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This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued in Austin, Texas, on November 24, 1993.

TRD-9332715 Linda K. von Quintus-Dorn
Chief Clerk
Texas Department of Insurance

Effective date: January 1, 1994

Proposal publication date: October 8, 1993

For further information, please call: (512) 463-6327

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TITLE 30. ENVIRONMENTAL QUALITY

Part I. Texas Natural Resource Conservation Commission

Chapter 117. Control of Air Pollution From Nitrogen Compounds

The Texas Natural Resource Conservation Commission (TNRCC) adopts amendments to §117.105 and §117.205, the repeal of §117.540 and §117. 550, and new §§117.540, 117.550, and 117.580, concerning Control of Air Pollution From Nitrogen Compounds. Sections 117.105, 117.205, and new §§117.540, 117.550, and 117.580 are adopted with changes to the proposed text as published in the June 15, 1993, issue of the Texas Register (18 TexReg 3745). The repeal of §117.540 and §117.550 are adopted without changes and will not be republished.

The proposed changes are part of a series of proposed revisions to Chapter 117 being developed in response to requirements by the U.S. Environmental Protection Agency (EPA) and the 1990 Federal Clean Air Act (FCAA) Amendments to apply reasonably available control technology (RACT) emission limits to major sources of nitrogen oxides (NO_x) in the following ozone nonattainment counties: Brazoria, Chambers, Fort Bend, Galveston, Hardin, Harris, Jefferson, Liberty, Montgomery, Orange, and Waller.

The proposed changes to §117.105 and §117.205, concerning Emissions Specifications, were designed to make the alternative compliance options of system-wide averaging and plant-wide averaging more consistent with EPA policy. The proposed new §117.540, concerning Phased RACT, was intended to avoid the need for case-by-case EPA approval of compliance extensions. The section as adopted falls short of this goal, but is expected to provide more detail of the type of information that EPA would consider in evaluating a request for an extended RACT implementation schedule. The proposed new §117.550, concerning Standard Construction Permits for NO_x RACT Projects, was designed to provide a standard permit procedure for the installation of NO_x control equipment to facilitate the timely implementation of emission reductions. Existing §117.540 and §117.550 were proposed for concurrent repeal. Proposed new §117.580, concerning Source Caps, was designed to add more compliance flexibility with a source cap option.

A public hearing was held in Houston on June 30, 1993, to consider the proposed revisions to Chapter 117. No oral testimony was presented during the public hearing. Written comments were accepted through July 15, 1993. Twenty commenters submitted written testimony. All comments have been reviewed and seriously considered. The following discussion addresses the general comments and comments specific to each of the proposed sections. Throughout the preamble, the TNRCC will be referenced, rather than the Texas Air Control Board (TACB). The TACB was consolidated into the TNRCC along with the Texas Water Commission on September 1, 1993.

General Comments.

An individual commented that the proposed rules were technical in nature and too difficult for the average person to understand. The staff agrees that the concepts embodied in the rules under consideration are sometimes quite complex technically. There is probably no easy remedy to make this type of subject matter less complicated. However, the staff welcomes input suggesting specific ways of clarifying the intent and wording of agency regulations. The staff is always available to assist any person with interpretation and explanation of the regulations.

Browning-Ferris Industries, Inc. (BFI) commented that NO_x emissions resulting from volatile organic compound (VOC) control devices (for example, flares) installed to meet New Source Performance Standards, reasonable further progress regulations, or other federally mandated VOC control requirements should be exempt from NO_x RACT. BFI added that only those emission sources found to be substantial contributors to regional ozone nonattainment should be considered candidates for NO_x RACT control requirements, after the relative benefits of VOC versus NO_x controls regarding ozone formation had been evaluated. The FCAA stipulates that VOC reductions achieved under reasonable further progress requirements cannot be substituted for NO_x reductions required under the FCAA. This chapter applies to existing major NO_x sources placed into service before November 15, 1992. Major NO_x sources which begin operation after that date must undergo new source review (NSR), regardless of any VOC reductions the source may have achieved under state or federal requirements. Attempting to limit NO_x RACT requirements to "substantial contributors" would imply that only certain sources are responsible for the ozone problem. In fact, extensive research into the phenomena of ozone formation and transport point to the conclusion that photochemical smog is a regional problem to which all sources contribute. Therefore, exemption of major NO_x sources for the reasons suggested by the commenter is inappropriate. It should be noted that flares are exempt from the control requirements of this chapter because cost-effective NO_x controls are not generally available for flares.

Amoco Chemical Company (Amoco Chem) commented that the competitive position of Texas industry is continually being undermined by environmental regulations which do not consider cost/benefit analysis in their development. The staff has worked extensively with the community of regulated sources to produce NO_x RACT regulations which attempt to balance cost/benefit issues with air quality mandates. Some control requirements initially considered by the staff have been postponed to future rulemaking so that industry can start making reasonable reductions in a cost-effective manner. Several of the rules proposed in the current round of rulemaking provide industry more flexibility in applying emission averages and specifying final compliance schedules.

Section 117.105(m) and §117.205(h)-Use of the lower of RACT or BACT Emission Specifications.

The revisions to §117.105 and §117.205, concerning Emission Specifications, add the requirement to use the lower of either the best available control technology (BACT) NO_x emission limit of a 30 TAC Chapter 116 permit or the appropriate RACT emission limit of §117.105(a)-(i) or §117.205(a)(3)-(c). This change will primarily affect the calculation of the system-wide or plant-wide emission limits of §117.107 and §117.207. The staff proposed this revision in response to EPA concerns made orally in April prior to Board adoption of the basic NO_x RACT rule, that the emissions averaging elements of the rule would not be federally approvable unless this change were made. EPA's document, "Reasonably Available Control Technology for Nitrogen Oxides Trading Guidance" (draft, June 10, 1993), supports the change. EPA uses the term "trading" to include emissions averaging and source cap methods of compliance limited to a single source. EPA cannot allow an emission reduction already achieved on an emission unit as a result of the NSR program to be included in a RACT rule with emission trading to eliminate or reduce a reduction requirement on some other unit which otherwise could have reasonably reduced emissions under a RACT rule with unit-by-unit compliance.

The change also eliminates a staff concern about the possible use of unreasonably high

permit limits for RACT limits. In many cases, the permit NO_x limit is the result of a codification procedure based on very poor emission factors rather than a detailed BACT review. The original rule proposal had used the terms "detailed BACT review" to distinguish among BACT limits which specifically considered available NO_x reduction technology and those permits which did not. Subsequent discussions with industry work group members regarding their intended use of permit limits for RACT averaging confirmed, on a practical level, the TACB General Counsel's concern that the use of the term "detailed" creates a subjective standard and should be avoided in a final rule.

The change will only rarely require lower emission limits (disregarding the permit codifications and renewals which were never intended to be considered equivalent to a "detailed BACT review") for units subject to BACT since March 3, 1982. The staff's revision allows boilers and heaters that were permitted at the 1982 BACT guideline of 0.12 pound (lb) NO_x per million (MM) Btu to retain that limit for RACT, since it is very close to the lowest RACT emission limit of 0.10 lb NO_x/MMBtu. The BACT guideline moved to 0.06 lb NO_x/MMBtu around 1988, so few, if any, units since then would be expected to be higher than the RACT limits.

The staff has added a clarification to the proposed policy of requiring the lower of the BACT and the RACT limits. Since BACT permit review is an ongoing program, it is necessary to establish a fixed time frame for including BACT limits. As proposed, the rule is not clear on this point. The adopted rule sets the effective date of the rules, June 9, 1993, as the date at which any BACT limits in effect on that date would apply to the universe of affected sources. The TNRCC notes that the rule defines "unit" as boilers, heaters, turbines, or engines placed into service prior to November 15, 1992, so no new units would be regulated by this change. The recommended change is consistent with EPA's draft trading policy.

Amoco Chem, Exxon Company, U.S.A. (Exxon); Texas Chemical Council (TCC, et al.) (Chevron U.S.A. Products Company, Texas Mid-Continent Oil & Gas Association, DuPont, and Exxon Chemical Americas) recommended language that would allow units which have had modifications permitted since November 15, 1990, to use the higher of the RACT or the BACT limit in the plant-wide average or source cap calculation. TCC et al. stated that to do otherwise would unfairly penalize operators who have made early reductions in NO_x emissions. The staff only partially agrees with the commenters. Most new or modified facilities permitted after November 15, 1990, were not constructed for the purposes of obtaining early NO_x RACT reductions. It would not be appropriate to use these project's emission limits to reduce or eliminate RACT requirements for other sources which otherwise could reasonably have made RACT reductions. However, the staff understands that one project was implemented in 1992 purely for making early RACT reductions. After consultation with EPA, Region 6, the staff is allowing units which have had NO_x reduction projects permitted since November 15, 1990, and prior to June 9, 1993, that were implemented solely for the purpose of making early NO_x reductions, to use the appropriate RACT emission limit of §117.205(a)(3)-(c) to allow credit for those reductions in the plant-wide average allowed in §117.207 or the facility cap calculation allowed in §117.580. Wording changes have been made to §117.205(h) to allow this credit.

Amoco Chem commented that it may not be feasible for a unit permitted after March 3, 1982, with a BACT limit higher than 0.12 lb NO_x/MMBtu to set aside its permitted limit to meet a more stringent RACT limit. Amoco Chem stated that this appears fundamentally incorrect since BACT is a case-by-case determination. The commenter suggested as an option to the TCC et al. recommendation, that the wording in §117.205(h) be changed to specify that any units issued a permit after March 3, 1982, with an emission limit equivalent to a NO_x limit of 0.12 lb NO_x/MMBtu natural gas combustion be limited to that rate for the purposes of this subchapter. Amoco Chem stated that this increases the universe of sources that will continue to meet their permitted limits to include those that may not be firing gas. The staff does not agree with the suggested change to allow higher RACT limits than 0.12 lb NO_x/MMBtu based on previous case-by-case BACT determinations. If limits higher than 0.12 lb NO_x/MMBtu were allowed during this period, they would have been based on such factors as furnace temperature, fuel type, furnace volume, or degree of air preheat. Since all of these factors are accounted for in the NO_x RACT limits, these sources will not likely be adversely affected by being required to use the lower of the permit and the RACT limit. If a unit is found to have been permitted at a rate higher than the applicable RACT limit during this period, the imposition of a more stringent RACT limit can be addressed through plant-wide averaging, source caps, or alternative case-specific specifications.

The EPA has previously provided guidance on the relationship between new RACT limits and older new source review limits. In a memorandum from John Calcagni, Director of the Air Quality Management Division of EPA, to EPA Regional Directors dated February 20, 1990, Mr. Calcagni states, "Even though such sources were subjected to the lowest achievable emission rate (LAER) as new sources when constructed, they are now existing sources and are thus subject to RACT regulations. The intent is not to 'reopen' a prior LAER permit (even one that was improperly made); RACT, however, is intended to apply in addition to old permit requirements. In these cases, a source subject to several requirements simultaneously must meet the most stringent requirement; in some cases, it is conceivable that the RACT requirements would override a requirement of the permit (which would be left intact)." Mr. Calcagni then requests the Regional Offices of EPA to, "ask states to correct existing regulations to require a RACT level of control where such control is more stringent than the previous LAER level of control."

Amoco Chem and TCC stated that the TNRCC permit renewal process has been used to update emission limits and control requirements on existing combustion units. They also stated that some recent permits have been issued for modified units at levels above the RACT limits and that it is inappropriate to impose additional controls on such units which have undergone review recently by the TNRCC.

The staff has reviewed the concerns of industry that recent BACT determinations have been made above the RACT limits. Although the current BACT guideline of 0.06 lb NO_x/MMBtu for boilers and heaters rated more than 40 MMBtu per hour heat input is made case-by-case, the staff found no instances of recent BACT determinations above the RACT limits of this Chapter. The TNRCC permit renewal requirements do not include applying current BACT standards to this older equipment. Most combustion units permitted prior to March 3, 1982, were not specifically evaluated for the feasibility of reducing NO_x emissions since NO_x controls were not well developed at that time. BACT for NO_x for most of these older permitted facilities was generally no control requirement. The renewal process is not primarily an emission reduction program and is not appropriate to establish RACT limits.

Exxon commented that §117.205(h) should be deleted entirely because it is "unnecessary and potentially confusing." Exxon believes that the existing rule language already requires the more stringent of the BACT and RACT limitations. The staff disagrees with the commenter. For clarification purposes, the rewording of §117.205(h) and §117.105(m) is beneficial in explicitly stating that the more stringent of the applicable BACT permit and Chapter 117 RACT limits apply.

EPA commented that there may be the opportunity for permitted units to provide "windfall credits" to other units if the permitted units' actual emission rates are significantly below their allowable limits. EPA has questioned if the state has considered the extent to which such "windfall credits" might occur by allowing sources to use the lowest allowable emission rate rather than the lowest of actual or allowable emission rates in calculating the system-wide/plant-wide average. EPA then questioned if the state has any industry specific data to substantiate that such "windfall credits" would be minimal. The current adoption is based on the concerns made orally to TNRCC staff two weeks prior to the Board's adoption of the basic RACT rule in May 1993. Since EPA's emerging policy reflected a slightly more stringent emission specification than the proposed rule, the TNRCC proposed new rulemaking regarding a revision to the emission specifications. EPA's current concern surfaced in the June 1993 draft trading guidance. EPA's draft policy guidance regarding using actual emissions from permitted units is applicable only to Prevention of Significant Deterioration (PSD) permits. (This is true on a practical level, since Texas has not issued NO_x nonattainment permits prior to the effective date of the NO_x rule.) These permits cover a relatively small portion of the RACT units covered by the rules. The staff will be able to provide specific data in April 1994, after initial control plans are submitted, which is expected to demonstrate that the "windfall"

credits of concern will be minimal. These credits are anticipated to be very small in regard to the overall reduction requirements adopted by the TNRCC, which are higher than the reductions which would be achieved under the limited EPA NO_x RACT emission limit guidance received.

