments do not increase the stringency of the program and will not 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.

In addition, Texas Government Code, §2001.0225, only applies 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. This rulemaking is not subject to the regulatory analysis provisions of §2001.0225(b), because the rules do not meet any of the four applicability requirements. Specifically, the emission banking and trading requirements within this rulemaking were developed in order to meet the ozone NAAQS set by the EPA under the Federal Clean

Air Act (FCAA), §109, as codified in 42 United States Code (USC), §7409, and therefore meet a federal requirement. 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.

TAKINGS IMPACT ASSESSMENT

The commission completed a takings impact assessment for the adopted rules. The following is a summary of that assessment. The commission is adopts these amendments as part of a strategy to reduce and permanently cap emissions of NO_x 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 amendments 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 that are the subject of these rules are not property rights. Consequently, these amendments do not meet the definition of a takings under Texas Government Code, §2007.002(5). The purpose of the rules is to provide flexibility in a NO_x control strategy which is necessary for the HGA area to meet the air quality standards established under federal law as NAAQS. Consequently, the exemption which applies to these rules is that of an action reasonably taken to fulfill an obligation mandated by federal law. Therefore, these revisions do not constitute a takings under Texas Government Code, Chapter 2007.

CONSISTENCY WITH THE COASTAL MANAGEMENT PROGRAM

The commission determined that the rulemaking relates to an action or actions subject to the Texas Coastal Management Program (CMP) in accordance with the Coastal Coordination Act of 1991, as amended (Texas Natural Resources Code, §§33.201 et seq.), and the commission'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 reviewed this action for consistency with the CMP goals and policies in accordance with the regulations of the Coastal Coordination Council and determined that the 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. The amendments will allow greater compliance flexibility for affected industries while reducing emissions of NO_x in the HGA nonattainment area to a level that would allow attainment of the NAAQS for ozone. No new emissions of air contaminants are authorized by these rules.

The commission solicited comments on the consistency of the proposed rules with the CMP during the public comment peiod, but received no comments.

EFFECT ON SITES SUBJECT TO THE FEDERAL OPERATING PERMITS PROGRAM

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

PUBLIC HEARING AND COMMENTERS

The commission held public hearings on the proposal on June 13, 2001 in Galveston; June 14, 2001 in Rosenberg and in Houston; June 15, 2001 in Austin; and July 2, 2001 in Houston.

BASF Corporation (BASF), BP Amoco (BP), BCCAAG, Enterprise, Environmental Defense (ED), EPA, ExxonMobil, Galveston-Houston Association for Smog Prevention (GHASP), Houston-Galveston Area Council (HGAC), Houston Sierra Club (Sierra), Reliant Energy (Reliant), Reliant Energy Channelview, L.P. (Reliant Channelview), Sempra Energy Resources (SER), Texas Chemical Council (TCC), Texas Industrial Project (TIP), and an individual submitted comments during the public comment period which closed on July 2, 2001. ED, GHASP, and Sierra opposed the proposal. EPA requested clarification of several points. The other commenters generally supported the concept of the proposal but opposed specific provisions.

ANALYSIS OF TESTIMONY

In January 2001, the Business Coalition for Clean Air Appeal Group (BCCAAG) and others filed suit against the commission challenging the December 6, 2000 SIP revision for HGA and five of the ten sets of rules associated with that SIP revision. As part of that lawsuit, the plaintiffs sought a temporary injunction to stay the effectiveness of these five sets of rules and for the commission to withdraw the SIP from EPA consideration; a hearing on this request was held in Judge Margaret Cooper's court, Travis County, Texas, May 14 - 18, 2001. Before that hearing was completed, an agreement in principle was reached to settle the lawsuit, and a Consent Order was entered by Judge Cooper which includes certain specific items included in the SIP revision and rules in Chapters 101 and 117 proposed by the commission on May 30, 2001 (26 TexReg 4380 and 4400). In support of its position that certain testimony in that hearing establishes the infeasibility of the NO_x reduction and that the air dispersion modeling used by the commission is not reliable, BCCAAG submitted the transcript from the hearing as comments on these proposals. The hearing transcript included testimony from BCCAAG's witnesses, as well as the commission's witnesses, and therefore presents both sides of, or two different opinions on, some of the issues. Many of the documents introduced as exhibits in the hearing predate the rule changes and SIP revision proposed by the commission in the June 15, 2001 issue of the *Texas Register* and do not specifically address these rule changes and SIP revision. In addition, BCCAAG submitted as comments its First Amended Petition in the lawsuit and BCCA's comments from the earlier SIP, both of which were created before the settlement in principle was reached. While BCCAAG supports the substitution of new ESADs

and other rule language from the Consent Order, it is not clear as to what other specific changes to the SIP and rules should be considered in this adoption in response to these particular comments.

As discussed earlier in this preamble, BCCAAG submitted the entire transcript of the May 14 - 18, 2001 temporary injunction hearing held before Judge Margaret Cooper, Travis County District Court, concerning the lawsuit styled BCCA Appeal Group, et al v. TNRCC. A witness, Jess McAngus (McAngus), testified that he does not believe that the cap and trade market will develop because, based on his conversations with companies, "no one expects to be able to overcontrol," and any companies that generate credits have "indicated that they're going to keep them for themselves for a margin of error." McAngus testified that the credits will "be too valuable to the company for them to sell" to someone else. Another witness, Doug Deason testified that ExxonMobil does not expect to have any excess credits from overcontrol.

Point source NO_x 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_x control literature, including the EPA alternative control techniques (ACTs), papers at numerous meetings of research and trade organizations for industry, NO_x 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_x control standards. Both combustion modifications and flue gas cleanup are established technologies. Technology is replicable, so in a true sense, the first successful selective catalytic reduction (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 retrofitted to levels below the existing ESADs and further details of the technical feasibility of the ESADs can be found elsewhere in this preamble and in the preamble to the adoption of the existing ESADs on December 6, 2000 (see the January 12, 2001 issue of the *Texas Register* (26 TexReg 524)). 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 1,200 contemplated in the preamble to the Chapter 117 proposal published in the August 25, 2000 issue of the *Texas Register* (25 TexReg 8275). Although the number of SCRs is expected to be unprecedented, the ultimate number installed is almost 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 existing rules gives 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.

ED and GHASP objected to the addition of another step in the emission reduction schedule in §101.353. ED stated that the revised schedule is not as expeditious as practicable and that there is no compelling reason for the revised schedule.

The commission adopted this change to allow the affected industries more options for planning and implementing incremental reductions in emissions. This schedule is practicable given the financial and technical resources necessary for individual companies and all sources in the HGA ozone nonattainment area to comply with the required emission reductions. The amendment would not affect the March 31, 2007 final compliance date, would not increase final emission rates, and would still achieve the final emission reductions as required by the SIP. The revised compliance schedule was provided by BCCAAG as part of the "Consent Order" submitted to Judge Margaret Cooper, Travis County District Court, in the lawsuit styled BCCA Appeal Group, et al v. TNRCC, as described earlier in this preamble.

BASF commented that the proposed cap and trade rules combined with new source review (NSR) will limit the ability of industry to make changes at sites because reductions will be required beyond those required to show attainment with the ozone standard. BASF and TIP recommended the use of Plant-wide Applicability Limits (PALs) instead of netting or revision of §101.352(d) to allow the use of allowances for project netting.

The commission is not revising the rule in response to this comment. Federal rules require that an offset be applied to major new or modified projects. The offset includes a ratio which

varies depending on the attainment status of an area. The ratio is intended to provide a net benefit in the form of emissions reduction to the airshed with the approval of each project. Until such time that the commission and the EPA determine that the benefits of the cap and trade program are equivalent to the benefits of requiring offsets, both programs will be enforced.

BASF, BCCAAG, Enterprise, and TIP commented that §101.353(a)(2)(A) should be revised to properly designate the variables for 1998 and 1999 emission factors.

The commission is revising the rule to correct the designation errors.

BCCAAG, Enterprise, and TIP commented that there should be no trading restrictions on unused allowances from unmodified facilities under a flexible permit and that facilities should not be treated differently for the allocation of allowances based on the type of NSR authorization. The Flexible Permit Guidance (FPG) issued by the commission provides that all facilities subject to the permit are considered modified when any facility subject to the permit is modified. This prohibits trading and banking of allowances for all facilities under the permit. TIP cited the preamble to final rules adopting the flexible permit program where the commission states "...the permit is not reopened with respect to facilities for which an amendment, revision, or modification is not sought...." This was in response to a comment that reopening of flexible permits should be limited to a review of the facility affected by the change. TIP stated that the policy should include an allowable for a modified facility, based on the modification, that can be used by any facility covered by the flexible permit. This allowable could not be used by facilities

at the site which are not covered by the flexible permit, nor could the allowable be traded to another site. BCCAAG, Enterprise, and TIP commented that the FPG also constitutes a rule subject to the Administative Procedures Act (APA) because it alters §101.353(a)(2)(B).