EPA commented that for the TNRCC to retain the 0.12 lb NO_x/MMBtu limit in the rule for certain boilers and heaters (those permitted after March 3, 1982), it should demonstrate why requiring these sources to reduce the difference between 0.12 lb NO_x/MMBtu and 0.10 lb NO_x/MMBtu, or 0.02 lb NO_x/MMBtu would not be considered RACT. The proposed rules allow boilers and heaters that were permitted at the 1982 BACT guideline of 0.12 lb NO_x/MMBtu to retain that limit, since it is very close to the lowest RACT emission limit of 0.10 lb NO_x/MMBtu. The limits are particularly close because many of the permit limits were established on fuel lower heating value (LHV). A 0.12 lb NO_x/MMBtu limit, LHV, is equivalent to approximately 0.11 lb NO_x/MMBtu, based on higher heating value, which is the RACT rule basis. The justification for retaining this exemption is that, for units complying with the emission specifications on a unit-by-unit basis, replacement of burners could be required to achieve this small emission reduction, which would not be cost-effective. The staff notes that this adjustment has only a very small effect on the potential rule-wide reductions, since the 0.12 pound NO_x/MMBtu limit is lower than almost all the RACT limits.

Section 117.540–Phased RACT.

EPA commented that since the proposal concerning phased RACT does not meet the EPA's requirements for replicable procedures, any phased RACT petition will require EPA approval. EPA further commented that the state may want to work with the EPA to develop a process that allows for an expedited review and approval process to facilitate federal approval of phased RACT determinations prior to the May 31, 1995, compliance date.

EPA's proposed Economic Incentive Program rules which appeared in the February 23, 1993, issue of the Federal Register (58 FR 11110) define "replicable" procedures as "methods which are sufficiently unambiguous such that the same or equivalent results would be obtained by the application of the methods by different users." Use of replicable procedures in documenting justification for a phased RACT petition would result in standardized petitions which could be evaluated consistently on a more or less objective basis. EPA's original intent in requesting replicable procedures in the phased RACT rule was to avoid EPA case-by-case review of every phased RACT petition. The phased RACT rule was reopened for rulemaking immediately after adoption in order to specify replicable procedures acceptable to EPA, and was modeled after EPA's proposed rules for utility boilers implemented under Title IV (acid rain) rulemaking published in the November 25, 1992, issue of the Federal Register (57 FR 55632). However, EPA guidance on the use of replicable procedures for evaluation of compliance extensions is not sufficiently developed to incorporate such procedures into the adopted rule at this time. The staff believes that the phased RACT rule, as proposed and revised in response to hearing testimony, adheres to the general concepts endorsed by the EPA. The staff agrees that an expedited process for EPA review and approval is desirable, and will continue to work with EPA to implement such a process.

TCC et al., Dow Chemicals (Dow), and Houston Lighting and Power (HL&P) commented that in §117.540(a), the word "believes" should be replaced by "determines," which is a less subjective term. The staff agrees with the commenters and has changed the rule language as suggested. Final determination on whether compliance by May 31, 1995, is practicable rests with the TNRCC and EPA.

TCC et al., Dow, and HL&P suggested that companies be required, by April 1, 1994, to provide only initial notification of the need for phased RACT, and that companies be allowed until January 1, 1995 or as soon as possible thereafter to submit petitions for phased RACT. EPA commented that the state must have sufficient time to make a determination on a source's phased RACT petition prior to the May 31, 1995, compliance date. EPA stated that the petitions should be submitted no later than the deadline for initial control plans (April 1, 1994). EPA suggested that the clause in §117.540(a)(1), "or as soon as possible after determination by the owner or operator that compliance by May 31, 1995, is not practicable," be deleted. In order to meet the rule requirement to submit initial control plans by April 1, 1994, affected companies must perform considerable advance planning and weigh many factors, including control options, emissions reductions, and economics. This process should identify most, but possibly not all, sources for which a phased RACT extension needs to be requested. If phased RACT petitions must be submitted by April 1, 1994, they will probably include "borderline" sources for which firm compliance schedules have not yet been developed. The staff does not want the petition process used to obtain automatic extensions, but also wishes to avoid excessive numbers of petitions submitted solely as a precaution against possible failure to meet the May 31, 1995, compliance date. The staff believes that the schedule for submitting phased RACT petitions needs to be expeditious to allow adequate time for state and EPA review, yet allow for circumstances yet unforeseen when the initial control plan was submitted (such as slippage in equipment delivery schedules). Therefore, the staff is requiring the submission of petitions for phased RACT by October 1, 1994.

Any petition submitted after this date must document the reasons why the October 1 deadline could not be met, giving specific reasons for the unforeseen events which caused schedule delays.

Galveston-Houston Association for Smog Prevention (GHASP) commented that a petition for phased RACT should be subject to a 30day review period by local pollution control agencies and the public with advertisements in local newspapers and the possibility for a public meeting or hearing in order to include the public in the agency's decision-making process. The staff does not believe that a pollution abatement project, even one that is implemented over an extended schedule, should necessarily entail the same degree of public notification and input as required for a NSR permit for a source which is increasing emissions of air contaminants. The staff is retaining the proposed procedure for submission and evaluation of phased RACT petitions.

EPA commented that if the state is to review economic factors and approve a phased RACT petition on this basis, then the state should specify in §117. 540(a)(2)(E) what information will be required from the source to make the determination. Gulf States Utilities (GSU) commented that economic factors should be considered as valid criteria in the approval of phased RACT and requested that the rule state what type of economic information must be submitted and how it will be evaluated. TCC, Dow, and HL&P recommended adding "economic considerations" to the criteria for evaluating a petition for phased RACT. They suggested that costs of actual historical and planned outages, as well as costs incurred by complying by May 31, 1995, be documented in the petition. The staff believes that economic considerations are valid criteria in support of the phased RACT petition. As proposed, the rule allows the consideration of "other technological and economic factors ... as the TNRCC determines is appropriate." The staff has added more specific rule language requiring the documentation of certain economic information to be submitted as an option in the phased RACT petition. Petitions would be required to document either: the costs of additional outages, if applicable, necessitated by compliance with the emission specifications of this chapter by May 31, 1995, as demonstrated by comparison to costs of actual historical and planned outages; comparisons of the cost of obtaining the NO_x abatement equipment, engineering services, or construction labor necessary to comply by May 31, 1995, and the cost of obtaining the equipment, services, or labor by the final compliance date specified in the petition; or other economic factors to be documented as the Executive Director establishes is appropriate. Forthcoming EPA guidance on compliance extensions is expected by late 1993. In the meantime, the staff believes that the adopted language addresses the need expressed by the commenters for the rule to clarify economic criteria for phased RACT petitions.

TCC et al., Dow, HL&P, Texas Utilities (TU), and Exxon commented that companies submitting phased RACT petitions should be required to document only those criteria relevant to their petition. The staff has revised the rules so that every criterion specified in the rules need not be addressed in each phased RACT petition. As discussed elsewhere in this preamble, the staff is listing in the rules the following technical criteria which may be selected by companies to justify compliance extensions: equipment unavailability, system unreliability, manufacturing unreliability, and equipment unreliability. Other technical factors not fitting into these categories may also be addressed in the peti-

tion for phased RACT. Economic considerations may be relevant and may even be the main criteria in some petitions for phased RACT. For this reason, the staff is including an additional, optional criterion providing for documentation of economic data.

GHASP objected to the use of economic factors such as outages in evaluating whether phased RACT petitions can be approved. GHASP commented that utility companies can reduce customer electric usage through energy conservation programs or buy excess power from other power grids to compensate for their outages. The staff believes that economic factors are valid criteria to use in evaluating petitions for phased RACT. Without data on historical and planned outage schedules, it would be much more difficult for staff to determine whether the petitioner actually could achieve compliance by May 31, 1995. Economic justifications will include the specific reasons why an outage, for the purpose of installing NO_x abatement equipment, could not be scheduled by May 31, 1995. The TNRCC has no authority to require utilities to implement energy conservation programs in order to lessen consumer demand, and any resulting change in plant outages is doubtful.

TCC et al., Dow, HL&P, and Exxon commented that the maximum compliance extension of 15 months past May 31, 1995, as proposed in §117.540(a)(2)(D), is arbitrary and may not provide enough time for some sources to install NO_x controls. They suggested deleting all references to a maximum extension period or adding wording to give the Executive Director discretion to approve later compliance dates. GHASP commented that the maximum compliance extension under the rule should be only one year. The proposed maximum compliance extension of 15 months (to August 31, 1996) was modeled after the proposed EPA Title IV regulation.

The staff believes that the rule should provide guidance as to the maximum amount of time for which compliance extensions can be made and that 15 months is a reasonable period for these extensions. The staff agrees with the concern regarding later compliance dates and is giving the Executive Director discretion to approve longer schedules. The staff believes that referencing a date in the rule for compliance extensions will help companies in planning realistic compliance schedules and submitting approvable phased RACT petitions.

TCC et al., Dow, and HL&P stated that the requirements in §117.540(a)(2) (E)(ii)-(v) to document vendor contacts and provide certification of equipment unavailability from all qualified vendors are not reasonable for general industrial sources, since these requirements were modeled after proposed Title IV federal rules for utility boilers with fewer control options and vendor choices. The commenters suggested requiring only certification of equipment unavailability by an authorized company representative. TU commented that utilities cannot require a vendor to provide information without a completed contract. TU further commented that obtaining a legally binding contract with a vendor before a compliance extension was approved by the agency would be impractical for a source. TU stated that vendor responses and data could be provided if necessary to document unavailability of equipment, services, or labor, and requested that the vendor certification requirements be deleted from the rule.

The staff modeled the phased RACT rule after EPA's proposed Title IV rules for utility boilers. These federal rules were used, in the absence of more definitive EPA guidance, to provide a basis for compliance extensions acceptable to EPA. The staff agrees with the commenters that general industrial sources typically have a greater variety of control options, with correspondingly more vendors and suppliers, than the utility sources which the federal rules were designed to regulate. However, the staff believes that the May 31, 1995 final compliance date is attainable for the majority of affected sources; and therefore, any petitions for compliance extensions should contain considerable documentation of good-faith efforts to comply by that date.

It is important to note that the rule, as well as the proposed federal rules after which it was patterned, does not require companies seeking a phased RACT petition to contact all qualified vendors. The rule merely requires listing those qualified vendors who were contacted. The staff has revised the requirement for vendors to certify that they cannot provide services and equipment by allowing companies to furnish a copy of the vendor's response to the company's request for bids. The staff has added the requirement for submitting copies of contracts with primary project vendors in new §117.540(a)(4) and deleting the duplicative requirement for submitting copies of vendor contracts in §117.540(a)(2)(E)(iv). If work on the compliance project is to be provided by the owner or operator, however, the petition cannot rely on the inability to provide the labor or engineering services in-house in justifying a compliance extension. Rather, a company would need to demonstrate that it could not obtain the services in a timely manner from either in-house or external sources. The staff has added new §117.540(a)(2)(A)(iii), requiring such documentation in the petition. The staff has deleted §117.540(a)(2)(E)(v)(I), pertaining to submission of material and energy balance data, because these data are not particularly relevant to the petition. The staff also has deleted §117.540(a)(2)(E)(v)(II) and (III), pertaining to cost and scheduling information, respectively, because these requirements are duplicated elsewhere in the rule. The staff believes that these rule provisions do not represent insurmountable hurdles in preparing phased RACT petitions, but that they do reflect the level of detail necessary to demonstrate a good-faith effort to meet the May 31, 1995, compliance date.

TU, located in the Dallas/Fort Worth ozone nonattainment area, is not directly affected by the current adoption. The state has made a commitment to EPA to adopt NO_x RACT rules for the Dallas/ Fort Worth area after results of the Urban Airshed Model (UAM) are available to provide directional guidance and help determine whether NO_x reductions will be beneficial in reducing ozone in that area. Any NO_x RACT requirements for the Dallas/Fort Worth area, as well as schedules for extensions of compliance, will need to be evaluated in light of the UAM results and the resulting ozone control strategy developed for the area.

EPA commented that if it is the state's intent that sources contact all qualified vendors before making the assertion that the equipment is unavailable, then the wording in §117.540(a)(2)(E)(ii), "and who have been contacted to obtain the required services and equipment," should be deleted. The staff intends this portion of the rule to require documentation of vendor contacts which were made to obtain necessary equipment and services to meet the May 31, 1995, compliance date. The intent is not to require companies to contact all qualified vendors.

TCC et al., Dow, and HL&P recommended the deletion of all industrial references from §117.540(a)(2)(E)(vi), concerning system unreliability, since the term "utility grid system unreliability" as used in the proposed Title IV federal rule applies specifically to utility sources and has no meaning for general industrial sources. The commenters suggested adding "manufacturing unreliability" to the criteria for evaluating a petition for phased RACT in cases where complying by May 31, 1995, would interfere with a company's manufacturing obligations. The commenters provided a list of suggested criteria for documenting manufacturing unreliability. EPA's "NO_x Supplement to the General Preamble," which appeared in the November 25, 1992, issue of the Federal Register (57 FR 55620) recognizes "system unreliability" as a justifiable reason for extending compliance schedules past May 31, 1995. The proposed Title IV rulemaking for utility boilers outlines criteria for documenting utility grid system reliability problems due to installation or availability of NO_x control equipment. The staff agrees that the use of this terminology specific to the utility industry may be inappropriate when applied to general industrial sources. General industrial references have been deleted from §117.540(a)(2) (E)(vi) and the concept of system unreliability for utility sources only has been retained.

The concept of system unreliability may be applied to industrial sources, however, with some revisions. Just as utilities have obligations to provide a product (electric power) to customers, industries also have similar obligations to provide manufactured products to their customers. The commenters have suggested "manufacturing unreliability" as a separate criterion which parallels "system unreliability." The staff has added manufacturing unreliability, defined as the inability or threatened inability of a source to fulfill contractual obligations to supply a product or products, to the rule as a separate criterion for a phased RACT petition.

TCC et al., Dow, and HL&P suggested adding "equipment unreliability" to the criteria for evaluating a petition for phased RACT in cases where new control equipment with inadequate actual operating data could reduce a unit's reliability. The commenters provided a list of suggested criteria for documenting equipment unreliability. The staff believes that the concept of "equipment unreliability," while not specifically addressed in EPA's NO_x RACT Supplement, is a valid criterion in the

consideration of a phased RACT petition. "Equipment unreliability" is defined as the reduced availability and operating reliability of a unit resulting from the operation of NO_x control equipment on that unit. Instead of committing to a given control technology for several units at once, a company may want to gather real-world data on the performance of a single unit and petition for compliance extensions for the remaining units. In order to obtain approval under such a criterion, the petitioner would need to demonstrate unreliability problems as documented by actual operating data furnished by the equipment vendor. Information on historical availability and forced outages and differences in each expected with the new control equipment, would also be required in the petition. The staff has added equipment unreliability to the rule as a separate criterion for a phased RACT petition.

TCC et al., Dow, and HL&P suggested that companies submitting phased RACT petitions be required to include copies of legally binding contracts with only the primary vendors for each project in order to simplify the petitioning process. This documentation would include a detailed design or installation schedule for the required equipment or services to be provided by that vendor. They further commented that in cases where work is performed inhouse rather than contracted, the company should be allowed to submit certification of the services or equipment to be provided. The staff believes that the suggested requirement to include copies of contracts with only the primary vendor, with appropriate documentation, is sound and consistent with the basic intent of the rule. The staff has added this requirement in a new subsection, and deleted the requirement for submitting vendor contracts from §117.540(a)(2) (E)(iv).

TCC et al., Dow, and HL&P requested provisions for the consideration of "other technical or economic factors" in the phased RACT petition for companies applying for petitions under such criteria. The staff has attempted to include in the rules the most relevant criteria which could be used to justify a phased RACT schedule. Other technical or economic factors not specifically listed, however, could be relevant to some individual petitions. The staff anticipates that these other criteria would be used in addition to, rather than to the exclusion of, the primary criteria already being added. The staff has added language to the rules providing that other technical or economic factors may be documented in the petition for phased RACT.

Dow commented that the requirement in proposed §117.540(a)(6) for holders of approved phased RACT determinations to comply with each compliance milestone in the petition is unrealistic, given the uncertainties involved with equipment delivery and construction schedules. The staff recognizes that unforeseen events may occur during the progress of a phased RACT compliance schedule which may jeopardize meeting the final compliance date specified in the petition. It is important that companies adhere to their specified compliance milestones, since these become the basis for approval of the petition. Proposed §117.540(a)(4) provides that approved petitions for phased RACT may be revised by the Executive Director upon a showing of just cause by the applicant. The staff believes that this procedure is adequate to address the types of unexpected developments addressed by the commenter and recommends retaining the rule language as proposed.

TCC et al., Dow, and HL&P suggested certain time schedules in the TNRCC's and EPA's evaluation of phased RACT petitions: TNRCC notification to the company of completeness or deficiency within 30 days of receipt; TNRCC approval or denial within three months of receiving an administratively complete petition; and 30 days for EPA to respond after TNRCC approval of the petition. The commenters stated that limited EPA review requiring a shorter turnaround than individual SIP revisions should satisfy EPA's concerns about replicable procedures while ensuring timely responses to petitioners. EPA commented that the state might want to set a maximum time limit that the state can take in making a phased RACT determination. The staff is adopting a two-tiered approach in the time schedule for processing and evaluating phased RACT petitions. The first tier involves initial review of the petition for completeness. Due to the sparse staff resources available, 30 days for the staff completeness determination is being adopted. A company notified of any deficiencies in its petition would have 30 days from the date of the staff notification letter to correct the deficiencies and respond. After the petition was deemed administratively complete, the staff would then have 90 days to evaluate and either approve or disapprove the petition. The staff has incorporated these procedures and timetables into the rule language.

The TNRCC has no authority to specify a schedule for EPA's review of phased RACT petitions. The TNRCC and EPA both desire that all petitions be reviewed as expeditiously as possible. The staff will continue discussions with the EPA Regional Office in Dallas to implement procedures for EPA's timely review of phased RACT petitions.

EPA commented that the state needs to avoid automatically allowing for source compliance delays through the use of the phased RACT petition or appeals process. To help accomplish this, EPA suggested the rules state that a petition not received by a certain date, or not approved by the Executive Director by May 31, 1995, would be considered denied. EPA also commented that the source must remain in compliance during any appeals process extending past May 31, 1995.

The staff agrees with EPA that the phased RACT petition or appeals process should not be used by companies to unnecessarily delay compliance. However, the staff is not certain that benefits would be gained from revising the rule language as EPA has suggested. It seems likely that a company would want to expedite rather than delay receiving approval of its phased RACT petition. A company's delays in submitting the petition or requested follow-up information would only reduce the time available to revise its compliance plan to comply by May 31, 1995, in the event the petition is denied. The staff is adopting time schedules for the agency's review of phased RACT petitions which would require staff determination of completeness of the petition within 30 days of receipt, company correction of any deficiencies within 30 days of notification, and final TNRCC approval or disapproval of the petition within 90 days of receiving an administratively complete petition. The staff believes that these time schedules are adequate to ensure timely submittal of all information necessary to evaluate phased RACT petitions.

Regarding the necessity of a source remaining in compliance past May 31, 1995, even if it appealed a denied petition to the Commission, the staff maintains that the appeals process does not protect any company from the consequences of noncompliance after May 31, 1995. A company that lost its appeal to the Commission would be liable in any event for the entire period it was out of compliance past May 31, 1995. Therefore, no additional rule language is needed to clarify or strengthen this position. The staff has added a minor clarification that the decision appealed is the decision made by the Executive Director "to deny a petition for phased RACT or to deny a revision to an approved phased RACT petition."

An individual and GHASP commented that the appeals procedure outlined in §117.540(a)(4) excludes public participation in agency decisions. The staff believes that the proposed appeals procedure does not exclude public participation in the agency decision-making process. The procedure for filing a Commission appeal under proposed §117.540(a)(4) specifically references 30 TAC §103.71, the TNRCC Procedural Rules, which provides for requests for action by the Commission. 30 TAC §103.73 of the Procedural Rules allows the Executive Director to hold a public hearing before presentation to the Commission if this is deemed appropriate. Under 30 TAC §103.74 of the Procedural Rules, a matter which is not a contested case may be brought before the Commission without prior public hearing. The Commission may then hear the matter with appropriate limitations on oral testimony, postpone the matter for further hearing before the Commission, or refer the matter for hearing before a hearing examiner who will report to the Commission at a later time. In all cases described, there is opportunity for public comment before the Commission, whether or not a public hearing is held.

Section 117.550-Standard Construction Permits for NO_x RACT Projects.

Regarding §117.550, the staff has changed the title from "General" to "Standard" Construction Permits for NO_x RACT Projects to reflect recent legislative changes and to add specificity to the title.

Amoco Oil Company (Amoco Oil), Exxon, Pennzoil, and TU expressed support for the Standard Construction Permits for NO_x RACT Projects provision, §117.550. Pennzoil also stated, "as the proposal recognizes, the installation of NO_x equipment is environmentally beneficial and legislatively mandated. Such installations should not be subject to the scrutiny accorded for a new source." GHASP and an individual commented that they are against a general permit program. GHASP

stated, "We believe that a case-by-case permitting strategy is much better since it focuses intense scrutiny on each permit." The standard construction permit for NO_x RACT projects will facilitate emission reductions by reducing the time necessary to obtain authorization to install NO_x controls. In general, the May 31, 1995, NO_x RACT implementation deadline in the 1990 FCAA creates a challenging schedule for some of the large pieces of equipment subject to the regulation. The available information suggests that collateral emission increases resulting from NO_x reduction projects will occur infrequently. The proposed requirements of the standard permit will minimize these increases and will allow the TNRCC to review information sufficient to demonstrate that the conditions of the standard permit are met. Standard permits are authorized by the Texas Clean Air Act (TCAA); and the TNRCC presently has Standard Exemptions instituted as part of Chapter 116, which are, in essence, standard permits.

GSU commented that the proposed revision regarding Standard Construction Permits for NO_x RACT Projects, "may hinder compliance with this rule by the appropriate date." GSU also remarked, "The TACB should not require a general permit because it is impractical and will delay construction schedules for sources to be in compliance by May 31, 1995." The standard permit for NO_x reduction projects creates an alternative to existing permit procedures, so it should not increase the time currently needed to implement NO_x reduction projects. Since the conditions for the standard permit are standardized, ascertaining compliance should be straightforward. The staff notes that current TNRCC Air Permits practice does not require permit review for installation of emission controls on grandfathered equipment and only permit revision for permitted equipment for which emissions were quantified and no emission controls were originally required; in both cases, there must be no increases in emissions or capacity.

Dow commented that it does not understand why the TNRCC is insistent about a maximum capacity increase for gas turbines in §117.550(a)(1)(C). Dow suggested that this subparagraph be eliminated altogether or to raise the maximum power increase to a level that will not inhibit reduction of NO_x emissions, i.e., 20 to 25%. GHASP commented that it is against the allowance of any increase in capacity for grandfathered units in §117. 550(a)(1)(C). Combining process improvement and emissions abatement in a single capital project may be cost-effective. This creates an issue as to where BACT and RACT should apply. The TCAA requires the application of BACT for facility modifications which may increase air contaminants, although certain modifications with insignificant emission increases could be exempted. The staff believes that the negotiated standard permit procedure for NO_x RACT projects, which is limited to capacity increases occurring as a direct result of installing controls, is sound. The standard permit cannot be used to avoid BACT in cases where fulfilling a RACT requirement would be of minor consequence. The procedure requires case-by-case BACT review under Chapter 116 in order to utilize a resulting capacity increase. This is appropriate, because for most modifications, the staff cannot generically assess BACT or insignificance of emissions.

The staff proposed a turbine power increase limit based on information from Dow. The information shows a maximum 14% power output from a Westinghouse gas turbine at the maximum steam injection rate to control NO_x. This level of steam injection will reduce NO_x below the 42 parts per million (ppm) RACT emission limit for gas turbines.

Eliminating the output increase restriction for gas turbines in the standard permit could provide a useful incentive to meet the NO_x RACT requirements with more beneficial, lower emitting technology than steam injection. Dry low-NO_x burner retrofits are applicable to some of the older General Electric gas turbines, but only if the turbine is first upgraded to a newer configuration with a higher output rating. These power output increases may exceed 14%. The TNRCC permitted such a project at 25 ppm NO_x in 1992. Permitted emissions included 25 ppm carbon monoxide (CO) and less than one ppm VOC, which suggests that collateral emission increases are not likely to be a problem. Much the same resulting emissions could have been expected with a standard permit. In addition, EPA's trading policy clarifies that for developing NO_x trading plans, an applicable BACT limit is the limit in effect on the effective date of the rule. This means that future BACT limits on RACT sources will not require a downward readjustment of the plant-wide or plant cap limit. Keeping these projects out of BACT review will not increase the credit allowed under plant-wide or emission cap averaging. The staff has deleted the limitation on increases to existing output capacity for gas turbines.

The standard permit allows for the possibility that an incidental and essentially unavoidable effect of installing control equipment or implementing a control technique in that capacity may increase. "Debottlenecking" or redesigning an emissions unit to increase capacity is not allowed under the standard permit. Further, except as previously discussed for gas turbines, in order to utilize any increase in capacity which is a direct result of implementing NO_x controls, a person must first obtain authorization through case-by-case permit review of Chapter 116.

Exxon, TU, Dow, HL&P, Baker & Botts (B&B), and TCC et al. commented that §117.550 should use the definitions for "actual grandfather rate" and "presumptive grandfather rate" that are proposed in 30 TAC Chapter 122 concerning Federal Operating Permits. HL&P and B&B commented that a reference to presumptive grandfather rate is also needed in §117.550 since the proposed Chapter 122 provides criteria for calculating presumptive rates when actual data are unavailable. TU and HL&P stated that it is important to use the adopted definitions for these two terms in Chapter 122 which, for electric utilities, are likely to be different than those of other industrial source types. This reference is to avoid inconsistencies with the adopted version of Chapter 122. EPA commented that it is concerned that §117.550(a)(1)(C) allows grandfathered equipment to emit up to the rate at which the emission unit actually operated and emitted prior to September 1, 1971, may interfere with the state's ability to achieve real NO_x reductions by allowing units to restore their capacity without going through the permitting process. EPA suggests changing the definition of "actual grandfather rate" to be the maximum annual emission rate or data that are related to emissions which are reflected in the most recent emissions inventory (i.e., the 1990 emissions inventory).