The commission is not revising the rules in response to these comments. The commission's intent when allocating allowances to a new or modified facility is to provide sufficient allowances based on the facility's authorized allowables until such time the facility can establish a baseline. This intent also includes projects where modifications may include reductions and shutdowns of other facilities. Therefore, when the entire modification project is completed, the owner or operator can operate the affected facilities in their final configuration for a two-year period to establish the baseline. When determining which facilities are new or modified, the commission's intent is to use the same criteria as used in NSR. In the case of facilities under a flexible permit cap, anytime that the cap is increased or otherwise modified, all facilities under the cap are also considered modified. This decision is based on the fact that at anytime an individual facility has a potential to increase emissions, change the method of controls, or change the characteristics of its emissions, it is considered modified. For example, when a flexible permit cap is increased, any individual facility under the cap can potentially increase its own emissions. In response to the language in the preamble for the regulations that authorized flexible permits, the commission stated that when a flexible permit is opened for modification, that a full review only be applied the facilities physically being changed. This was intended to eliminate retroactive best available control technology (BACT) reviews for all facilities under

the cap every time the flexible permit was amended. The language in the preamble was not intended to imply that facilities under a flexible permit which was amended are not modified. For these reasons, the commission intends to consider all of the facilities under a capped portion of a flexible permit to be modified if any facility under that cap is new or modified. Consequently, all facilities under the capped portion of a flexible permit will receive allowances based on allowables if the cap includes any new or modified facility. These facilities will continue to receive allowances on this basis until such time that all construction as represented in the permit application (administratively complete prior to Jan. 2, 2001) is complete and the affected facilities have established a new two-year baseline.

BCCAAG, Enterprise, and TIP commented that a 180-day shakedown period should be incorporated into the formula for allowance allocation. The two-year baseline for the allocation of allowances should not include this period because emissions during shakedown often are not representative of normal operations.

The commission is revising the rule in response to these comments. It was not the intent of the original rule to include any start-up period when establishing the two-year baseline period, and the commission is adding language to clarify this point.

Reliant Channelview commented that sources that have been modified to emit at less than an ESAD rate should be allocated allowances based on the higher emission rate modeled for the SIP. This will ensure

that the modified unit, which will be more efficient and cleaner, will have sufficient allowances to operate at maximum capacity.

The commission is revising §101.353 in response to this comment to allow facilities that emit at below the ESAD rate to use the ESAD rate as their baseline for determining the allocation of allowances.

BCCAAG, Enterprise, and TIP commented that they support the addition of §101.353(g) concerning extenuating circumstances for allowance allocation, but they are greatly concerned about the guidance issued by the commission for the application of this policy. No conditions are imposed on the executive director on the exercise of his discretion in granting a timely application. The procedure restricts consideration to five limited circumstances. TIP objected particularly to the requirement that a facility demonstrate a 25% site-wide activity difference. This policy penalizes facilities that may meet the required activity drop but are co-located with facilities that do not. The result is an allocation of allowances for the site that is well below the emissions expected if both facilities were operating at a normal authorized rate. BCCAAG, Enterprise, and TIP contended that the Extenuating Circumstances Guidance (ECG), if enforced, is a rule for which the commission has not complied with the APA. The ECG does not just provide factors to be considered before granting extenuating circumstances but limits the application of executive director discretion. In effect the ECG revises §101.353(g) without formal rulemaking procedures as required under the APA.

The commission is not changing the rule in response to these comments. The guidance mentioned by the commenters lists several factors that the executive director will consider in making a decision concerning extenuating circumstances for alternate level of activity certification. These factors include the 25% activity difference for an alternate period, as stated by TIP. Because of the importance of maintaining the emissions cap in the HGA area, the commission intends that qualification for an alternate level of activity period be a rigorous and well documented activity. The executive director will consider the factors in the guidance, but these factors do not limit the exercise of his discretion to consider all extenuating circumstances.

ExxonMobil commented that §101.353(g), concerning extenuating circumstances, is unnecessarily restrictive and can have the net effect of reducing maximum effect capacity for the life of some facilities. ExxonMobil recommended that less restrictive guidance be developed which allows the agency to consider market conditions during the 1997 - 1999 baseline period as a valid reason to use a different three-year period to establish the baseline. ExxonMobil also recommended that the baseline should be adjustable in future years. ExxonMobil stated that the commission should also issue guidance to allow facilities to set activity levels necessary to meet capacity needs of the future.

The commission is not changing the rule in response to this comment. Section 101.353(g) gives the executive director discretion to deviate from the allowance allocation requirements, including the determination of a baseline of activity in the future. The section does limit the executive director to allowing no more than two additional years for establishing a baseline for

new or modified facilities. This section only limits the dates when an owner or operator of a facility may apply for extenuating circumstances. In addition, this section does not specify what requirements the applicant must meet to request extenuating circumstances. The executive director has established guidelines for the general consideration of applications for extenuating circumstances; however, the guidance is not regulatory and does not limit the executive director's discretion to grant extenuating circumstances in cases that deviate from the guidance.

The commission requested comments on alternative methods for allocating allowances to new boilers, auxiliary steam boilers, and stationary gas turbines within an electric power generating system. ExxonMobil, SER, and TCC responded to this request. SER commented that a two-year extension for baseline determination is preferable to the current cap and trade base, but may not be sufficient to allow new power plants serving a high growth area such as Montgomery County to accumulate sufficient operation time to determine a representative baseline. This could force the higher efficiency new units into a situation where they must either limit operation and defer to older and dirtier units or purchase allowances. This is not consistent with promoting environmental benefits and energy reliability. SER preferred a seven year extension, but recommended that the commission adopt a program that allows facilities to receive allowances equal to actual emissions scaled up to full capacity with the limitation that allowances not used in the year they were allocated could not be banked. SER expressed the belief that this policy will encourage the maximum use of high efficiency generating stations, such as those proposed by SER for Montgomery and Liberty Counties, with the resulting NO_x reductions. Sierra opposed the

seven-year option. SER opposed a program where the commission retains allowances and makes them available to new units because of the difficulty in determining annual needs for a new facility. TCC commented that allowances for any new or modified facilities should be established permanently on the allowables and should not be based on the two-year baseline. ExxonMobil stated that they support all four options listed in the proposal with the comment that if a hold back of allowance for new facilities is chosen, it not be limited to only utilities but extended to all point sources which have a similar need to operate with a high degree reliably. An individual opposed any grace period for industrial sources to establish a baseline of activity.

The initial allocation of allowances based on allowable emissions for new facilities is intended to provide the facilities sufficient allowances to operate until they have established a baseline. The allocation is not intended to provide allowances that will be perpetually greater than actual emissions as this would give new facilities an unfair advantage over existing facilities whose allowances are based on an established baseline and not on capacity. However, a principal goal of the cap and trade program is to provide incentive to make emissions reductions. The commission believes that owners or operators who install and operate cleaner equipment should have the opportunity to fully integrate that equipment at a realistic level of operation that is representative of the demands that will be placed on the equipment. The commission believes that a five-year period to establish a baseline will allow this integration. In order to provide flexibility, the commission is revising §101.353 to allow the averaging of any two consecutive years in the first five years of operation of a new or modified facility as a baseline

and will allow the owner or operator, under extenuating circumstances, to obtain a further two-year extension with executive director approval.

BCCAAG, Enterprise, and TIP commented that a reference to Chapter 117 in §101.354(a) be made more specific and refer to section numbers.

The commission is revising the rule in response to this comment to include specific references to the sections of Chapter 117 concerning monitoring and compliance protocols.

EPA commented that §101.354(a) should be revised to state what data will be used if Chapter 117 monitoring is not available, and that this data must be approved by the executive director and EPA. EPA stated that this rule should also be revised to state that missing monitoring data will be addressed in protocol revisions. BCCAAG, Enterprise, and TIP commented that the formula in §101.354(a) for deducting allowances should be deleted and replaced with a requirement that the deduction will be based on actual emissions reported to the commission for a control period. They also stated that not all emissions are determined using emission factors and §101.359 allows other emission determination methods.

The commission is revising the rule in response to these comments to clarify that the monitoring protocols in Chapter 117 will be used if such data is available and to specify a hierarchy of data to be used in the absence of Chapter 117 protocols. This hierarchy is: continuous monitoring data; periodic monitoring data; testing data; manufacturer's data; and

EPA Compilation of Air Pollution Emission Factors **(AP-42). The rule has also been revised to state that, in addition to the approval of the executive director for the use of alternative protocols, the information concerning the protocols will be made available to the EPA which will have 30 days to disapprove. The commission is retaining the formula as an additional option to Chapter 117 protocols, but its use is not mandatory.**

ExxonMobil commented that §101.354(e) which extends the date by which a site must hold sufficient NO_x allowances in its compliance account for the prior calendar year from February 1 to March 1 is a move in the right direction but still creates a tight schedule for industry to meet. ExxonMobil recommended that the date be extended to April 1 or preferably to May 1. BP and TCC recommended extending the reconciliation period to March 31 (a full calendar quarter).

The commission is not changing the rule in response to these comments. The commission believes that it is reasonable for owners and operators to track their emissions throughout the control period so that they will have a close approximation of the number of allowances they will require throughout a control period. The reconciliation period is intended to allow companies to quantify their last few weeks of emissions and to balance compliance accounts where a relatively limited number of allowances are needed. The reconciliation period is not intended to provide a period of time for large allowance deficits to be corrected. With these assumptions, the commission believes that the reconciliation period as proposed is sufficient time to determine actual emission and purchase any additional allowances.