The intent of the rule distinction between permitted and grandfathered facilities is to emphasize that permitted facilities may well have specific capacity limitations which are not to be considered violated if a capacity increase results directly from application of NO_x RACT, unless the increase is relied on prior to amending the permit. The staff has reconsidered the proposed references to grandfathered emission rates in §117.550(a)(1)(C). The staff does not believe grandfathered emission rates need to be evaluated in order to determine whether NO_x control equipment or techniques will result in a capacity increase. The staff has deleted the references to grandfathered emission rates in §117.550(a)(1)(C).

GSU stated that §117.550(a)(3)(B) should make clear that PSD modeling is not required unless there is a significant increase in emissions of a PSD pollutant. As written, §117.550(a)(3) requires in the case that there will be a significant increase in a regulated pollutant, that a demonstration is required to show that any emissions increase will not cause a violation of a National Ambient Air Quality Standard (NAAQS), a PSD increment (e.g., particulate matter (PM)), or a visibility limitation. For any of the requirements of subparagraphs (A)-(C) to apply, there must be a significant net emissions increase. EPA commented that the state should clarify the term "emissions" in §117.550(a)(3) by revising the paragraph to read, "If installation of NO_x abatement equipment or implementation of a NO_x control technique will result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area, a person claiming a general permit shall submit information sufficient to demonstrate that the following conditions will be met ...."

Emissions increases must be quantified in the initial compliance plan, but are not clearly enforceable emission limits since the initial plan may be modified without penalty until the final compliance date. In some cases, test results may show the initial quantification to be inaccurate. Rather than compare new allowables to old actuals, as required under the adoption, EPA's proposed language allows new "representative actual annual emissions" to be compared to the most recent inventory emissions. This is a more practical standard and is consistent with EPA's Wisconsin Electric Power Company (WEPCO) control project PSD exclusion.

Dow, HL&P, B&B, TCC, et al. commented that the phrase "and incidental to" in §117.550(a)(2) regarding collateral emission increases associated with installing NO_x abatement equipment or implementing a NO_x

control technique is confusing and unclear. The commenters suggested deleting the phrase from the rule. The commenters also suggested using "the requirement to install" NO_x abatement equipment instead of "installing" NO_x abatement equipment, for clarity. The staff believes the phrase "and incidental to" is redundant with the terms, "a direct result of" and has deleted the phrase "and incidental to." The staff has added the words "the requirement to install" for clarity.

Exxon, Dow, HL&P, B&B, and TCC et al. commented that §117.550 should also refer to §117.580 concerning Source Cap, where appropriate. The staff agrees with the commenters and has made changes to include references to §117.580, where appropriate.

GHASP commented that it is against any allowed increases in emissions that are a result of NO_x control technology add-ons in §117.550(a)(2). GHASP also commented that it is not in favor of §117.550(a)(3), which may allow significant net increases in emissions from a criteria pollutant. The staff and industry agree that emission increases resulting from NO_x emission reductions will be uncommon. In a letter from the TCC industry NO_x RACT work group dated August 13, 1993, the conclusion of the industry work group is that recent advances in low-NO_x burner technology should minimize the number of facilities which would exceed the 100 tons per year major modification trigger.

Dow commented that the modeling requirements seem to have little benefit relative to the goals of these regulations, and that the TNRCC and industry should put their limited resources to work on reducing NO_x emissions. GSU commented that NAAQS modeling for CO would be a waste of resources in areas where CO is known not to be a problem. GSU also questioned the purpose of submitting modeling information under §117.550(a)(3). GSU stated, "If the NOI (notice of intent) grants authorization to emit under the NO_x abatement plans presented, what is the purpose of reviewing modeling data?" Dow and GSU suggested that the TNRCC revisit this rule and remove all of the modeling requirements in §117.550(a)(3). Modeling is only needed for sources which will have significant net emission increases of any criteria pollutant as a result of installing NO_x controls. These sources would otherwise be subject to federal PSD permit review. The basis for providing the exemption from PSD review is EPA's July 21, 1992 WEPCO policy regarding pollution control projects at electric utility power plants. The WEPCO policy requires safeguards, for example, showing that the NAAQS will be protected. Air dispersion modeling is the standard technique for evaluating the ambient impact of significant emission increases of CO. The NOI only grants authorization to emit under the NO_x abatement plans if the required submissions have been made. The NOI serves to notify the TNRCC and allows it to confirm that the requirements for Standard Construction Permits for NO_x RACT Projects have been met. The purpose of submitting and the staff reviewing modeling is to ensure that the NAAQS will not be violated by the emission increases, as required by EPA. As far as the NAAQS for CO, the staff does not know if the additional impacts associated with the CO increases will cause a problem with the CO NAAQS. It is incumbent upon industry to demonstrate that there will not be a NAAQS violation.

GSU commented that if the purpose of reviewing modeling data is to determine a detrimental impact to the environment, GSU wants to know how this impact would be defined and compared to the positive benefit of reducing NO_x. The modeling is used to demonstrate that the CO increase will not be predicted to cause an exceedance of the CO NAAQS.

GSU asked that, if the TNRCC reviews the data and finds fault with the control plan, will a source be required to remove the NO_x abatement equipment and then be considered out of compliance if it cannot meet the May 31, 1995, compliance date? With regard to the modeling submission, the staff suggests that industry work closely with the TNRCC staff and adhere to standard modeling protocol, hold an initial consultation with the permit modeling staff, and submit the modeling results by April 1, 1994, to ensure that industry's risk is minimized in its implementation of the rules.

B&B commented that §117.550(a)(3)(C) should have the sentence that begins with the wording, "For the purposes of this title,..." moved out of subparagraph (C) and placed at the left hand margin as a stand-alone sentence. The staff has added a parenthetical insertion of this sentence after the phrase "significant net increase" where it appears in §117.550(a)(3). This change will be consistent with the *Texas Register* format for publication purposes.

B&B commented that §117.550(a)(3)(C) needs revision to the reference "the amount specified in the MAJOR MODIFICATION column of Table I of §101.1" because it is unclear. B&B suggested that language be added to the rule to clarify that for areas that are in attainment for a criteria pollutant, the largest number for that criteria pollutant in the major modification table should be used to determine if there will be a significant net increase of the pollutant. If an area is not in attainment, B&B suggested that the number used to determine a significant net increase should be the amount greater than or equal to the amount specified in the column that corresponds to the nonattainment area's classification for that criteria pollutant. The staff agrees with the commenter concerning the need for revision of this subparagraph for clarification of the term "significant." For nonattainment pollutants, the MAJOR MODIFICATION column of Table I in §101.1 will be used as the reference; for attainment pollutants, the definition in 40 Code of Federal Regulations 52.21(b)(23) will be used.

EPA commented that §117.550(a)(5) should require similar minimization plans for other criteria pollutants, as well as for CO. EPA suggested that the paragraph be revised to read, "Notice of the intent to be covered by the general permit must be accompanied by a minimization plan for collateral emission increases, describing efforts to be taken to minimize increases in emissions that will result from installing NO_x abatement equipment or implementing a NO_x control technique." The standard permit requires a person to quantify any emission increases resulting from a NO_x RACT reduction. These collateral emission increases could include CO, VOC, and particulate matter (PM). Submission of a CO minimization plan is sufficient to show that the lesser products of incomplete combustion, VOC and PM, will be minimized as well.

GHASP and an individual requested that there be a 30-day public comment period for each proposed general permit because §117.550 does not allow the public an opportunity to comment on the issuance of a general construction permit. GHASP commented that 14 days is not sufficient time for the public and the local air pollution control agencies to discover, review, and provide comments as proposed in §117.550(a)(6). The standard permit for NO_x RACT projects is designed to expedite emission reductions. A 30-day public comment period would reduce or eliminate any benefit of obtaining expeditious emission reductions. In addition, the types of requirements in the standard permit do not entail case-by-case approval, and comments would be limited to whether the objective requirements of the standard permit have been satisfied.

An individual commented that the TNRCC needs to grant approval of the general construction permit as a requirement before construction or implementation begins. The standard permit saves time by acting as a preapproved set of conditions which, if met, allow for construction without need for TNRCC approval. However, the TNRCC will review the registrations to assure that the requirements of the standard permit have been satisfied. When modeling is needed (for significant emission increases) the TNRCC will evaluate the modeling presented by the company to assure that it conforms to existing agency modeling guidelines. The TNRCC has the ability to halt construction if there is going to be a detrimental impact as a result of the construction project. The suggestion that the TNRCC must first approve the standard permit before construction or implementation begins could result in untimely delays and noncompliance with the rule's requirements.

EPA commented that the proposed revisions to §117.550 do not require sources to offset significant collateral emission increases. EPA stated, "The treatment of these emission increases must be consistent with the state's attainment demonstration plan. Therefore, any increases that are not required to be offset should be accounted for as growth for the state's planning purposes." Collateral emission increases resulting from reducing combustion unit NO_x emissions are not generally expected, but could include CO, VOC, and PM. Any growth of collateral air emissions as a result of implementing NO_x reductions must be identified and quantified in the initial compliance plans and will be accounted for in the state's attainment planning process.

Section 117.580–Source Cap.

The issue of how to calculate the source cap allowable emission rate was discussed at length at the August 30, 1993, Board meeting. It was noted that if a two-year actual average production level is used to compute

the allowable emission rate and compliance is determined on a shorter, 30-day average period, an additional stringency is created that may go beyond equivalence with the other compliance options. After consideration of the issue, the Board adopted the source cap rule with the source cap allowable emission rate calculated on equipment operating days, as recommended by the industry workgroup, rather than the actual two-year average of operating levels, as recommended by the TACB staff in this evaluation of testimony, and EPA. EPA subsequently indicated that the source cap based on the operating day calculation will not be approvable. The TNRC and industry workgroup continue to work with EPA to find a satisfactory alternative to this calculation. If a compromise is reached in the near future, the TNRCC may propose a revision to these rules to ensure their federal approvability.

EPA commented that the proposed source cap rule (§117.580) appears to be consistent with recent EPA draft guidance (NO_x RACT Trading Guidance, July 2, 1993), but noted that any changes made in the final guidance could necessitate further EPA review for consistency with federal policy. The staff has reviewed EPA's NO_x RACT Trading Guidance and considers it to be sound and logical policy. The staff will continue to work with EPA to ensure that the adopted rule is consistent with EPA's draft and final guidance.

Shell Oil/Chemical (Shell) provided a detailed analysis of NO_x reduction scenarios at its plant comparing individual emission limits, plant-wide averaging, and source cap, as well as combinations of these scenarios. According to Shell, these data show that forcing the source cap to include all units may cause additional expenditures for continuous emissions monitoring systems (CEMS) with little or no NO_x reduction benefit. Pennzoil expressed support for the source cap rule because it provides a flexible and efficient means of controlling emissions. Shell presented data showing that under the unit-by-unit RACT alternative, 18 NO_x units would need to be controlled; under the plantwide averaging option, seven units; and under the source cap, four units. The key feature of the source cap which makes it attractive from a cost-effectiveness standpoint is that it allows companies to shift capacity utilization to the more efficient equipment controlled under the cap. As long as NO_x emissions reductions are equivalent to unit-by-unit RACT, this approach has the potential to meet NO_x reduction requirements with considerable savings to industry.

GHASP registered its opposition to the principle of source caps, which, like "bubbles," do not require maximum controls on every single emission source. The source cap, which is conceptually similar to the bubble, is an example of the innovative, flexible approaches being considered nationwide to achieve emissions reductions required under the 1990 FCAA Amendments. While it is true that every emission unit in a source cap may not be controlled, there is a fundamental requirement that total emissions from the cap may not exceed the level of emissions that would have resulted had each individual unit been controlled to RACT levels. Since RACT takes technical feasibility and economic reasonableness into account, the level of RACT control is typically less stringent than LAER, and for this reason would not be characterized as "maximum controls."

TCC et al. and Dow recommended that inclusion in the source cap of all units otherwise subject to NO_x emission limits of §117.205 (relating to Emission Specifications) or §117.207(f) (relating to Alternative Plant-Wide Emission Specifications) should be optional rather than mandatory. They cited the need to minimize additional costs for monitoring and communications systems as justification of more flexibility, and suggested that sources not included in the source cap would have to comply with the emission limits of §117.205 or §117.207(f). Exxon suggested replacing the word "must" with "may" in §117.580(a), thus allowing a source cap for a smaller group of units to achieve equivalent NO_x reductions in a cost-effective manner. EPA's draft document titled "Reasonably Available Control Technology for Oxides of Nitrogen Trading Guidance" (NO_x RACT Trading Guidance) outlines the requirements for state emissions trading programs for NO_x RACT, including source caps. EPA addresses the issue raised by the commenters by stating that if any particular category of emission units is included in an emissions trading group, then all emission units of that type should also be included. For source caps, this restriction is necessary to avoid emission increases resulting from shifting production to units not included in the source cap. Each equipment category whose individual emission units would otherwise be subject to the §117.205 emission limitations may be included in the source cap, and any equipment category included in the source cap must include all emission units belonging to that category. All emission units not included in the source cap shall comply with the requirements of §117.205, concerning individual unit emission limits, or §117.207, concerning plant-wide emissions averaging.

TCC et al. and Dow requested a source cap based on a 30-day rolling average. This approach would take advantage of operating fluctuations which lower actual daily emissions for some units, thus allowing other units to exceed the 30-day average limit individually and still comply with the overall 30-day rolling average. In addition, the commenters stated that a maximum daily source cap would also be necessary to account for the daily fluctuations of emissions from units in the 30-day rolling average source cap. Their suggested definition of maximum daily source cap used the maximum rated heat capacity of each boiler and heater in determining the source cap allowable. EPA guidance contained in the "Nitrogen Oxides Supplement to the General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990" (NO_x RACT Supplement) of November 25, 1992, allows the use of 30-day rolling averages in determining allowable emission rates. If the 30-day rolling average is used, the NO_x RACT Trading Guidance requires the additional constraint of a daily source cap. This stipulation prevents any day's emissions under a cap with a long-term averaging plan from exceeding what would have been allowed under individual unit or plant-wide averaging plans, thus recognizing that ozone is a daily phenomenon. The NO_x RACT Trading Guidance requires using the "maximum possible activity level" (defined as the maximum level of activity allowed or possible, whichever is lower, in a 24-hour period). The staff agrees with the commenters and has changed the rule to require use of both 30-day rolling average and daily source caps in conformance with EPA guidance.

TCC et al. and Dow requested that actual historical operating rates be based on actual operating days rather than calendar days, since the latter method would include maintenance turnarounds and unplanned outages into the average and would penalize operators who have had recent extended outages. The staff has sought to require emission reductions with the source cap compliance option to be roughly equivalent to individual compliance, §117.205, and plant-wide averaging, §117.207. The plant-wide averaging option sets an equality between the RACT emission rate limits and the company-assigned allowable emission limits; both calculated at maximum rated capacity (MRC). There is parity in the method of calculating and complying with the limits.

There is usually a differential or "surplus" between what a unit is allowed to emit and what it actually emits. If many units are considered, the sum of this differential can become large. The actual activity level is a factor which relates actual emissions to allowable emissions. The source cap option sets an equality between the RACT emission rate limits and the plant's total allowable emission rate. Since there are no individual emission limits, there need be no surplus between what the plant is allowed to emit and what it actually emits. The elimination of this surplus is what makes the source cap option less stringent than plant-wide averaging, unless the activity level is used as an adjustment. The suggestion to use an activity level which excludes periods of nonactivity (e.g., maintenance downtime or other shutdown) seems to lack balance, since while operating under the source cap, these shutdown periods will assist the entire plant to remain in compliance.

The staff notes the existence of two aspects of the source cap compliance option which already tend to result in fewer reductions than the plant-wide option. Shutdown equipment is allowed to be included in the calculation of allowable emissions in the source cap, but not in the plant-wide average. Also, the source cap pound per hour (lb/hr) limit is less restrictive than the lb/MMBtu limit in the plant-wide average. Shell's (hypothetical) example in the rule testimony shows that 18 of 32 units would need to be controlled under the individual emission limits, seven under plant-wide averaging, and four units under source caps. Adjustments to increase apparent activity levels could reduce required reductions.

TCC et al. and Dow requested that in cases where the two-year period preceding November 15, 1992, is not representative of normal unit operations in calculating the monthly average heat input, a five-year period prior to November 15, 1992, be allowed. The

commenters stated that companies which were operating below capacity because of low product demand would be penalized by the restriction to the two previous years. EPA commented that §117.580(b) in the proposed source cap rule does not define how "actual historical average heat input" should be determined, and referred to recent EPA draft guidance for assistance in defining the term. The staff has specified the two-year period prior to June 9, 1993 (the effective date of the rule) in determining the actual annual heat input for emission units included in the source cap. For the reasons cited by the commenters, it may be advantageous for some companies to consider a different two-year period. Therefore, the staff has allowed the use of a different consecutive 24-month period, upon approval of the Executive Director, that is more representative of normal unit operation. This type of flexibility in establishing the actual historical average heat input is discussed in EPA's NO_x RACT Trading Guidance.

TCC et al. and Dow's recommended definition of R_i (the emission limit for each individual unit in the source cap) specified only the emission limits of §117.205(a)-(c) or (f). The definition of R_i offered by the commenters eliminates BACT limits from consideration. For sources which have a BACT limit lower than the RACT limit, the difference between these two limits would result in a "windfall credit" which presumably could be applied to offset emissions from other units in the source cap. The staff has a fundamental disagreement with this concept, since it fails to recognize that BACT reductions required under NSR would have occurred anyway without the opportunity to trade in a source cap. EPA cannot allow an emission reduction already achieved on a unit as a result of the NSR program to be used in a RACT rule with emissions trading to eliminate or lessen a reduction requirement on some other unit which otherwise could have reasonably reduced emissions under a RACT rule with unit-byunit compliance. In its NO_x RACT Trading Guidance, EPA holds that the use of such windfall credits to exempt existing sources from RACT levels of control could circumvent the RACT requirements of the FCAA.

A two-part definition for R_i in §117.508(b) has been adopted. The first part in subparagraph (A) applies to emission units subject to the federal NSR requirements of 40 Code of Federal Regulations (CFR) §51.165(a), 40 CFR §51.166, or 40 CFR §52.21, or to the requirements of the TNRCC Permits Program which implements these federal requirements, or emission units that have been subject to an New Source Performance Standards (NSPS) requirement of 40 CFR 60 prior to June 9, 1993. For these units, R_i is defined as the lowest of the actual emission rate or all applicable federally enforceable emission limitations as of June 9, 1993, that apply to emission unit *i* in the absence of trading. In order to prevent credit being claimed for the difference in emission rates before and after control, all calculations of emission rates must presume that emission controls in effect on June 9, 1993 are in effect for the two-year period used in calculating the actual annual heat input. The second part in subparagraph (B) of the definition applies to all other emission units, and defines R_i as the lowest of the RACT limits of this Chapter or any BACT limit pursuant to the TNRCC Air Permits Program that applies to emission unit i in the absence of trading.

TCC et al. and Dow commented that §117.207(f) (concerning Alternative Plant-Wide Emission Specifications) should be listed along with §117.205 in certain places where applicable emission limits are referenced in §117.580. TCC et al. and Dow commented that one or more exempted units should be allowed to be included in a source cap, provided that their average actual emission rate for the period November 15, 1990, to November 15, 1992 is greater than the emission limit set by §117.207(f). The staff is allowing exempted sources in an equipment category to be included in the source cap, as long as all units belonging to that category are included. This concept is endorsed in EPA's NO_x RACT Trading Guidance. The commenters have suggested that to allow portions of an exempted class into the source cap, such units be required to demonstrate that their average actual emission rate is greater than the emission specification of §117.207(f) for the period November 15, 1990, to November 15, 1992. This approach seeks to preclude possible "gaming" of the rule which would result from including exempted units that were already operating below the emission specification. However, it does not account for the possibility that exempted units operating marginally above the emission limit could be selectively included in the source cap, while production was shifted to other exempted units not included in the cap which could then emit at higher levels than before with impunity. RACT equivalency could not be assured under such a scheme.

TCC et al. and Dow objected to the proposed requirement in §117.580(g) for exempted units included in the source cap to obtain additional emission reductions based on offset ratios. EPA policy in the NO_x RACT Trading Guidance requires non-RACT emission units (which includes exempted units) participating in a source cap to reduce potentially tradeable emissions by an amount equal to the offset ratio that applies in the area. The Economic Incentive Program proposed rules (58 FR 11115, February 23, 1993) refer to this trading ratio as "exceptional environmental benefit." In the Houston/Galveston area, for example, emissions available for trading would be 1/1.3, or 0.77 times the original emissions; in the Beaumont/Port Arthur area, emissions available for trading would be 1/1.2, or 0.83 times the original emissions. TCC et al. and Dow suggested that the equations for calculating 30-day rolling average and maximum daily caps provide separate terms for boiler and heater emission limits and for gas turbine emission limits. Amoco Chemical commented that clarifying language concerning calculation of allowable mass emission rates contained in §117.207(g), relating to Alternative Plant-Wide Emission Specifications, should be included in the source cap rule. Amoco Chemical specifically suggested wording patterned after §117.207(g)(3), which describes procedures to calculate allowable mass emission rates for gas turbines. In order to clarify the equations for calculating source cap allowable mass emission rates, the staff has referenced the calculation procedures of §117.207(g)(2), concerning stationary internal combustion engines, in new §117.508(5), and the calculation procedures of §117.207(g)(3), concerning stationary gas turbines, in new §117.508(6). With these clarifying additions to the rule, the staff believes that the equations as proposed are acceptable without further revision.

TCC et al. and Dow suggested that sources be allowed to demonstrate through testing that the actual heat input of a unit is equivalent to its MRC, provided that this designation is made enforceable. The term "MRC" is defined in §117.10, concerning Definitions, a rule not currently open for rulemaking. The definition allows the possibility for a permit condition to limit MRC. Enforceable permit conditions which limit a unit's production capacity should include physical restrictions on the equipment of sufficient scope to require a unit shutdown to remove the restrictions. Keeping records of actual maximum hourly fuel inputs has also been required. The staff anticipates that boilers and heaters rated less than 100 MMBtu/hr will need to be regulated under NO_x RACT. The staff's concern is that the recommendation could postpone certainty on control requirements for this equipment without increasing the time allowed by statute to implement the emission controls.

TCC et al. and Dow commented that maintaining daily records of fuel usage, as required by §117.580(d), is burdensome and not essential to determine daily emission levels. They suggested that fuel usage records be maintained on a monthly basis. Since the source cap allows emissions averaging on a 30-day rolling basis, the additional constraint of a maximum daily cap must be imposed to avoid having any day's emissions higher than what would have been allowed under a traditional emissions averaging program. Compliance with the daily emissions limit cannot be verified unless daily records of fuel usage are maintained. TCC et al. and Dow suggested replacing the term "15 working days" in §117.580(e), relating to reporting of source cap exceedances, with "21 days" to avoid confusion. GHASP commented that written reports of exceedances should be submitted to the TNRCC within five, rather than 15 days of the occurrence as proposed in §117.580(e). In specifying a time frame for reporting of source cap exceedances, the staff attempted to balance the need for prompt notification to the agency with a realistic assessment of the time required for companies to identify and report problems resulting in exceedances. The staff believes that the proposed time frame reasonably meets both these criteria, and has changed the wording from "15 working days" to "21 days."

TCC et al. and Dow stated that units not subject to the emission limits of §117.205, but which have been modified and have achieved emission reductions since November 15, 1990, should be allowed credit under the source cap in the same manner as allowed for shutdown equipment. The commenters

also stated that such units should be allowed to apply reduction credits in the cap as long as these credits have not been used for NSR offset or PSD netting determinations.

The staff disagrees with the first comment, since it is basically the same argument made elsewhere in the commenters' testimony that the difference between a lower NSR, PSD, or NSPS emission limit and a higher RACT limit can be credited in a source cap. Credit can only come from additional actual reductions from the source which result in an emission rate lower than the pre-trade allowable emission rate. EPA's NO_x RACT Trading Guidance allows the use of non-RACT emission units to provide credit for RACT emission units, as long as any applicable LAER, BACT, or NSPS requirements are met, and the trade results in exceptional environmental benefit applying appropriate offset ratios. It would be most appropriate to address this issue in future rulemaking which will establish emission limits in §117.205 for currently exempt sources. This would extend applicability of §117.205(h), one of the subjects of the current rulemaking, to these sources. Section 117.205(h) provides that NO_x reduction projects permitted between November 15, 1990, and June 9, 1993, that were solely for the purpose of making early NO_x reductions shall be subject to the applicable RACT emission limitation of this Chapter.

With regard to the second comment, concerning use of excess emission credits which were not relied upon for NSR offset or PSD netting determinations, the staff agrees that such credits may be applied to the source cap, following the conditions set out elsewhere in the rule. All units in an equipment category (either RACT or non-RACT sources) from which the credits are obtained would have to be included in the cap. As discussed previously, the exceptional environmental benefit requirements, including appropriate offset ratios, would have to be met by non-RACT sources. The staff has added language to the rule clarifying that emission reductions from shutdowns or curtailments which have not been used for netting or offset purposes under the TNRCC Air Permits Program or have not resulted from any other state or federal requirement may be included in the baseline for establishing the cap.

TCC et al. and Dow suggested that for purposes of calculating the source cap emission limit in §117.580(h)(2) for retired units, the actual monthly average heat input and the maximum daily heat input be used along with the applicable emission limit of §117.205(a)-(c). The staff agrees that the calculation procedures contained in §117.580(h)(2) and §117.580(b) should be consistent. The staff has revised the language in §117.580(b), so no change in wording is necessary for §117.580(h)(2) since it already refers to subsection (b). However, the requirements for establishing the allowable emission limit R_i in §117.580(b) are more comprehensive than the commenters' suggestion to use only the applicable emission limit of §117. 205(a)-(c). This distinction is discussed in detail in the portion of the testimony evaluation concerning the definition of the allowable emission limit R_i for non-retired units.

TCC et al. and Dow recommended the deletion of §117.580(h)(3), dealing with proration of actual heat input and maximum capacity of retired units. GHASP objected to including units in the source cap which had been shutdown more than 120 days prior to submitting a permit for NO_x RACT. The staff does not agree with TCC et al. and Dow's suggestion to delete §117. 580(h)(3). In response to GHASP's comment, the staff notes that since permits are not required for inclusion of shutdown units in the source cap, it is assumed that the commenter is referring to submission of the initial control plan. The rule prohibits use of credits for any shutdown occurring before November 15, 1990, and requires a proration of the actual heat input and maximum capacity based on the actual number of days of operation from January 1, 1991, to December 31, 1992. Allowing credit for shutdown of equipment which occurred prior to the effective date of the rule is an innovative approach to establishing RACT requirements. Prorating in such a manner strikes an equitable balance between shutdowns which occurred for purely economic reasons and shutdowns undertaken with air quality considerations in mind. The staff believes that this is a reasonable requirement and has retained the rule language as proposed.