Reliant supported the use of emission credits and transfer of surplus allowances to add additional flexibility to the cap and trade program.

The commission appreciates this support.

BP and TCC generally supported the language in §101.356 that allows owners or operators of a site to permanently sell their rights to allowances. BP and TCC stated that this will eliminate the requirements of completing annual transactions thus reducing the paperwork burden.

The commission appreciates this support.

Reliant commented that the commission should calculate allowables for modified facilities with respect to the new activity and not the facility as a whole. Thus the trading restriction in §101.356(c) would only apply to unused allowances generated by the modified activity. The remainder of a facility's allowances could then be transferred to other units as needed.

The commission is not revising the rule in response to this comment. The executive director participated in numerous meetings with stakeholders and evaluated many options on how to allocate allowances to new and modified facilities. The option described by Reliant was discussed in detail. However, in order to be most fair to all affected facilities, and due to the complexity of separating a single facility into separate allocation methodologies and tracking

the use of allowances under these methodologies, the commission chooses not to adopt this option.

BASF, BCCAAG, Enterprise, and TIP commented that §101.356 should be revised to allow the conversion of ERCs into allowances. BASF commented that the restriction against this conversion lacks reasoned justification.

The commission is revising the rule in response to these comments by adding a new §101.356(h). The commission agrees that ERCs generated prior to December 1, 2000, were evaluated and included in the HGA attainment demonstration. Therefore, these ERCs, if converted into a stream of allowances would not increase emissions beyond those levels modeled that demonstrated compliance with the NAAQS for ozone. The new §101.356(h) to allows these ERCs to be used as allowances subject to approval of the executive director. The commission has evaluated the use of ERCs generated after December 1, 2000, and has concerns that these ERCs could be detrimental on the final level of the NO_x mass emissions cap. These concerns include the use of ERCs generated from mobile sources and from stationary sources which are not covered under the cap and trade program. The executive director will continue to evaluate the conversion of ERCs generated after December 1, 2000, into a stream of allowances and will make a recommendation to the commission concerning future rulemaking.

ExxonMobil commented that the wording in §101.360(a) - (c) be consistent and that the language should be clarified as to what information is required in the certification.

The commission is revising the rule in response to this comment. The commission has reorganized the section and added a definition for existing facility for clarity and to reduce the length of the section. The information specified in the section is intended to be an example of the minimum information required. The commission may require additional information to support the application form and has intentionally left this discretion to the executive director because each facility will require a case-by-case determination.

BCCAAG, Enterprise, and TIP commented that a three-year audit of the cap and trade program is too infrequent to determine the program's effectiveness in providing cost-effective compliance and flexibility. They suggested an annual audit.

The commission is not revising the rule in response to these comments. The commission believes that a comprehensive audit will be sufficient to evaluate the program fully. The commission will compile data annually for the annual report, as required in §101.363, which will allow the commission as well as other interested stakeholders to evaluate the effectiveness of the program.

HGAC supported the review of the cap and trade program to allow for growth as new technologies are introduced.

The commission appreciates the support.

GHASP commented that the cap and trade program could have potential environmental justice issues as it relates to volatile organic compounds (VOCs) emissions. The commission should demonstrate that this program will not harm communities due to cumulative emissions. Sierra commented that the cap and trade program allows some industry to avoid reductions which will affect specific areas creating an environmental justice issue. Sierra also opposes the cap and trade rules in general and a system of command and control.

The commission has not revised the rule in response to these comments. The cap and trade program is a NO_x reduction program and does not affect rule or emission limits for VOCs. The commission's NO_x reduction strategy is regional and is intended to achieve a target level of reduced regional NO_x and subsequently a reduction in ozone. The commission believes that this strategy will lead to public health benefits for the entire region. The program does allow the trading of emission allowances for compliance flexibility, but the purchase of allowances does not allow individual emission limitations in permits or other authorizations to be exceeded. When establishing permit limits, the commission reviews the permitted emissions limits for off-property health effects.

ED commented that the proposal backslides from the December 2000 adoption by delaying the schedule by which DERCs are devalued. ED recommended that the commission adopt a schedule at least as expeditious as the one originally adopted in December 2000.

The commission has not revised the rule in response to this comment. The delay in devaluation of DERCs will not jeopardize achievement of the final emissions cap or the 2007 compliance deadline. DERCs are created by a voluntary reduction in emissions beyond that required under rules. While the commission recognizes the importance of achieving the NO_x emissions cap in the HGA area, the commission also believes that rewarding voluntary reductions is consistent with a market-based emission reduction program like the mass emission cap and trade program. The commission therefore believes that it is appropriate to maintain the value of DERCs as long as this is consistent with achievement of the regional emissions cap.

BP commented that allowances based on allowables should not be prohibited from trading pending establishment of a two-year historical baseline. BP acknowledged the commission's concerns for not allowing this trading but expressed the belief that some trading would provide the needed flexibility for industry.

The commission is not revising the rule in response to this comment. Allowances based on allowables are intended to provide new facilities the ability for initial operation under the cap and trade program. The allocation is not intended to provide allowances that will be perpetually greater than actual emissions because this action would give new facilities an unfair advantage over existing facilities that have allowances based on an established baseline and not on capacity. Even though the commission modeled the allowable emissions from new sources, this

was done to model a worst-case scenario and was not the intended to continue to provide allowances based on maximum design capacity.

BP and TCC commented that the commission should clarify that the reasonably available control technology (RACT) final control plan is invalidated once the mass cap and trade program becomes effective. They commented that it will be confusing and complex if the commission requires compliance with both the RACT control plan and cap and trade.

No changes were proposed to §117.215(e), Final Control Plan Procedures for Reasonably Available Control Technology, which requires that the NO_x RACT final control plan be updated with any emission compliance measurements submitted for units using CEMS or predictive emissions monitoring system (PEMS) and complying with an emission limit on a rolling 30-day average. The NO_x RACT final control plan was due by November 15, 1999, for sources in BPA and HGA, and final compliance with the RACT requirements for these sources was required by November 15, 1999. Implementation of the Chapter 101 mass emissions cap and trade program will begin on January 1, 2002. However, the emission reductions required by the mass emissions cap and trade program will not be fully implemented until April 1, 2007. The commission agrees that updates to the NO_x RACT final control plan are no longer necessary after that date in HGA. The commission notes that guidance on the final control plans is available on the commission's website at: *http://www.tnrcc.state.tx.us/oprd/forms/fcp.html.* Changes that could trigger a revision to a final control plan include construction of new units

with the same product output as units complying with the source cap, and changes to maximum rated capacities, applicable limits, or assigned limits.

BP and TCC commented that the NSR should be streamlined. BP commented that the commission should work with industry to clarify necessary changes in the NSR program, which would simplify permitting.

This rulemaking does not address the issuance of NSR permits. The commission continues to examine methods of making NSR permitting more efficient and will consider specific recommendations from affected industries concerning changes to the permitting process.

BASF, BCCAAG, Enterprise, and TIP commented that the rules should be revised to state that emissions should be based on the best data available at a given time. BASF stated that if new emission measuring technology is established that it should not have to be retroactively applied.

The commission is not revising the rules in response to these comments. Implementation of the commenters' suggestions could result in the individual allocation of allowances that is consistently higher than those needed to operate the source. The commission believes that this would remove the incentive to make actual emission reductions or result in a continuous surplus of allowances, giving the owner of those allowances a competitive advantage.

EPA commented that the commission should clarify in response to comments that Texas Water Code (TWC), §7.051 and §7.052 allow the commission to impose penalties where every day of a long term violation is a separate violation.

EPA's interpretation of these statutes is correct; each day of noncompliance is a separate violation. Thus, everyday that the annual cap is exceeded can be considered as a separate violation.

EPA commented that the commission should clarify in response to comments that information from regulated sources that is exempt from public disclosure cannot be used to perform emission calculations. EPA also requested that any exemptions from disclosure be noted in the annual compliance report to EPA.

The commission agrees with EPA that emissions data cannot be held confidential. It is the Office of the Attorney General that makes such a determination in specific cases. Attorney General Opinion No. H-539 (February 26, 1975) ruled that emissions data supplied to the state may not be treated as confidential. Emissions data has been interpreted to include information on the nature and amounts of emission from a facility. The commission will include any notice of exemptions from disclosure in the annual report.

EPA commented that the commission should indicate, in its response to comments, that it will notify metropolitan planning organizations (MPOs) each time MDERCs are used until such time this responsibility is placed on the credit generator.

The commission agrees that MPOs should be made aware of mobile emission reduction credit (MERC) and MDERC generation projects because of the necessity to avoid double count reductions that may be banked and also be assumed to occur as part of the SIP.

EPA requested that the commission clarify how Alternate Emission Limits (AELs) may be used without exceeding the NO_x emissions cap.