TCC et al. and Dow recommended the deletion of §117.580(h)(4), which requires that retired units be shutdown and rendered inoperable prior to the final compliance date of May 31, 1995. The staff agrees with the commenters that the proposed §117.580(h)(4) should be deleted. Shutdown units are treated in two different ways, depending on whether the shutdown occurs before or after the effective date of the rule, not the final compliance date. A unit subject to emission limits under §117.205 and in operation on the effective date of the rule is not treated specially under the plant cap if it subsequently shuts down. The unit's contribution to the cap limit is calculated in accordance with §117.580(b). The owner or operator would be able to start the unit if it fully meets the monitoring requirements of §117. 580(c), so that continuous compliance with the cap is demonstrated. The proposed §117.580(h)(4) has been deleted.

TCC et al., Dow, and Amoco Oil commented that in §117.580(h)(6), shutdown units rendered inoperable, but not permanently retired, should be identified in the initial control plan. They stated that such units should not have to obtain a permit amendment before resuming operation, since this would force facilities to retrofit to a stricter BACT, rather than a RACT, standard. Instead, the commenters stated that shutdown units resuming operation need only file a revised control plan and apply for the general construction permit under §117.550. GHASP commented that only shutdown units which have been permanently retired should be allowed in the source cap The staff agrees with the commenters that shutdown units should be identified in the initial control plan. The staff also agrees that a permit or permit amendment is not needed for a nonoperating unit to resume operation under the cap. The staff disagrees with GHASP's comment. As discussed in the previous comment, the owner or operator would be able to start the unit if it fully meets the monitoring requirements of §117.580(c), and continuous compliance with the cap is demonstrated. The staff discussed the possible need to develop procedures specific to revising a source cap compliance plan. There will not be a potential need to modify the final source cap control plan until after May 31, 1995. The staff and industry have not had very much time to consider the source cap and issues relating to the need to modify the cap are more likely to develop at a later date. Such language could be developed for possible inclusion in §117.217, concerning Revision of Final Control Plan. The staff has deleted the second sentence of proposed §117.580(h)(6) and deferred the issue of revised final control plans to future rulemaking.

TCC et al., Dow, and Amoco Oil stated that allowing state or federally enforceable shutdown credits in §117.580(h)(7) only after the effective date of the rule would favor companies which postponed NO_x reductions until required. They recommended that November 15, 1990, be set as the baseline date for allowing shutdown credits. They further commented that any excess credits from previous PSD netting or NSR offsets be available for inclusion in the source cap baseline. EPA's NO_x RACT Trading Guidance allows some shutdown credits which occur prior to the effective date of the rule to be applied to reduce the reductions required of a source. This element of the source cap rule reduces the effectiveness of the rule. EPA's policy limits the extent of this loss of effectiveness. It is noted that shutdowns which occurred after November 15, 1990, and prior to the effective date of the rule, which have not been made federally enforceable, are creditable.

TCC et al. and Dow commented that emissions contributions from start-ups, shutdowns, and upset/maintenance episodes in §117.580(j) should be based on the maximum emission rate for the affected unit, unless data can be provided to demonstrate that actual emissions were lower. GHASP commented that upset emissions and other spill, leak, and emergency emissions did not appear to be counted in the source cap, but should be. Excluding emissions occurring from units during periods of start-up, shutdown, or upset/maintenance could create an incentive to overreport the duration of these periods. The staff has revised the language to allow the option for the owner or operator to provide data which demonstrates that actual emissions were less than maximum emission rates during the period. Regarding GHASP's comment, the paragraph requires upset or "emergency" emissions to be counted in the source cap, but the types of sources and the nature of NO_x emissions is such that the concepts of spills or leaks are not really applicable.

TCC et al. and Dow disagreed that in §117.580(k), an exceedance of the source cap emission limit shall constitute an exceedance for each unit included in the cap. They stated that this issue would be better addressed by a separate enforcement policy rather than through rulemaking. GHASP supported this portion of the rule. The source cap approach to compliance is new. There are many areas in which details will need to be

worked out. Enforcement policy is one of these areas. The policy will not need to be in effect until May 31, 1995. The goal of an enforcement policy toward source caps is to ensure that the level of deterrence to noncompliance is maintained at the level which would have otherwise applied in the absence of source caps. Since the staff has not had time to explore enforcement policies and these policies do not necessarily require rulemaking, the proposed paragraph has been deleted.

Use of Predictive Emissions Monitors (PEMS).

TCC et al. and Dow requested more options under §117.580(c), which proposes CEMS for each unit included in the source cap. They commented that parametric monitoring should be allowed for boilers and heaters rated greater than 100 MMBtu/hr or for gas turbines rated greater than 10 MW. The other suggested option besides CEMS and PEMS was to use the unit's maximum emission rate as measured by initial testing or the unit's controlled or uncontrolled potential to emit. TCC et al., Dow, Amoco Oil, and Amoco Chemical cited the following advantages for PEMS: cost savings, greater reliability, real emissions reductions, and ease of model verification. Dow stated that PEMS offer the possibility of better quality data with less down time than CEMS and listed two units in other states with permits or pending permits to use PEMS. Amoco Oil and Amoco Chemical expressed support for use of PEMS not only in the source cap rule, but also in other parts of this Chapter presently requiring CEMS. Amoco Oil suggested that §117.570, concerning Alternate Means of Compliance, be reopened for public comment to allow the use of PEMS upon approval of the Executive Director. The Council of Industrial Boiler Owners (CIBO) commented that PEMS are in many cases more accurate than CEMS and noted that EPA has recognized the validity of alternative monitoring methods in its own rulemaking in 40 CFR 75, Subpart E Alternative Monitoring Systems.

The industry NO_x RACT work group brought new information to the TNRCC staff regarding advanced technology using regression analysis to predict emissions in July 1993. The staff recognizes that less costly methods of determining actual emission rates are vitally needed in the field of air pollution control. The new technology appears to be very promising. The staff worked with industry to modify Subpart E in an effort to make it a costeffective and reliable standard for demonstrating the equivalency of PEMS to CEMS for industrial sources. Subpart E, promulgated in January 1993, is currently specifically applicable to electric utility units required to monitor emissions under Title IV of the FCAA.

The Subpart E requirement to compare 30 days of paired CEMS/PEMS data sets in one of the statistical tests has been identified as being cost-ineffective. The EPA's apparent intent in requiring a minimum of 30 days of data is to demonstrate that the PEMS is capable of predicting actual emissions at a wide variety of operating conditions. Alternatively, the staff believes that equivalency of PEMS to CEMS can be demonstrated by requiring 24 hours of continuous testing rather than 30 days. These tests, however, must be conducted for every fuel supply at three different load levels (low, high, and normal operating levels). In addition to testing at different load levels, equivalency of PEMS to CEMS will be verified for seasonal variability by further requiring testing to be conducted quarterly for at least one unit in a category of units. Data collection of 24 successive emission data points which are either 20-minute averages or hourly averages were found to be adequate for performing reliable statistical analyses at every load level and for every fuel supply. The increased variability inherent in the shorter, 20-minute averages makes for a more stringent equivalence test than the comparison of one-hour average data required by Subpart E.

The Chapter 117 continuous emissions monitoring requirements in §117.213 are not a subject of current rulemaking. In the future, it will be necessary to review §117.213 to consider the implementation of EPA's enhanced monitoring rules required by FCAA Title VII. It would be appropriate to consider alternative monitoring procedures applicable to all affected units at that time. The staff believes this is the more appropriate section to consider opening than §117.570, which addresses intersource trading.

TCC et al. and Dow requested that in cases where PEMS is used instead of CEMS to show compliance with the source cap, the results of initial demonstration of compliance be submitted no later than 180 days past May 31, 1995. Dow commented that since some boiler and gas turbine retrofit projects might not be complete until late May, 1995, an extension of 60 to 180 days should be allowed for submitting test results using PEMS. during PEMS development, Dow recommended use of an alternate monitoring system and use of a portable CEMS or maximum emission rate value to calculate the emission cap.

Pennzoil requested clarification as to whether the source cap rule requires installation of CEMS on internal combustion engines. The staff has followed TCC et al.'s suggestion to allow the use of the maximum emission rate in lieu of installing a CEMS to monitor NO_x, CO, and O2 or CO2 for any equipment not required to install CEMS under §117.213(b), which would include internal combustion engines.

Subchapter B. Combustion at Existing Major Sources

Utility Electric Generation

• 30 TAC §117.105

The amendment is adopted under the Texas Health and Safety Code (Vernon 1990), Texas Clean Air Act (TCAA), §382.017, which provides the TNRCC with the authority to adopt rules consistent with the policy and purposes of the TCAA.

§117.105. Emission Specifications.

(a)-(l) (No change.)

(m) For purposes of this subchapter, the more stringent of any permit NO_x emission limit in effect on June 9, 1993, under a permit issued pursuant to Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) and the NO_x emission limits of subsections (a)-(i) of this section shall apply, except that gas-fired boilers and heaters operating under a permit issued after March 3, 1982, with an emission limit of 0.12 pound NO_x per million Btu heat input, shall be limited to that rate for the purposes of this subchapter.

This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued in Austin, Texas, on November 19, 1993

TRD-9332645 Mary Ruth Holder
Director, Legal Services
Texas Natural Resource Conservation Commission

Effective date: December 15, 1993

Proposal publication date. June 15, 1993

For further information, please call: (512) 908-6087

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Commercial, Institutional, and Industrial Sources

• 30 TAC §117.205

The amendment is adopted under the Texas Health and Safety Code (Vernon 1990), Texas Clean Air At (TCAA), §382 017, which provides the Texas Natural Resource Conservation Commission with the authority to adopt rules consistent with the policy and purposes of the TCAA.

§117.205. Emission Specifications

(a)-(g) (No change.)

(h) For purposes of this subchapter, the more stringent of any permit NO_x emission limit in effect on June 9, 1993, under a permit issued pursuant to Chapter 116 of this title and the emission limits of subsections (a)(3)(b), and (c) of this section shall apply, except that:

(1) gas-fired boilers and heaters operating under a permit issued after March 3, 1982, with an emission limit of 0.12 pound NO_x per million Btu heat input, shall be limited to that rate for the purposes of this subchapter, and

(2) gas-fired boilers and process heaters which have had NO_x reduction projects permitted since November 15, 1990, and prior to June 9, 1993, that were solely for the purpose of making early NO_x reductions, shall be subject to the appropriate emission limit of subsections (a)(3)(b), and

(c) of this section. The affected person must document that the NO_x reduction project was solely for the purpose of obtaining early reductions, and include this documentation in the initial control plan required in §117.209 of this title (relating to Initial Control Plan Procedures).

This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

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TRD-9332646 Mary Ruth Holder
Director, Legal Services
Texas Natural Resource Conservation Commission

Effective date: December 15, 1993

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For further information, please call: (512) 908-6087

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Subchapter D. Administrative Provisions

• 30 TAC §117.540, §117.550

The repeals are adopted under the Texas Health and Safety Code (Vernon 1990), Texas Clean Air Act (TCAA), §382.017, which provides TNRCC with the authority to adopt rules consistent with the policy and purposes of the TCAA.

This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

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Director, Legal Services
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• 30 TAC §§117.540, 117.550, 117.580

The new sections are adopted under the Texas Health and Safety Code (Vernon 1990), Texas Clean Air Act (TCAA), §382.017, which provides TNRCC with the authority to adopt rules consistent with the policy and purposes of the TCAA.

§117.540. Phased Reasonably Available Control Technology (RACT).

(a) The owner or operator affected by the provisions of this chapter (relating to Control of Air Pollution from Nitrogen Compounds) who determines that compliance by May 31, 1995, is not practicable may submit a petition for phased RACT. The process for submitting a petition and receiving approval shall be based on the following.

(1) The petition shall be submitted by October 1, 1994, or as soon as possible after such date upon a demonstration by the owner or operator that the petition was not submitted by October 1, 1994, due to unforeseen circumstances.

(2) The owner or operator of the affected unit or units shall submit information in the petition to the Texas Natural Resource Conservation Commission (TNRCC) and a copy to the United States Environmental Protection Agency (EPA) Regional Office in Dallas which will demonstrate all of the following:

(A) compliance by May 31, 1995, is impracticable due to the unavailability of nitrogen oxides (NO_x) abatement equipment, engineering services, or construction labor; system unreliability; manufacturing unreliability; equipment unreliability; or other technological and economic factors as TNRCC determines are appropriate;

(B) there is a proposed stage-by-stage program for compliance and clearly specified compliance milestones for each unit;

(C) there is a commitment to implement the portion of the phased RACT petition that can be implemented by May 31, 1995; and

(D) the final compliance date specified in the petition shall be as soon as practicable, but in no case later than August 31, 1996, except as approved by the Executive Director.

(3) Each petition for phased RACT shall contain the information required by at least one of the following criteria.

(A) If compliance by May 31, 1995 is impracticable due to the unavailability of NO_x abatement equipment, engineering services, or construction labor, the following information shall be included in the petition for phased RACT:

(i) a list of the company names, addresses, and telephone numbers of vendors who are qualified to provide the services and equipment capable of meeting the applicable emission limitation under this chapter and who have been contacted to obtain the required services and equipment. A copy of the request for bids along with the dates of contact shall also be provided to show a good-faith effort to obtain the required services and equipment necessary to meet the requirements of this chapter by May 31, 1995; and

(ii) copies of responses from each of the vendors listed in clause (i) of this subparagraph showing that they cannot provide the necessary services and install the appropriate equipment in time for the unit to comply by May 31, 1995. Such responses shall include the reasons why the services cannot be provided and why the equipment cannot be installed in a timely manner.