The commission is not revising the rule in response to this comment. The cap and trade program uses ESADs as listed in §117.106 and §117.206, Emissions Specifications for Attainment Demonstrations, and §117.475, Emissions Specifications, when calculating the number of allowances to allocate. AELs may not be used or requested in lieu of ESADs as specified in §117.106(e)(3) - (4) and §117.206(f)(4). There is no provision in the commission rules to allow for a variance from the Chapter 117 requirements. The commission recognizes that facilities with a capacity factor of 0.0383 have an ESAD of 0.060 lb NO_x/MMBtu regardless of facility type, as allowed in §§117.106(c)(4), 117.206(c)(17), or 117.475(c)(6). This ESAD is not an "AEL" but simply an assigned ESAD for facilities that are rarely utilized.

EPA commented that the commission should clarify that emissions offsets must be obtained for the life of the NSR source.

The commission agrees that offsets must be provided by the owner or operator of a facility for the life of that facility. The commission also agrees that, in order for reductions from a facility which is subject to the cap and trade program to be used as offsets, the owner or operator must permanently retire the rights to the allowances associated with that facility. This, in effect, generates ongoing credits which can be used as offsets for the life of a facility. The commission wished to clarify that Chapter 101 does not address permitting, and NSR permits issued under Chapter 116 that involve offsets must be issued with the requirement that offsets be obtained for the life of the permitted facility. This requirement is found in §116.150, New Major Source or Major Modification in Ozone Nonattainment Areas. The banking rules do not modify or supersede that requirement. Chapter 101 does require that new facilities which are subject to Division 3 obtain allowances on an annual basis equal to their actual NO_x emissions in addition to obtaining offsets for the ratio portion of their allowable emissions. The commission also wishes to clarify that allowances which are obtained by these new facilities are not issued by the state, but are obtained from the existing number of allowances available to existing facilities. The total number of allowances under the cap remains finite.

BASF, BCCAAG, Enterprise, and TIP commented that a mechanism should be incorporated into the rules to allow facilities without ESADs to opt into the NO_x cap and trade program.

The commission is not revising the rules in response to these comments. Emission reductions from non-ESAD facilities can be certified and banked as DERCs, which can then be converted and used as allowances. The executive director is evaluating the addition of a provision allowing voluntary participation by non-ESAD facilities in the cap and trade program and may make a recommendation to the commission on the need for future rulemaking.

STATUTORY AUTHORITY

The amendment is adopted under Texas Health and Safety Code, Texas Clean Air Act (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.

CHAPTER 101: GENERAL AIR QUALITY RULES

SUBCHAPTER A: GENERAL RULES

§101.1

§101.1. Definitions.

Unless specifically defined in the TCAA or in the rules of the commission, the terms used by the commission have the meanings commonly ascribed to them in the field of air pollution control. In addition to the terms which are defined by the TCAA, the following terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) **Account** - For those sources required to be permitted under Chapter 122 of this title (relating to Federal Operating Permits), all sources which are aggregated as a site. For all other sources, any combination of sources under common ownership or control and located on one or more contiguous properties, or properties contiguous except for intervening roads, railroads, rights-of-way, waterways, or similar divisions.

(2) **Acid gas flare** - A flare used exclusively for the incineration of hydrogen sulfide and other acidic gases derived from natural gas sweetening processes.

(3) **Ambient air** - That portion of the atmosphere, external to buildings, to which the general public has access.

(4) **Background** - Background concentration, the level of air contaminants that cannot be reduced by controlling emissions from man-made sources. It is determined by measuring levels in non-urban areas.

(5) **Capture system** - All equipment (including, but not limited to, hoods, ducts, fans, booths, ovens, dryers, etc.) that contains, collects, and transports an air pollutant to a control device.

(6) **Captured facility** - A manufacturing or production facility that generates an industrial solid waste or hazardous waste that is routinely stored, processed, or disposed of on a shared basis in an integrated waste management unit owned, operated by, and located within a contiguous manufacturing complex.

(7) **Carbon adsorber** - An add-on control device which uses activated carbon to adsorb volatile organic compounds (VOC) from a gas stream.

(8) **Carbon adsorption system** - A carbon adsorber with an inlet and outlet for exhaust gases and a system to regenerate the saturated adsorbent.

(9) **Coating** - A material applied onto or impregnated into a substrate for protective, decorative, or functional purposes. Such materials include, but are not limited to, paints, varnishes, sealants, adhesives, thinners, diluents, inks, maskants, and temporary protective coatings.

(10) **Cold solvent cleaning** - A batch process that uses liquid solvent to remove soils from the surfaces of metal parts or to dry the parts by spraying, brushing, flushing, and/or immersion while maintaining the solvent below its boiling point. Wipe cleaning (hand cleaning) is not included in this definition.

(11) **Combustion unit** - Any boiler plant, furnace, incinerator, flare, engine, or other device or system used to oxidize solid, liquid, or gaseous fuels, but excluding motors and engines used in propelling land, water, and air vehicles.

(12) **Commercial hazardous waste management facility** - Any hazardous waste management facility that accepts hazardous waste or polychlorinated biphenyl compounds for a charge, except a captured facility which disposes only waste generated on-site or a facility that accepts waste only from other facilities owned or effectively controlled by the same person.

(13) **Commercial incinerator** - An incinerator used to dispose of waste material from retail and wholesale trade establishments. (See incinerator.)

(14) **Commercial medical waste incinerator** - A facility that accepts for incineration medical waste generated outside the property boundaries of the facility.

(15) **Component** - A piece of equipment, including, but not limited to, pumps, valves, compressors, and pressure relief valves, which has the potential to leak VOCs.

(16) **Condensate** - Liquids that result from the cooling and/or pressure changes of produced natural gas. Once these liquids are processed at gas plants or refineries or in any other manner, they are no longer considered condensates.

(17) **Construction-demolition waste** - Waste resulting from construction or demolition projects.

(18) **Control system or control device** - Any part, chemical, machine, equipment, contrivance, or combination of same, used to destroy, eliminate, reduce, or control the emission of air contaminants to the atmosphere.

(19) **Conveyorized degreasing** - A solvent cleaning process that uses an automated parts handling system, typically a conveyor, to automatically provide a continuous supply of metal parts to be cleaned or dried using either cold solvent or vaporized solvent. A conveyorized degreasing process is fully enclosed except for the conveyor inlet and exit portals.

(20) **Criteria Pollutant or Standard** - Any pollutant for which there is a National Ambient Air Quality Standard established under 40 Code of Federal Regulations (CFR) Part 50.

(21) **Custody transfer** - The transfer of produced crude oil and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

(22) **De minimis impact** - A change in ground level concentration of an air contaminant as a result of the operation of any new major stationary source or of the operation of any existing source which has undergone a major modification, which does not exceed the following specified amounts.

Figure: 30 TAC §101.1(22) (No change.)

AIR CONTAMINANT	**ANNUAL**	**24-HOUR**	**8-HOUR**	**3-HOUR**	**1-HOUR**
Inhalable Particulate Matter (PM_{10})	1.0 µg/m^3	5 µg/m^3			
Sulfur Dioxide	1.0 µg/m^3	5 µg/m^3		25 µg/m^3	
Nitrogen Dioxide	1.0 µg/m^3				
Carbon Monoxide			0.5 mg/m^3		2 mg/m^3

(23) **Domestic wastes** - The garbage and rubbish normally resulting from the functions of life within a residence.

(24) **Emissions banking** - A system for recording emissions reduction credits so they may be used or transferred for future use.

(25) **Emissions reduction credit (ERC)** - Any stationary source emissions reduction which has been banked in accordance with Chapter 101, Subchapter H, Division 1 of this title (relating to Emission Credit Banking and Trading).

(26) **Emissions reduction credit certificate** - The certificate issued by the executive director which indicates the amount of qualified reduction available for use as offsets and the length of time the reduction is eligible for use.

(27) **Emissions unit** - Any part of a stationary source which emits or would have the potential to emit any pollutant subject to regulation under the FCAA.

(28) **Exempt solvent** - Those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.

(29) **External floating roof** - A cover or roof in an open top tank which rests upon or is floated upon the liquid being contained and is equipped with a single or double seal to close the space between the roof edge and tank shell. A double seal consists of two complete and separate closure seals, one above the other, containing an enclosed space between them.

(30) **Federal motor vehicle regulation** - Control of Air Pollution from Motor Vehicles and Motor Vehicle Engines, 40 CFR Part 85.

(31) **Federally enforceable** - All limitations and conditions which are enforceable by the EPA administrator, including those requirements developed under 40 CFR Parts 60 and 61, requirements within any applicable state implementation plan (SIP), any permit requirements established under 40 CFR §52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under the approved program that is incorporated into the SIP and that expressly requires adherence to any permit issued under such program.

(32) **Flare** - An open combustion unit (i.e., lacking an enclosed combustion chamber) whose combustion air is provided by uncontrolled ambient air around the flame, and which is used as a control device. A flare may be equipped with a radiant heat shield (with or without a refractory lining), but is not equipped with a flame air control damping system to control the air/fuel mixture. In addition, a flare may also use auxiliary fuel. The combustion flame may be elevated or at ground level. A vapor combustor is not considered a flare.