(iii) if work on the project will be provided by the owner or operator, the petition for phased RACT shall include documentation that the necessary NO_x abatement equipment, engineering services, or construction labor could not be obtained in a timely manner from either in-house or external sources, as well as a detailed design or installation schedule for the required services or equipment to be provided by the owner or operator.

(B) If compliance by May 31, 1995, is impracticable due to system unreliability for sources in the utility industry, defined as the inability or threatened inability of a utility grid system to fulfill obligations to supply electric power, the following information shall be included in the petition for phased RACT:

(i) standard load forecasts, based on standard forecasting models available throughout the utility industry, applied to the period May 31, 1993- May 30, 1995;

(ii) outage schedule for all units in the utility grid to which the subject unit belongs; and

(iii) specific reasons why an outage for the purpose of installing NO_x emission control equipment cannot be scheduled by May 31, 1995.

(C) If compliance by May 31, 1995, is impracticable due to manufacturing unreliability, defined as the inability or threatened inability of a source to fulfill contractual obligations to supply a product or products, the following information shall be included in the petition for phased RACT:

(i) certification by an authorized official of the company showing manufacturing obligations for which the company is contractually obligated. Manufacturing obligation information shall include copies of contracts signed by an authorized official of the company or similar documentation and shall exclude com-

mercially sensitive information;

(ii) historical and planned outage schedules for all units whose manufacturing capacity would be affected by the outage of the affected unit; and

(iii) specific reasons why an outage for the purpose of installing NO_x emission control equipment cannot be scheduled by May 31, 1995.

(D) If compliance by May 31, 1995, is impracticable due to equipment unreliability, defined as the reduced availability and operating reliability of a unit resulting from the operation of NO_x control equipment on that unit, the following information shall be included in the petition for phased RACT:

(i) specific reasons why the new NO_x control equipment will reduce the current reliability of the operating unit;

(ii) historical availability and forced outage data expressed as annual percentages and the differences in each expected with the new NO_x control equipment. Availability is defined as the sum of hours the equipment is in service plus the hours the equipment is not in service, but available for service, divided by the number of hours in the reporting period. A forced outage is defined as down time which occurs as a result of a trip, emergency shutdown, or unplanned maintenance;

(iii) most recent operating history available from the vendor for the new NO_x control equipment, including actual test operating hours, actual load during testing, and specific problems that resulted in lost availability; and

(iv) reasons why the No_x Control technology is not considered proven including vendor test and commercial operating data, if available from the vendorl.

(E) If compliance by May 31, 1995, is impracticable due to other technical factors, the petition for phased RACT shall contain such documentation as the Executive Director establishes is appropriate for such technical factors.

(F) If compliance by May 31, 1995, is unreasonable due to economic considerations, excluding the time value of money, the petition for phased RACT shall contain the following information showing comparisons of the cost of compliance by May 31, 1995, and the cost of compliance by the final compliance date specified in the petition:

(i) the costs of additional outages, if applicable, necessitated by compliance with the emission specifications of this chapter by May 31, 1995, as demonstrated by comparison to costs of actual historical and planned outages;

(ii) comparisons of the cost of obtaining the NO_x abatement equipment, engineering services, or construction labor necessary to comply by May 31, 1995, and the cost of obtaining the NO_x abatement equipment, engineering services, or construction labor by the final compliance date specified in the petition. Copies of legally binding contracts, signed by an authorized official of the company, shall be submitted to document these costs. If the required NO_x abatement equipment, engineering services, or construction labor will be provided by the owner or operator, as provided for in paragraph (4) of this subsection, certification by an authorized official of the company may be submitted in lieu of contracts to document these costs; or

(iii) other economic factors, documented as the Executive Director establishes is appropriate for such economic factors.

(4) All petitions for phased RACT shall include copies of legally binding contracts with the primary vendors for each project, signed by an authorized official of the company, showing a detailed design or installation schedule for the required services or equipment to be provided by that vendor, with a completion date no later than August 31, 1996, except as approved by the Executive Director. Any commercially sensitive financial information or trade secrets should be excised from the contracts.

(5) Within 30 days of receiving a petition for phased RACT, the Executive Director shall inform the applicant in writing that the petition is complete or that additional information is required. If the petition is deficient, the notification shall state any additional information required. The requested information correcting the deficiency must be received by the Executive Director within 30 days of the date of the letter notifying the applicant of the deficiency.

(6) The Executive Director shall approve or deny the petition within 90 days of receiving an administratively complete phased RACT petition. The Executive Director shall approve a petition for phased RACT if the Executive Director determines that compliance is not practicable by May 31, 1995, because of either the unavailability of nitrogen oxides abatement equipment, engineering services, or construction labor; system unreliability; manufacturing unreliability; equipment unreliability; or other technological and economic factors as TNRCC determines are appropriate.

(7) Any person affected by the Executive Director's decision to deny a petition for phased RACT or to deny a revision to an approved phased RACT petition may appeal the decision to the Board within 30 days after the date of the decision. Such appeal is to be taken by written notification to the Executive Director. Section 103.71 of this title (relating to Request for Action by the Board) should be consulted for the method of requesting Commission action on the appeal. Approved petitions for phased RACT may be revised by the Executive Director upon a showing of just cause by the applicant.

(8) Approval of a phased RACT schedule by TNRCC does not waive any applicable federal requirements or eliminate the need for approval by EPA.

(9) The holder of an approved phased RACT determination shall comply with each specified compliance milestone and each date for compliance provided in the approved petition, as well as any other condition established in the approval.

(b) The Executive Director shall initiate a reevaluation of the final compliance dates specified in this undesignated head (relating to Administrative Provisions) one year after the adoption of this chapter. The Executive Director shall evaluate the practicability of all sources complying with §§117.105, 117.107, 117.205, 117.207, 117.305, and 117.405 of this title (relating to Emission Specifications; Alternative System-Wide Emission Specifications; Emission Specifications; Alternative Plant-Wide Emission Specifications; Emission Specifications; and Emission Specifications) by May 31, 1995. The Executive Director shall base the evaluation on the information contained in the control plans required by §§117.109, 117.209, 117.309, and 117.409 of this title. In evaluating the practicability of compliance by May 31, 1995, the Executive Director shall take into consideration the availability of NO_x abatement equipment, engineering services, or construction labor; system unreliability; manufacturing unreliability; equipment unreliability; or other technological and economic factors as the TNRCC determines are appropriate. Within 15 months after adoption of this chapter, the Executive Director shall publish notice in the *Texas Register* of the intent to either retain or extend by rulemaking the final compliance dates of this undesignated head.

§117.550. Standard Construction Permits for NO_x RACT Projects.

(a) In lieu of complying with the permitting requirements of Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification), any person who installs ni-

trogen oxides (NO_x) abatement equipment or implements a NO_x control technique in order to comply with the requirements of this chapter shall be entitled to a standard permit under the following conditions.

(1) The change must not result in an increase of the unit's or the facility's production capacity, as documented in accordance with §§117.119, 117.219, 117.319, and 117.419 of this title (relating to Notification, Recordkeeping, and Reporting Requirements), as applicable, except in the following cases.

(A) For gas turbines, any increase in capacity must be a direct result of the requirement to implement controls on existing units required to meet emission limitations required by §117.105 of this title (relating to Emission Specifications), §117.107 of this title (relating to Alternative System-Wide Emission Specifications), §117.205 of this title (relating to Emission Specifications), §117.207 of this title (relating to Alternative Plant-Wide Emission Specifications), and §117.580 of this title (relating to Source Cap).

(B) For permitted equipment other than gas turbines, any increase in capacity must be a direct result of the requirement to implement controls on existing units previously permitted in accordance with the requirements of Chapter 116 of this title that are required to meet emission limitations required by §§117.105, 117.107, 117.205, 117.207, 117.305, 117. 405, or 117.580 of this title. Such units must remain in compliance with all terms and limitations of their permits and cannot utilize the increase in production capacity without satisfying the permitting requirements of Chapter 116 of this title.

(C) For grandfathered equipment other than gas turbines, any increase in capacity must be a direct result of the requirement to implement controls on existing units that are required to meet emission limitations required by §§117.105, 117.107, 117.205, 117.207, 117.305, 117. 405, or 117.580 of this title. Such grandfathered units cannot utilize the increase in production capacity without satisfying the permitting requirements of Chapter 116 of this title.

(2) Any emission increase of an air contaminant other than NO_x must be a direct result of the requirement to install NO_x abatement equipment or implement a NO_x control technique and shall comply with the emission specifications of §§117.105, 117.107, 117.205, 117.207, 117.305, 117.405 of this title; §§117.121, 117.221, 117.321, 117.421 of this title (relating to Alternative Case Specific Specifications); or §117.580 of this title, as applicable.

(3) If installation of NO_x abatement equipment or implementation of a NO_x control technique will result in a significant net increase (for purposes of this chapter, "significant net increase" for nonattainment pollutants means an increase of emissions equal to or greater than the amount specified in the MAJOR MODIFICATION column of Table I in §101.1 of this title (relating to Definitions), and for attainment pollutants, the definition in 40 Code of Federal Regulations 52.21(b)(23)) in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area, a person claiming a standard permit shall submit information sufficient to demonstrate that the following conditions will be met:

(A) considering the NO_x reductions that will result from implementation of the requirements of this part, the emissions increase shall not cause or contribute to a violation of any national ambient air quality standard;

(B) the emissions increase shall not cause or contribute to a violation of any Prevention of Significant Deterioration (PSD) of air quality regulation increment; and

(C) the emissions increase shall not cause or contribute to a violation of a visibility limitation.

(4) Emission increases eligible for a standard permit shall:

(A) be quantified in the initial compliance plan, and

(B) be tested as required by §§117.111, 117.211, 117.311, and 117.411 of this title (relating to Initial Demonstration of Compliance), as applicable.

(5) Notice of the intent to be covered by the standard permit must be accompanied by a carbon monoxide (CO) minimization plan, describing efforts to be taken to minimize increases in CO emissions that will result from installing NO_x abatement equipment or implementing a NO_x control technique.

(6) Notice of the intent to be covered by a standard permit shall be filed with the agency before a standard permit can be claimed Such notice should be filed on or before the date for filing an initial control plan as required by §§117.109, 117.209, 117.309, and 117.409 of this title (relating to Control Plan Procedures), as applicable. Information required under paragraph (3) of this subsection shall be submitted no later than 14 days prior to the commencement of construction for the installation of NO_x abatement equipment or implementation of a NO_x control technique.

(b) Unless notified by the Executive Director to the contrary, any person who submits notice of the intent to be covered by the standard permit is authorized to emit the increase in the quantity of pollutants emitted or change in the type of pollutants emitted under the terms and conditions of this permit 14 days after the date that the notice of intent is postmarked, if all required submissions have been made. The Executive Director may deny coverage under this permit at any time upon a determination that the terms and conditions of this permit are not being met and may require submittal of a permit or permit amendment application for a permit under Chapter 116 of this title. Emissions covered by a standard permit must comply with all rules and regulations of the Texas Natural Resource Conservation Commission.

(c) For purposes of compliance with the PSD and nonattainment new source review provisions of Chapter 116 of this title, an increase that satisfies the requirements for a standard permit shall not constitute a physical change or a change in the method of operation. For purposes of compliance with the Standards of Performance for New Stationary Sources regulations promulgated by the United States Environmental Protection Agency in 40 Code of Federal Regulations (CFR) 60.14, an increase that satisfies the requirements for a standard permit shall satisfy the requirements of 40 CFR 60.14(e)(5).

(d) All representations made in association with a notice of intent to claim a standard permit become conditions upon which the NO_x abatement equipment covered by the standard permit shall be constructed and operated or the NO_x control technique implemented. It shall be unlawful for any person to vary from such representations if the change in conditions will affect that person's right to claim a standard permit under this section. Any change in conditions such that a person is no longer eligible to claim a standard permit under this section requires submission of a permit or permit amendment application for a permit under Chapter 116 of this title.

§117.580. Source Cap.

(a) An owner or operator may achieve compliance with the emission limits of §117.205 of this title (relating to Emission Specifications) by achieving equivalent nitrogen oxides (NO_x) emission reductions obtained by compliance with a source cap emission limitation in accordance with the requirements of this section. Each equipment category at a source whose individual emission units would otherwise be subject

to the NO_x emission limits of §117.205 of this title may be included in the source cap. Any equipment category included in the source cap must include all emission units belonging to that category. Equipment categories include, but are not limited to, the following: steam generation, electrical generation, and units with the same product outputs, such as ethylene cracking furnaces. All emission units not included in the source cap shall comply with the requirements of §117.205 or §117.207 of this title (relating to Alternative Plant-Wide Emission Specifications).

(b) The source cap allowable mass emission rate shall be calculated as follows.