(33) **Fuel oil** - Any oil meeting The American Society for Testing and Materials (ASTM) specifications for fuel oil in ASTM D 396-86, Standard Specifications for Fuel Oils. This includes fuel oil grades 1, 2, 4 (Light), 4, 5 (Light), 5 (Heavy), and 6.

(34) **Fugitive emission** - Any gaseous or particulate contaminant entering the atmosphere which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening designed to direct or control its flow.

(35) **Garbage** - Solid waste consisting of putrescible animal and vegetable waste materials resulting from the handling, preparation, cooking, and consumption of food, including waste materials from markets, storage facilities, and handling and sale of produce and other food products.

(36) **Gasoline** - Any petroleum distillate having a Reid Vapor Pressure (RVP) of four pounds per square inch (27.6 kPa) or greater which is produced for use as a motor fuel and is commonly called gasoline.

(37) **Hazardous waste management facility** - All contiguous land, including structures, appurtenances, and other improvements on the land, used for processing, storing, or disposing of hazardous waste. The term includes a publicly or privately owned hazardous waste management facility consisting of processing, storage, or disposal operational hazardous waste management units such as one or more landfills, surface impoundments, waste piles, incinerators, boilers, and industrial furnaces, including cement kilns, injection wells, salt dome waste containment caverns, land treatment facilities, or a combination of units.

(38) **Hazardous waste management unit** - A landfill, surface impoundment, waste pile, boiler, industrial furnace, incinerator, cement kiln, injection well, container, drum, salt dome waste containment cavern, or land treatment unit, or any other structure, vessel, appurtenance, or other improvement on land used to manage hazardous waste.

(39) **Hazardous wastes** - Any solid waste identified or listed as a hazardous waste by the administrator of the EPA under the federal Solid Waste Disposal Act, as amended by RCRA, 42 United States Code (USC), §§6901 et seq., as amended.

(40) **Heatset (used in offset lithographic printing)** - Any operation where heat is required to evaporate ink oil from the printing ink. Hot air dryers are used to deliver the heat.

(41) **High-bake coatings** - Coatings designed to cure at temperatures above 194 degrees Fahrenheit.

(42) **High-volume low-pressure (HVLP) spray guns** - Equipment used to apply coatings by means of a spray gun which operates between 0.1 and 10.0 pounds per square inch gauge air pressure.

(43) **Incinerator** - An enclosed combustion apparatus and attachments which is used in the process of burning wastes for the primary purpose of reducing its volume and weight by removing the

combustibles of the waste and which is equipped with a flue for conducting products of combustion to the atmosphere. Any combustion device which burns 10% or more of solid waste on a total British thermal unit (Btu) heat input basis averaged over any one-hour period shall be considered an incinerator. A combustion device without instrumentation or methodology to determine hourly flow rates of solid waste and burning 1.0% or more of solid waste on a total Btu heat input basis averaged annually shall also be considered an incinerator. An open-trench type (with closed ends) combustion unit may be considered an incinerator when approved by the executive director. Devices burning untreated wood scraps, waste wood, or sludge from the treatment of wastewater from the process mills as a primary fuel for heat recovery are not included under this definition. Combustion devices permitted under this title as combustion devices other than incinerators will not be considered incinerators for application of any regulations within this title provided they are installed and operated in compliance with the condition of all applicable permits.

(44) **Industrial boiler** - A boiler located on the site of a facility engaged in a manufacturing process where substances are transformed into new products, including the component parts of products, by mechanical or chemical processes.

(45) **Industrial furnace** - Cement kilns, lime kilns, aggregate kilns, phosphate kilns, coke ovens, blast furnaces, smelting, melting, or refining furnaces, including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, or foundry furnaces, titanium dioxide chloride

process oxidation reactors, methane reforming furnaces, pulping recovery furnaces, combustion devices used in the recovery of sulfur values from spent sulfuric acid, and other devices the commission may list.

(46) **Industrial solid waste** - Solid waste resulting from, or incidental to, any process of industry or manufacturing, or mining or agricultural operations, classified as follows.

(A) Class 1 industrial solid waste or Class 1 waste is any industrial solid waste designated as Class 1 by the executive director as any industrial solid waste or mixture of industrial solid wastes that because of its concentration or physical or chemical characteristics is toxic, corrosive, flammable, a strong sensitizer or irritant, a generator of sudden pressure by decomposition, heat, or other means, and may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or otherwise managed, including hazardous industrial waste, as defined in §335.1 of this title (relating to Definitions) and §335.505 of this title (relating to Class 1 Waste Determination).

(B) Class 2 industrial solid waste is any individual solid waste or combination of industrial solid wastes that cannot be described as Class 1 or Class 3, as defined in §335.506 of this title (relating to Class 2 Waste Determination).

(C) Class 3 industrial solid waste is any inert and essentially insoluble industrial solid waste, including materials such as rock, brick, glass, dirt, and certain plastics and rubber, etc., that

are not readily decomposable as defined in §335.507 of this title (relating to Class 3 Waste Determination).

(47) **Internal floating cover** - A cover or floating roof in a fixed roof tank which rests upon or is floated upon the liquid being contained, and is equipped with a closure seal or seals to close the space between the cover edge and tank shell.

(48) **Leak** - A VOC concentration greater than 10,000 parts per million by volume (ppmv) or the amount specified by applicable rule, whichever is lower; or the dripping or exuding of process fluid based on sight, smell, or sound.

(49) **Liquid fuel** - A liquid combustible mixture, not derived from hazardous waste, with a heating value of at least 5,000 Btu per pound.

(50) **Liquid-mounted seal** - A primary seal mounted in continuous contact with the liquid between the tank wall and the floating roof around the circumference of the tank.

(51) **Maintenance area** - A geographic region of the state previously designated nonattainment under the FCAA Amendments of 1990 and subsequently redesignated to attainment subject to the requirement to develop a maintenance plan under FCAA, §175A, as amended. The

following are the maintenance areas within the state: Victoria Ozone Maintenance Area (60 FR 12453) - Victoria County.

(52) **Maintenance Plan** - A revision to the applicable SIP, meeting the requirements of FCAA, §175A.

(53) **Marine vessel** - Any watercraft used, or capable of being used, as a means of transportation on water, and that is constructed or adapted to carry, or that carries, oil, gasoline, or other volatile organic liquid in bulk as a cargo or cargo residue.

(54) **Mechanical shoe seal** - A metal sheet which is held vertically against the storage tank wall by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(55) **Medical waste** - Waste materials identified by the Texas Department of Health as "special waste from health care-related facilities" and those waste materials commingled and discarded with special waste from health care related facilities.

(56) **Metropolitan Planning Organization (MPO)** - That organization designated as being responsible, together with the state, for conducting the continuing, cooperative, and comprehensive planning process under 23 USC, §134 and 49 USC, §1607.

(57) **Mobile emissions reduction credit (MERC)** - The credit obtained from an enforceable, permanent, quantifiable, and surplus (to other federal and state regulations) emissions reduction generated by a mobile source as set forth in Chapter 114, Subchapter E of this title (relating to Low Emission Vehicle Fleet Requirements) or Chapter 114, Subchapter F of this title (relating to Vehicle Retirement and Mobile Emission Reduction Credits), and which has been banked in accordance with Chapter 101, Subchapter H, Division 1 of this title.

(58) **Motor vehicle** - A self propelled vehicle designed for transporting persons or property on a street or highway.

(59) **Motor vehicle fuel dispensing facility** - Any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.

(60) **Municipal solid waste** - Solid waste resulting from, or incidental to, municipal, community, commercial, institutional, and recreational activities, including garbage, rubbish, ashes, street cleanings, dead animals, abandoned automobiles, and all other solid waste except industrial solid waste.

(61) **Municipal solid waste facility** - All contiguous land, structures, other appurtenances, and improvements on the land used for processing, storing, or disposing of solid waste. A facility may be publicly or privately owned and may consist of several processing, storage, or disposal operational units, e.g., one or more landfills, surface impoundments, or combinations of them.

(62) **Municipal solid waste landfill** - A discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR §257.2. A municipal solid waste landfill (MSWLF) unit also may receive other types of RCRA Subtitle D wastes, such as commercial solid waste, non-hazardous sludge, conditionally exempt small-quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. An MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion.

(63) **National Ambient Air Quality Standard (NAAQS)** - Those standards established under FCAA, §109, including standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), inhalable particulate matter (PM_{10} and $PM_{2.5}$), and sulfur dioxide (SO_2).

(64) **Net ground-level concentration** - The concentration of an air contaminant as measured at or beyond the property boundary minus the representative concentration flowing onto a property as measured at any point. Where there is no expected influence of the air contaminant flowing onto a property from other sources, the net ground level concentration may be determined by a measurement at or beyond the property boundary.

(65) **New source** - Any stationary source, the construction or modification of which was commenced after March 5, 1972.

(66) **Nonattainment area** - A defined region within the state which is designated by EPA as failing to meet the National Ambient Air Quality Standard for a pollutant for which a standard exists. The EPA will designate the area as nonattainment under the provisions of FCAA, §107(d). For the official list and boundaries of nonattainment areas, see 40 CFR Part 81 and pertinent Federal Register notices. The following areas comprise the nonattainment areas within the state:

(A) Carbon monoxide (CO). El Paso (ELP) CO nonattainment area (56 FR 56694)--Classified as a Moderate CO nonattainment area with a design value less than or equal to 12.7 parts per million. Portion of El Paso County. Portion of the city limits of El Paso: That portion of the City of El Paso bounded on the north by Highway 10 from Porfirio Diaz Street to Raynolds Street, Raynolds Street from Highway 10 to the Southern Pacific Railroad lines, the Southern Pacific Railroad lines from Raynolds Street to Highway 62, Highway 62 from the Southern Pacific Railroad lines to Highway 20, and Highway 20 from Highway 62 to Polo Inn Road. Bounded on the east by Polo Inn Road from Highway 20 to the Texas-Mexico border. Bounded on the south by the Texas-Mexico border from Polo Inn Road to Porfirio Diaz Street. Bounded on the west by Porfirio Diaz Street from the Texas-Mexico border to Highway 10.

(B) Inhalable particulate matter (PM_{10}). El Paso (ELP) PM_{10} nonattainment area (56 FR 56694)--Classified as a Moderate PM_{10} nonattainment area. Portion of El Paso County which comprises the El Paso city limit boundaries as they existed on November 15, 1990.

(C) Lead. Collin County lead nonattainment area (56 FR 56694)--Portion of Collin County. Eastside: Starting at the intersection of south Fifth Street and the fence line approximately 1,000 feet south of the Gould National Batteries (GNB) property line going north to the intersection of south Fifth Street and Eubanks Street; Northside: Proceeding west on Eubanks to the Burlington Railroad tracks; Westside: Along the Burlington Railroad tracks to the fence line approximately 1,000 feet south of the GNB property line; Southside: Fence line approximately 1,000 feet south of the GNB property line.

(D) Nitrogen Dioxide (NO_2). No designated nonattainment areas.

(E) Ozone.

(i) Houston/Galveston (HGA) ozone nonattainment area (56 FR 56694)--Classified as a Severe-17 ozone nonattainment area. Consists of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller Counties.

(ii) El Paso (ELP) ozone nonattainment area (56 FR 56694)--Classified as a Serious ozone nonattainment area. Consists of El Paso County.

(iii) Beaumont/Port Arthur (BPA) ozone nonattainment area (61 FR 14496)--Classified as a Moderate ozone nonattainment area. Consists of Hardin, Jefferson, and Orange Counties.

(iv) Dallas/Fort Worth (DFW) ozone nonattainment area (63 FR 8128)--Classified as a Serious ozone nonattainment area. Consists of Collin, Dallas, Denton, and Tarrant Counties.

(F) Sulfur Dioxide (SO_2). No designated nonattainment areas.

(67) **Nonreportable upset** - Any upset that is not a reportable upset as defined in this section.

(68) **Opacity** - The degree to which an emission of air contaminants obstructs the transmission of light expressed as the percentage of light obstructed as measured by an optical instrument or trained observer.

(69) **Open-top vapor degreasing** - A batch solvent cleaning process that is open to the air and which uses boiling solvent to create solvent vapor used to clean or dry metal parts through condensation of the hot solvent vapors on the colder metal parts.

(70) **Outdoor burning** - Any fire or smoke-producing process which is not conducted in a combustion unit.

(71) **Particulate matter** - Any material, except uncombined water, that exists as a solid or liquid in the atmosphere or in a gas stream at standard conditions.

(72) **Particulate matter emissions** - All finely-divided solid or liquid material, other than uncombined water, emitted to the ambient air as measured by EPA Reference Method 5, as specified at 40 CFR Part 60, Appendix A, modified to include particulate caught by impinger train; by an equivalent or alternative method, as specified at 40 CFR Part 51; or by a test method specified in an approved SIP.

(73) **Petroleum refinery** - Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of crude oil, or through the redistillation, cracking, extraction, reforming, or other processing of unfinished petroleum derivatives.

(74) **PM_{10}** - Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by a reference method based on 40 CFR Part 50, Appendix J and designated in accordance with 40 CFR Part 53, or by an equivalent method designated with that Part 53.

(75) **PM_{10} emissions** - Finely-divided solid or liquid material with an aerodynamic diameter less than or equal to a nominal ten micrometers emitted to the ambient air as measured by an applicable reference method, or an equivalent or alternative method specified in 40 CFR Part 51, or by a test method specified in an approved SIP.

(76) **Polychlorinated biphenyl compound (PCB)** - A compound subject to 40 CFR Part 761.

(77) **Process or processes** - Any action, operation, or treatment embracing chemical, commercial, industrial, or manufacturing factors such as combustion units, kilns, stills, dryers, roasters, and equipment used in connection therewith, and all other methods or forms of manufacturing or processing that may emit smoke, particulate matter, gaseous matter, or visible emissions.

(78) **Process weight per hour** - "Process weight" is the total weight of all materials introduced or recirculated into any specific process which may cause any discharge of air contaminants into the atmosphere. Solid fuels charged into the process will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. The "process weight per hour" will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment used to conduct the process is idle. For continuous operation, the "process weight per hour" will be derived by dividing the total process weight for a 24-hour period by 24.

(79) **Property** - All land under common control or ownership coupled with all improvements on such land, and all fixed or movable objects on such land, or any vessel on the waters of this state.

(80) **Reasonable further progress (RFP)** - Annual incremental reductions in emissions of the applicable air contaminant which are sufficient to provide for attainment of the applicable national ambient air quality standard in the designated nonattainment areas by the date required in the SIP.

(81) **Remote reservoir cold solvent cleaning** - Any cold solvent cleaning operation in which liquid solvent is pumped to a sink-like work area that drains solvent back into an enclosed container while parts are being cleaned, allowing no solvent to pool in the work area.

(82) **Reportable quantity (RQ)** - Is as follows:

(A) for individual air contaminant compounds and specifically listed mixtures, either:

(i) the lowest of the quantities:

(I) listed in 40 CFR §302, Table 302.4, the column "final RQ";

(II) listed in 40 CFR §355, Appendix A, the column "Reportable Quantity"; or

(III) listed as follows:

(-a-) butanes (any isomer)--5,000 pounds;

(-b-) butenes (any isomer, except 1,3-butadiene)--5,000 pounds;

(-c-) ethylene--5,000 pounds;

(-d-) carbon monoxide--5,000 pounds;

(-e-) pentanes (any isomer)--5,000 pounds;

(-f-) propane--5,000 pounds;

(-g-) propylene--5,000 pounds;

(-h-) ethanol--5,000 pounds;

(-i-) isopropyl alcohol--5,000 pounds;

(-j-) mineral spirits--5,000 pounds;

(-k-) hexanes (any isomer)--5,000 pounds;

(-l-) octanes (any isomer)--5,000 pounds;

(-m-) decanes (any isomer)--5,000 pounds; or

(ii) if not listed in clause (i) of this subparagraph, 100 pounds;

(B) for mixtures of air contaminant compounds:

(i) where the relative amount of individual air contaminant compounds is known through common process knowledge or prior engineering analysis or testing, any amount of an individual air contaminant compound which equals or exceeds the amount specified in subparagraph (A) of this paragraph;

(ii) where the relative amount of individual air contaminant compounds in subparagraph (A)(i) of this paragraph is not known, any amount of the mixture which equals or exceeds the amount for any single air contaminant compound that is present in the mixture and listed in subparagraph (A)(i) of this paragraph;

(iii) where each of the individual air contaminant compounds listed in subparagraph (A)(i) of this paragraph are known to be less than 0.02% by weight of the mixture, and each of the other individual air contaminant compounds covered by subparagraph (A)(ii) of this paragraph

are known to be less than 2.0% by weight of the mixture, any total amount of the mixture of air contaminant compounds greater than or equal to 5,000 pounds; or

(iv) where natural gas excluding methane and ethane, or air emissions from crude oil are known to be in an amount greater than or equal to 5,000 pounds or associated hydrogen sulfide and mercaptans in a total amount greater than 100 pounds, whichever occurs first;

(C) for opacity, an opacity which is equal to or exceeds 15 additional percentage points above the applicable limit, averaged over a six-minute period. Opacity is the only reportable quantity applicable to boilers or combustion turbines fueled by natural gas, coal, lignite, wood, or fuel oil containing hazardous air pollutants at a concentration of less than 0.02% by weight;

(D) for facilities where air contaminant compounds are measured directly by a continuous emission monitoring system providing updated readings at a minimum 15-minute interval an amount, approved by the executive director based on any relevant conditions and a screening model, that would be reported prior to ground level concentrations reaching at any distance beyond the closest facility property line:

(i) less than one half of any applicable ambient air standards; and

(ii) less than two times the concentration of applicable air emission limitations.

(83) **Reportable upset** - Any upset which, in any 24-hour period, results in an unauthorized emission of air contaminants equal to or in excess of the reportable quantity as defined in this section.

(84) **Rubbish** - Nonputrescible solid waste, consisting of both combustible and noncombustible waste materials. Combustible rubbish includes paper, rags, cartons, wood, excelsior, furniture, rubber, plastics, yard trimmings, leaves, and similar materials. Noncombustible rubbish includes glass, crockery, tin cans, aluminum cans, metal furniture, and like materials which will not burn at ordinary incinerator temperatures (1,600 degrees Fahrenheit to 1,800 degrees Fahrenheit).