(1) A rolling 30-day average emission cap shall be calculated for all emission units included in the source cap using the following equation:

$$\text{NO}_x \text{ 30-day rolling average emission cap (lb/day)} = \sum_{i=1}^{N} \left(R_i \times \frac{\textit{Actual annual heat input}}{\textit{Operating days}} \right)$$

where: i = each emission unit in the emission cap

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

R_i = (A) For emission units subject to the federal New Source Review (NSR) requirements of 40 Code of Federal Regulations (CFR) 51.165(a), 40 CFR 51.166, or 40 CFR 52.21, or to the requirements of Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification) which implements these federal requirements, or emission units that have been subject to a New Source Performance Standard requirement of 40 CFR 60 prior to

June 9, 1993, R_i is the lowest of the actual emission rate or all applicable federally enforceable emission limitations as of June 9, 1993 that apply to emission unit *i* in the absence of trading. All calculations of emission rates must presume that emission controls in effect on June 9, 1993 are in effect for the two-year period used in calculating the actual annual heat input.

(B) For all other emission units, R_i is the lowest of the reasonably available control technology (RACT) limit of §117.205(a)(3)-(c) or §117.207(f) of this title or the best available control technology (BACT) limit for any unit subject to a permit issued pursuant to Chapter 116 of this title that applies to emission unit *i* in the absence of trading.

Actual annual heat input = Actual historical average annual heat input, as certified to the TNRCC, for the two-year period prior to June 9, 1993. The Executive Director may allow the use of a different

consecutive 24-month period that is more representative of normal unit operation.

Operating days = The average number of days per year during the 24-month period that fuel was fed to the unit.

(2) A maximum daily cap shall be calculated for all emission units included in the source cap using the following equation:

$$\text{NO}_x \text{ maximum daily cap (lb/day)} = \sum_{i=1}^{N} (R_i \times \textit{Maximum daily heat input})$$

where: i, N, and R_i are defined as in paragraph (1) of this subsection.

Maximum daily heat input = The maximum heat input, as certified to the TNRCC, allowed or possible (whichever is lower) in a 24-hour period.

(3) Each emission unit included in the source cap shall be subject to the requirements of both paragraphs (1) and (2) of this subsection at all times.

(4) The owner or operator at its option may include any of the entire classes of exempted units listed in §117.207(f) of this title in a source cap. Such units shall be required to reduce emissions available for use in the cap by an additional amount calculated in accordance with the United States Environmental Protection Agency's proposed Economic Incentive Program rules for offset ratios for trades between RACT and non-RACT sources, as published in the February 23, 1993, issue of the *Federal Register* (58 FR 11110).

(5) For stationary internal combustion engines, the source cap allowable emission rate shall be calculated in pounds per hour using the procedures specified in §117.207(g)(2) of this title.

(6) For stationary gas turbines, the source cap allowable emission rate shall be calculated in pounds per hour using the procedures specified in §117.207(g) (3) of this title.

(c) The owner or operator who elects to comply with this section shall perform the following.

(1) For each unit included in the source cap, either:

(A) install, calibrate, maintain, and operate a continuous exhaust nitrogen oxides (NO_x) monitor, carbon monoxide (CO) monitor, an oxygen (O_2) (or carbon dioxide (CO_2)) diluent monitor, and a totalizing fuel flow meter. The required continuous emissions monitoring systems (CEMS) and fuel flow meters shall be used to measure NO_x, CO, and O_2 (or CO_2) emissions and fuel use for each affected unit and shall

be used to demonstrate continuous compliance with the source cap. Any CEMS shall meet all installation and performance testing requirements of §117.211 of this title (relating to Initial Demonstration of Compliance), all quality assurance requirements of §117.213(b) of this title (relating to Continuous Demonstration of Compliance), and the requirements of §117.219 of this title (relating to Notification, Recordkeeping, and Reporting Requirements); or

(B) install, calibrate, maintain, and operate a predictive emissions monitoring system (PEMS) and a totalizing fuel flow meter. The required PEMS and fuel flow meters shall be used to measure NO_x, CO, and O_2 (or CO_2) emissions and fuel flow for each affected unit and shall be used to demonstrate continuous compliance with the source cap. As alternatives to using PEMS to monitor O_2 or CO_2, subparagraph (A) of this paragraph or similar alternative method approved by the Executive Director may be used. The PEMS shall be installed, initially certified in accordance with clause (iii) of this subparagraph, and the results submitted to the Texas Natural Resource Conservation Commission (TNRCC) within 60 days after May 31, 1995. Any PEMS shall meet the requirements of §117.219 of this title and all the requirements of 40 Code of Federal Regulations (CFR) 75, Subpart E except:

(i) variations to 40 CFR 75, Subpart E which the owner or operator demonstrates to the satisfaction of TNRCC to be substantially equivalent to the requirements of 40 CFR 75, Subpart E;

(ii) requirements of 40 CFR 75, Subpart E which the owner or operator demonstrates to the satisfaction of TNRCC are not applicable;

(iii) for the initial certification of any unit while firing its primary fuel, the owner or operator shall:

(I) conduct initial relative accuracy test audit (RATA) pursuant to 40 CFR Part 60, Appendix B, Performance Specification 2, subsection 4.3 (pertaining to NO_x); Performance Specification 3, subsection 2.3 (pertaining to O_2 or CO_2); and Performance Specification 4, subsection 2.3 (pertaining to CO) at each load level described in §75.41(a)(4)(i)-(iii) of 40 CFR 75; and

(II) conduct an F-test, a t-test, and a correlation analysis pursuant to 40 CFR 75, Subpart E at each load level described in §75.41(a)(4) (i)-(iii). Calculations must be based on a minimum of 24 successive emission data points at each load range which are either 20-minute averages or hourly averages;

(iv) for each of the three successive quarters following the quarter in which initial certification was conducted, demonstrate accuracy and precision of PEMS for at least one unit of a category of equipment by performing RATA and statistical testing in accordance with clause (iii) of this subparagraph; and

(v) for each alternative fuel fired in a unit, the PEMS shall be certified in accordance with clause (iii) of this subparagraph; or

(C) for units not subject to continuous monitoring requirements, as provided for in §117.213(b)(1) of this title, use the maximum emission rate as measured by hourly emission rate testing conducted in accordance with §117.211(f) of this title. Emission rates for these units must be limited to the maximum emission rates as conducted under §117.211(f) of this title.

(2) For each operating unit equipped with CEMS, the owner or operator shall either use a PEMS pursuant to paragraph (1)(B) of this subsection, or the maximum emission rate as measured by hourly emission rate testing conducted in accordance with §117.211(f) of this title, to provide emissions compliance data during periods when the CEMS is off-line. The methods specified in 40 CFR 75.46 shall be used to provide emissions substitution data for units equipped with PEMS.

(d) The owner or operator of any units subject to a source cap shall maintain daily records indicating the NO_x emissions from each source and the total fuel usage for each unit and include a total NO_x emissions summation and total fuel usage for all units under the source cap on a daily basis. Records shall also be retained in accordance with §117.219 of this title.

(e) The owner or operator of any units operating under this provision shall report any exceedance of the source cap emission limit within 48 hours to the appropriate regional office. The owner or operator shall then follow up within 21 days of the exceedance with a written report which includes an analysis of the cause for the exceedance with appropriate data to demonstrate the amount of emissions in excess of the applicable limit and the necessary corrective actions taken by the company to assure future compliance. Additionally, the owner or operator shall submit quarterly reports for the monitoring systems in accordance with §117.219 of this title.

(f) The owner or operator shall demonstrate initial compliance with the source cap in accordance with the schedule specified in §117.520 of this title (relating to Compliance Schedule for Commercial, Institutional, and Industrial Combustion Sources).

(g) A unit which has operated since November 15, 1990, and has since been permanently retired or decommissioned and rendered inoperable prior to June 9, 1993, may be included in the source cap emission limit under the following conditions:

(1) the unit must have actually operated since November 15, 1990;

(2) for purposes of calculating the source cap emission limit, the applicable emission limit for retired units shall be calculated in accordance with subsection (b) of this section;

(3) the actual annual heat input and maximum capacity shall be prorated based upon actual number of days of operation from January 1, 1991, to December 31, 1992;

(4) the owner or operator must certify the unit's operational level and maximum rated capacity;

(5) a unit which has been shutdown and rendered inoperable, but not permanently retired, should be identified in the initial control plan and may be included in the source cap;

(6) emission reductions from shutdowns or curtailments which have not been used for netting or offset purposes under the requirements of Chapter 116 of this title or have not resulted from any other state or federal requirement may be included in the baseline for establishing the cap.

(h) An owner or operator who chooses to use the source cap option must include in the initial control plan required to be filed under §117.209 of this title (relating to Initial Control Plan Procedures) a plan for initial compliance. The owner or operator shall include in the initial control plan the identification of the election to use the source cap procedure as specified in this section to achieve compliance with this section and shall specifically identify all sources that will be included in the source cap. An owner or operator who chooses to use the source cap option must include in the final control plan procedures of §117.215 of this title (relating to Final Control Plan Procedures) the information necessary under this section to demonstrate final compliance with the source cap.

(i) For the purposes of determining compliance with the source cap emission limit, the contribution of each affected unit that is operating during a startup, shutdown, or upset period shall be calculated from the NO_x emission rate, as measured by the initial demonstration of compliance, for that unit, unless the owner or operator provides data demonstrating to the satisfaction of the Executive Director that actual emissions were less than maximum emissions during such periods.

This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued in Austin, Texas, on November 19, 1993.

TRD-9332648 Mary Ruth Holder
Director, Legal Services
Texas Natural Resource Conservation Commission

Effective date. December 15, 1993

Proposal publication date: June 15, 1993

For further information, please call: (512) 908-6087

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TITLE 34. PUBLIC FINANCE

Part I. Comptroller of Public Accounts

Chapter 3. Tax Administration

Subchapter L. Motor Fuels Tax

• 34 TAC §3.171

The Comptroller of Public Accounts adopts an amendment to §3.171, concerning records required; information required, without changes to the proposed text as published in the October 1, 1993, issue of the *Texas Register* (18 TexReg 6729).

The 73rd Legislature, 1993, amended the Tax Code, Chapter 153, to add a new permit classification called a "jobber. The amendment is necessary to advise jobbers of the records necessary for the purchase, sale, and use of gasoline and diesel fuel.

No comments were received regarding adoption of the amendment.

The amendment is adopted under the Tax Code, §111.002, which provides the comptroller with the authority to prescribe, adopt, and enforce rules relating to the administration and enforcement of the provisions of the Tax Code, Title 2. The amendment implements the Tax Code, §153.117 and §153. 219.

This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued in Austin, Texas, on November 22, 1993.

TRD-9332528 Martin E. Cherry
Chief, General Law Section
Comptroller of Public Accounts

Effective date. December 13, 1993

Proposal publication date: October 1, 1993

For further information, please call: (512) 463-4028

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• 34 TAC §3.175

The Comptroller of Public Accounts adopts an amendment to §3.175, concerning liquefied gas tax decal, with changes to the proposed text as published in the October 1, 1993, issue of the *Texas Register* (18 TexReg 6730). The change occurs in subsection (c)(1) and (2) and was made for clarity and consistency. Letter of exemption is retitled letter of exception.

The 73rd Legislature, 1993, amended the Tax Code, Chapter 153, to except commercial transportation companies providing transportation services to public school districts from prepaying the liquefied gas tax. Commercial transportation companies providing transportation services to public school districts do not have to obtain decals for vehicles used to provide these transportation services

No comments were received regarding adoption of the amendment

The amendment is adopted under the Tax Code, §111.002, which provides the comptroller with the authority to prescribe, adopt, and enforce rules relating to the administration and enforcement of the provisions of the Tax Code, Title 2. The amendment implements the Tax Code, §153 3021

§3.175. Liquefied Gas Tax Decal

(a)-(b) (No change.)

(c) Exceptions

(1) The liquefied gas tax does not apply to sales to public school districts and counties in this state, or to commercial transportation companies providing transportation services to public school districts in this state and holding valid letters of exception from the comptroller

(2) A public school district, commercial transportation company providing transportation services to a public school district and holding a valid letter of exception from the comptroller, or a county in this state operating a motor vehicle powered by liquefied gas is not required to prepay the liquefied gas tax and obtain a decal for the motor vehicle.

(d) Rate schedule

(1) The following rate schedule (based on mileage driven the previous year) applies.

Registered Gross Weight	Less Than 5,000 Miles	5,000 to 9,999 Miles	10,000 to 14,999 Miles	15,000 Miles and Over
Class A: Less than 4,000 pounds	$ 30	$ 60	$ 90	$120
Class B: 4,000 to 10,000 pounds	42	84	126	168
Class C: 10,001 to 15,000 pounds	48	96	144	192
Class D: 15,001 to 27,500 pounds	84	168	252	336
Class E: 27,501 to 43,500 pounds	126	252	378	504
Class F: 43,501 and over	186	372	558	744

(2) A special use liquefied gas tax decal and tax is required for the following types of vehicles described as follows: Class T: Transit carrier vehicles operated by a transit company, $444.

(e) New or newly converted vehicles. A liquefied gas tax decal for a Class A-F motor vehicle shall be initially issued on the basis of estimated miles that will be driven during the one-year period following the date the decal is issued.

(f) Display of decal.

(1) The decal shall be affixed to the inside, lower right corner of the windshield (passenger side) of the vehicle.

(2) Invalid liquefied gas tax decals shall be removed before installing a new decal or transferring ownership of the motor vehicle.

(g) Special use vehicles. Vehicles required to be licensed for highway use but whose main purpose, design, and use is off the highway, may renew a liquefied gas decal for a rate less than the mileage indicated on the odometer if a record or log indicating the miles traveled on the highway by the vehicle is maintained and attached to the renewal application.

This agency hereby certifies that the rule as adopted has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority.

Issued in Austin, Texas, on November 22, 1993.

TRD-9332529 Martin E Cherry
Chief, General Law Section
Comptroller of Public Accounts