(85) **Sludge** - Any solid or semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant; water supply treatment plant, exclusive of the treated effluent from a wastewater treatment plant; or air pollution control equipment.

(86) **Smoke** - Small gas-born particles resulting from incomplete combustion consisting predominately of carbon and other combustible material and present in sufficient quantity to be visible.

(87) **Solid waste** - Garbage, rubbish, refuse, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control equipment, and other discarded material, including solid, liquid, semisolid, or containerized gaseous material resulting from industrial, municipal, commercial,

mining, and agricultural operations and from community and institutional activities. The term does not include:

(A) solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued under the Texas Water Code, Chapter 26;

(B) soil, dirt, rock, sand, and other natural or man-made inert solid materials used to fill land, if the object of the fill is to make the land suitable for the construction of surface improvements; or

(C) waste materials that result from activities associated with the exploration, development, or production of oil or gas, or geothermal resources, and other substance or material regulated by the Railroad Commission of Texas under the Natural Resources Code, §91.101, unless the waste, substance, or material results from activities associated with gasoline plants, natural gas liquids processing plants, pressure maintenance plants, or repressurizing plants and is hazardous waste as defined by the administrator of the EPA under the federal Solid Waste Disposal Act, as amended by RCRA, as amended (42 USC, §§6901 et seq.).

(88) **Sour crude** - A crude oil which will emit a sour gas when in equilibrium at atmospheric pressure.

(89) **Sour gas** - Any natural gas containing more than 1.5 grains of hydrogen sulfide per 100 cubic feet, or more than 30 grains of total sulfur per 100 cubic feet.

(90) **Source** - 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.

(91) **Special waste from health care related facilities** - A solid waste which if improperly treated or handled may serve to transmit infectious disease(s) and which is comprised of the following: animal waste, bulk blood and blood products, microbiological waste, pathological waste, and sharps.

(92) **Standard conditions** - A condition at a temperature of 68 degrees Fahrenheit (20 degrees Centigrade) and a pressure of 14.7 pounds per square inch absolute (101.3 kPa). Pollutant concentrations from an incinerator will be corrected to a condition of 50% excess air if the incinerator is operating at greater than 50% excess air.

(93) **Standard metropolitan statistical area** - An area consisting of a county or one or more contiguous counties which is officially so designated by the United States Bureau of the Budget.

(94) **Submerged fill pipe** - A fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 cm) from the bottom or, when applied to a tank which is loaded from the side, that has a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.

(95) **Sulfur compounds** - All inorganic or organic chemicals having an atom or atoms of sulfur in their chemical structure.

(96) **Sulfuric acid mist/sulfuric acid** - Emissions of sulfuric acid mist and sulfuric acid are considered to be the same air contaminant calculated as H_2SO_4 and shall include sulfuric acid liquid mist, sulfur trioxide, and sulfuric acid vapor as measured by Test Method 8 in 40 CFR Part 60, Appendix A.

(97) **Sweet crude oil and gas** - Those crude petroleum hydrocarbons that are not "sour" as defined in this section.

(98) **Total suspended particulate** - Particulate matter as measured by the method described in 40 CFR Part 50, Appendix B.

(99) **Transfer efficiency** - The amount of coating solids deposited onto the surface or a part of product divided by the total amount of coating solids delivered to the coating application system.

(100) **True vapor pressure** - The absolute aggregate partial vapor pressure (psia) of all VOCs at the temperature of storage, handling, or processing.

(101) **Unauthorized emission** - An emission of any air contaminant except carbon dioxide, water, nitrogen, methane, ethane, noble gases, hydrogen, and oxygen which exceeds any air emission limitation in a permit, rule, or order of the commission or as authorized by TCAA, §382.0518(g).

(102) **Upset** - An unscheduled occurrence or excursion of a process or operation that results in an unauthorized emission of air contaminants.

(103) **Utility boiler** - A boiler used to produce electric power, steam, or heated or cooled air, or other gases or fluids for sale.

(104) **Vapor combustor** - A partially enclosed combustion device used to destroy VOCs by smokeless combustion without extracting energy in the form of process heat or steam. The combustion flame may be partially visible, but at no time does the device operate with an uncontrolled flame. Auxiliary fuel and/or a flame air control damping system, which can operate at all times to control the air/fuel mixture to the combustor's flame zone, may be required to ensure smokeless combustion during operation.

(105) **Vapor-mounted seal** - A primary seal mounted so there is an annular space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof or cover.

(106) **Vent** - Any duct, stack, chimney, flue, conduit, or other device used to conduct air contaminants into the atmosphere.

(107) **Visible emissions** - Particulate or gaseous matter which can be detected by the human eye. The radiant energy from an open flame shall not be considered a visible emission under this definition.

(108) **Volatile organic compound** (VOC) - Any compound of carbon or mixture of carbon compounds excluding methane; ethane; 1,1,1-trichloroethane (methyl chloroform); methylene chloride (dichloromethane); perchloroethylene (tetrachloroethylene); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23); 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113); 1,2-dichloro-1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro-2,2-dichloroethane (HCFC-123); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1,2-tetrafluoroethane (HFC-134a); 1,1-dichloro-1-fluoroethane (HCFC-141b); 1-chloro-1,1-difluoroethane (HCFC-142b); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); parachlorobenzotrifluoride (PCBTF); cyclic, branched, or linear completely methylated

siloxanes; acetone; 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca); 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb); 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee); difluoromethane (HFC-32); ethylfluoride (HFC-161); 1,1,1,3,3,3-hexafluoropropane (HFC-236fa); 1,1,2,2,3-pentafluoropropane (HFC-245ca); 1,1,2,3,3-pentafluoropropane (HFC-245ea); 1,1,1,2,3-pentafluoropropane (HFC-245eb); 1,1,1,3,3-pentafluoropropane (HFC-245fa); 1,1,1,2,3,3-hexafluoropropane (HFC-236ea); 1,1,1,3,3-pentafluorobutane (HFC-365mfc); chlorofluoromethane (HCFC-31); 1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a); 1-chloro-1-fluoroethane (HCFC-151a); 1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxybutane; 2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane; 1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane; 2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane; methyl acetate; carbon monoxide; carbon dioxide; carbonic acid; metallic carbides or carbonates; ammonium carbonate; and perfluorocarbon compounds which fall into these classes:

(A) cyclic, branched, or linear, completely fluorinated alkanes;

(B) cyclic, branched, or linear, completely fluorinated ethers with no unsaturations;

(C) cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations; and

(D) sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.

(109) **VOC water separator** - Any tank, box, sump, or other container in which any VOC, floating on or contained in water entering such tank, box, sump, or other container, is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 3: MASS EMISSIONS CAP AND TRADE PROGRAM

§§101.350, 101.352 - 101.354, 101.356, 101.360, 101.363

STATUTORY AUTHORITY

The amendments and new section 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 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.

§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) **Adjustment period** - A period of time, beginning on the first day of operation of a facility and ending no more than 180 consecutive days later, used to make corrections and adjustments to achieve normal technical operating characteristics of the facility.

(2) **Allowance** - The authorization to emit one ton of nitrogen oxides (NO_x), expressed in tenths of a ton, during a control period.

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

(4) **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."

(5) **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.

(6) **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.

(7) **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.

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

(9) **Existing Facility** - A new or modified facility that either has submitted an application for a permit under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) 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 of this title (relating to Permits by Rule) and commenced construction before January 2, 2001.

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

(11) **Level of activity -** The amount of activity at a facility measured in terms of production, fuel use, raw materials input, or other similar units.

(12) **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.

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

§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) An owner or operator of a facility subject to this division may certify reductions from the facility 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 (b) or (h) of this section.

Figure: 30 TAC §101.353(a)

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

Where: (1) Á = 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 for 1997 or the emission specifications under §§117.106, 117.206, and 117.475 of this title (relating to Emission Specifications for Attainment Demonstration; and Emission Specifications) (ESAD) whichever is higher, 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;

EF_{98} = the facility's emission factor for 1998 or the emission specifications under ESAD, whichever is higher, 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;

EF_{99} = the facility's emission factor for 1999 or the emission specifications under ESAD, whichever is higher, 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.

(B) For existing facilities not in operation prior to January 1, 1997 and that have been in operation less than five complete consecutive calender years beginning after the end of the adjustment period and have not established two years of baselin data:

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

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

$EF_{Allowable}$ = The emission factor or the emission specifications under ESAD, whichever is higher, authorized by the executive director until such time two consecutive calendar years of actual emission data is available.

(C) For existing facilities not in operation prior to January 1, 1997 and that have established two consecutive calendar years of baseline data out of the first five years of operation following the end of the adjustment period:

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

Where: LA_{Year-1} = the facility's level of activity, as certified by the executive director, for the first of any two consecutive years within the first five years of operation;

LA_{Year-2} = the facility's level of activity, as certified by the executive director, for the second of any two consecutive years within the first five years of operation;

EF_{Year-1} = the facility's emission factor or the emission specifications under ESAD, whichever is higher, 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 the first of any two consecutive years within the first five years of operation;

EF_{Year-2} = the facility's emission factor or the emission specifications under ESAD, whichever is higher, 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 the second of any two consecutive years within the first five years of operation.

(3) × = reduction factor, where:

(A) For all boilers, auxiliary steam boilers, and stationary gas turbines (including duct burners used in turbine exhaust ducts) within an electric power generating system, as defined in §117.10(13)(A)(iii) of this title (relating to Definitions), located in the Houston/Galveston nonattainment area:

(i) for January 1, 2002 through March 31, 2003, × = 0.00;

(ii) for April 1, 2003 through March 31, 2004, × = 0.489;

(iii) on or after April 1, 2004 through March 31, 2007, × = 0.978;

(iv) on or after April 1, 2007, × = 1.00;

(B) If the emissions specifications in §117.106(c)(5) of this title apply, then:

(i) for January 1, 2002 through March 31, 2003, × = 0.00;

(ii) for April 1, 2003 through March 31, 2004, × = 0.50;

(iii) on or after April 1, 2004, × = 1.00;

(C) For all other facilities:

(i) for January 1, 2002 through March 31, 2004, × = 0.00;

(ii) for April 1, 2004 through March 31, 2005, × = 0.389;

(iii) for April 1, 2005 through March 31, 2006, × = 0.667;

(iv) for April 1, 2006 through March 31, 2007, X = 0.778;

(v) on or after April 1, 2007, X = 1.00;

(D) If the emissions specifications in §117.206(c)(18) of this title apply, then:

(i) for January 1, 2002 through March 31, 2004, X=0.00;

(ii) for April 1, 2004 through March 31, 2005, X=0.47;

(iii) for April 1, 2005 through March 31, 2006, X=0.80;

(iv) for April 1, 2006 through March 1, 2007, X=0.93;

(v) on or after April 1, 2007, X=1.00;

(E) 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 existing facilities, 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, beginning after the end of the adjustment period; or

(ii) when two complete consecutive calender years of actual level of activity data is available, beginning after the end of the adjustment period, 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_{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)(4), 117.206(c)(17), or 117.475(c)(6) of this title, 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)(4), 117.206(c)(17) or 117.475(c)(6) of this title.

(b) For a new and/or modified facility that has submitted, under Chapter 116 of this title (relating to Control of Air Pollution by Permit for New Construction of Modification), 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 (relating to Permits by Rule) 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(g) of this title (relating to Allowance Banking and Trading).

(c) If actual emissions of nitrogen oxides (NO_x) during a control period exceed the amount of allowances held in a compliance account on March 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; and

(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) The owner or operator of a facility may, due to extenuating circumstances, request up to two additional calendar years to establish a baseline period more representative of normal operation as determined by the executive director. Applications for extenuating circumstances must be submitted by the owner or operator of the facility to the executive director:

(1) no later than June 30, 2001;

(2) for facilities whose baseline as described variable (2)(C) listed in the figure contained in subsection (a) of this section is not complete by June 30, 2001, no later than 90 days after completion of the baseline period; or

(3) at any time as authorized by the executive director.

(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 calender 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 monitoring and testing protocols established in §§117.114, 117.214, and 117.479 of this title (relating to Emission Testing and Monitoring for the Houston/Galveston Attainment Demonstration; and Monitoring, Recordkeeping, and Reporting Requirements).

(b) In the event that the monitoring and testing data required under subsection (a) of this section is missing or unavailable, the facility may report actual emissions for that period of time using the following equation or other listed methods in the following order to determine actual emissions: continuous monitoring data; periodic monitoring data; testing data; manufacturer's data; and *EPA Compilation of Air Pollution Emission Factors* (AP-42). When reporting actual emissions as required under this subsection, the facility must also submit the justification for not using the methods in subsection (a) of this section and the justification for the method used.

Figure: 30 TAC §101.354(b)

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

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

(c) If the protocol used to show compliance with this section differs from the protocol used by the commission to establish the allocation of allowances under §101.353 of this title (relating to Allocation of Allowances), the executive director may recalculate the number of allowances allocated per year for consistency between the methods.

(d) 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.

(e) Allowances allocated in accordance with the variables in (a)(2)(B) listed in Figure 30 TAC §101.353(a) 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.

(f) On March 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 nitrogen oxides 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 (d) of this section.

(c) The owner or operator of a site receiving allowances on an annual basis may permanently sell those rights to any person. This request for transfer of ownership shall be completed by the executive director following the submission of a completed ECT-4 Form, Application for Permanent Transfer of Allowance Ownership. The executive director will issue a letter to the purchaser and seller reflecting this transaction. The transaction will be considered finalized upon issuance of this letter.

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

(e) Only authorized account representatives may trade allowances.

(f) Trades will be reviewed for approval 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.

(g) Sites may use nitrogen oxides (NO_x) 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) - (9) 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) - (9) of this subsection provided that 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, on a one to one basis or other ratio, to the use of NO_x 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) DERCs generated prior to January 1, 2005 may be used in lieu of allowances for compliance with this division for the control period beginning January 1, 2005 through December 31, 2005 at a ratio of four DERCs for one allowance.

(4) DERCs generated prior to January 1, 2005 may be used in lieu of allowances for compliance with this division for the control period beginning January 1, 2006 through December 31, 2006 at a ratio of seven DERCs for one allowance.

(5) DERCs generated prior to January 1, 2005 may be used in lieu of allowances for compliance with this division for the control period beginning January 1, 2007 and all subsequent control periods at a ratio of ten DERCs for one allowance.

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

(7) Beginning January 1, 2005, no more than 10,000 DERCs may be used in any combination totaled over all sites in the Houston/Galveston (HGA) ozone nonattainment area during a single calender year. This restriction does not apply to MDERCs.

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

(9) 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.

(h) Emission reduction credits (ERCs) may be converted into a yearly allocation of allowances at the rate of one ERC to one allowance per year only if they were generated prior to December 1, 2000 and provided that:

(1) the ERC is quantifiable, real, surplus, enforceable, and permanent as required in §101.302 of this title (relating to General Provisions) at the time the ERC is converted;

(2) the ERC was generated in the HGA area;

(3) the ERC was generated from a reduction in NO_x;

(4) the ERC has not expired; and

(5) the owner of the ERC has prior approval from the executive director.

§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, emission factors, 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 allowable 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 used to determine its baseline activity, the actual level of activity and actual emission factors for those two years 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.

(c) Owners or operators of a site that becomes subject to this division on or after April 1, 2001 by virtue of adding facilities subject to the emission specifications under §§117.106, 117.206, and 117.475 of this title (relating to Emission Specifications for Attainment Demonstrations; and Emission Specifications) shall certify the level of activity for existing facilities in accordance with subsections (a) and (b) of this section, except such certification shall be submitted no later than 90 days from the date the site becomes subject to this division, as determined by the executive director.

§101.363. Program Audits and Reports.

(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.

(1) The audit will evaluate the impact of the program on the state's ozone 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 (DERCs), and/or mobile discrete

emission reduction credits (MDERCs) 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 EPA and made available for public inspection within six months after the audit begins.

(b) No later than June 30 following the end of each control period, the executive director shall develop and make available to the general public and EPA, a report that includes:

(1) number of allowances allocated to each compliance account;

(2) total number of allowances allocated under this division;

(3) number of actual nitrogen oxides (NO_x) allowances subtracted from each compliance account based on the actual NO_x emissions from the site; and

(4) a summary of all trades completed under this division.

SUBCHAPTER H: EMISSIONS BANKING AND TRADING

DIVISION 4: DISCRETE EMISSION CREDIT BANKING AND TRADING

§§101.370, 101.372, 101.373

STATUTORY AUTHORITY

The amendments 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 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.

§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 operation at a facility measured in terms of production, use, raw materials input, vehicle miles traveled, or other similar units.

(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 facility measured in terms of production, fuel use, raw materials input, or other similar units.

(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 emission rate 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.

§101.372. General Provisions.

(a) Applicable pollutants. Reductions of volatile organic compounds (VOCs), nitrogen oxides (NO_x), carbon (CO), sulfur dioxide (SO_2), and particulates with an aerodynamic diameter of less than or equal to a nominal ten microns (PM_{10}) 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. 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_x 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_x 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_x 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_2 , and PM_{10} discrete emission credits must be used in the same metropolitan statistical area in which the reduction was generated.

(5) VOC and NO_x 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_x 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 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 shutdown or 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) (No change.)

If SA > BA, then
(BER * BA) - (SER * SA) = reduction generated

Else if SA < BA, then:
(BER * BA) - (SER * BA) = 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 tenth of a 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 shutdown 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

(I) 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 or withdrawn.

(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_x) 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_x cap and trade requirements as provided in §101.356(g) of this title (relating to Allowance Banking and Trading).

(D) compliance with §115.950 and §117.570 of this title (relating to Use of Emissions 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 non-road 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) (No change.)

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

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

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

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_{Mi} = 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) (No change.)

(PLA * PER) - (ALA * AER) =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 tenth of a 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) Application of intent to use. An application 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 applicant has submitted the notice and received executive director approval;

(2) the application 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 application 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 application 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 application 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_x;

(-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.