Federal Register

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Part II

Environmental Protection Agency

40 CFR Part 52

Approval and Promulgation of Air Quality State Implementation Plans (SIP); Texas (8 Documents); Final Rules

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–126–1–7477; FRL–7092–2]

Approval and Promulgation of Implementation Plans; Texas; Houston/Galveston Nonattainment Area; Ozone

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is fully approving the Texas one-hour ozone attainment demonstration State Implementation Plan (SIP) for the Houston/Galveston (HG) severe nonattainment area with an attainment date of November 15, 2007. Also, being published in today's **Federal Register** are seven additional actions, approving various measures that support the attainment demonstration.

In this action, the EPA is approving the following related SIP elements: The following local measures relied on in the attainment demonstration: speed limit reduction, voluntary mobile emission programs (VMEP) and transportation control measures (TCM); the Post 1999 Rate of Progress (ROP) plans for the time periods November 15, 1999 to November 15, 2002, November 15, 2002 to November 15, 2005 and November 15, 2005 to November 15, 2007; the Motor Vehicle Emissions Budget (MVEB) contained in the attainment demonstration SIP and the Post 1999 ROP plans; the 15% ROP Plan (Conversion of conditional interim approval to a full approval); certain enforceable commitments to adopt additional measures and perform additional analyses; revisions to the 1990 base year inventory; and the HG area's SIP as meeting the reasonably available control measures (RACM) requirement.

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of documents relevant to this action are available for public inspection during normal business hours at the Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Dallas, Texas 75202–2733; and, the Texas Natural Resource Conservation Commission, Office of Air Quality, 12124 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Guy R. Donaldson, Air Planning Section (6PD–L), 1445 Ross Avenue, Dallas, Texas 75202–2733. Telephone Number (214) 665–7242, E-mail Address: Donaldson.Guy@epa.gov.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

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I. Final Action

A. What Elements of the Texas SIP Are We Approving?

We are fully approving the one-hour ozone attainment demonstration SIP for the HG nonattainment area as meeting the attainment demonstration requirements of 182(c)(2) and (d) of the Clean Air Act (the Act). We proposed this action on July 12, 2001 (66 FR 36655). This demonstration shows, through photochemical modeling and other evidence, that through a combination of adopted measures, recent legislation, and commitments to adopt additional measures the HG area will attain the one-hour ozone standard by November 15, 2007.

As an integral part of the attainment demonstration, we are approving and finding adequate the associated MVEBs only until these emission budgets have been revised pursuant to the State's enforceable commitments to use MOBILE6 and to adopt additional measures necessary for attainment and we have found the revised budgets adequate for the purposes of transportation conformity.

Before approving an attainment demonstration SIP, we must approve all of the control measures relied on in the demonstration. The majority of the control measures relied on in the attainment demonstration have been approved in other **Federal Register** notices. (See Section II for a listing of related **Federal Register** notices.) We are approving in today's action, certain measures relied upon in the attainment demonstration and which were submitted December 20, 2000: the Speed Limit Reductions, the VMEP, and the TCMs. We are also approving the following related SIP elements:

- 15% ROP Plan,
- The Post 1999 ROP Plans and their associated contingency measures;
- A demonstration that all RACM have been adopted for the HG nonattainment area; and
- Revisions to the 1990 Base Year Inventory.

The revisions to the Post 1999 ROP plans and the RACM analysis that we are approving today were parallel processed. (*See* Section I.E. for a discussion of parallel processing.)

In addition, we believe that for the HG area to be successful in attaining the one-hour ozone standard, the State must be committed to certain future actions relating to adopting additional measures and to future evaluations of the inputs to the plan. To that end, Texas has included the following enforceable commitments in their State Implementation Plan which we are approving:

- The State's enforceable commitment to perform a mid-course review (including evaluation of all modeling, inventory data, and other tools and assumptions used to develop this attainment demonstration) and to submit a mid-course review SIP revision, with any recommended mid-course corrective actions, to the EPA by May 1, 2004.
- The State's enforceable commitment to perform new mobile source modeling for the HG area, using

MOBILE6, our on-road mobile emissions factor computer model, within 24 months of the model's official release; that if a transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 official release, transportation conformity will not be determined until Texas submits an MVEB which is developed using MOBILE6 and which we find adequate.

- An enforceable commitment to adopt rules that achieve at least the additional 56 tons/day of NO_X emission reductions that are needed for the area to show attainment of the one-hour ozone standard and as supported by identified measures that could potentially be adopted and could achieve the reductions without requiring additional limits on highway construction.
- An enforceable commitment to adopt and submit the EPA by December 1, 2002 measures to achieve 25% of the 56 tons/day.
- An enforceable commitment to adopt and submit to EPA by May 1, 2004 measures for the remaining needed additional NO_X reductions.
- An enforceable commitment that the rules needed for the additional NO_X reductions will be adopted as expeditiously as practicable and the compliance dates will be expeditious.
- An enforceable commitment to concurrently revise the MVEBs and submit them to EPA as a revision to the attainment SIP if additional control measures reduce the motor vehicle emissions budget (MVEB).

This action also satisfies the last two elements of section 182(d)(1)(A) of the Act to adopt TCMs as necessary to comply with the reasonable further progress and attainment demonstration requirements of the Act. The first requirement to offset growth in emissions from growth in vehicle miles traveled (VMT) or number of vehicle trips is addressed in a corresponding action published separately in today's **Federal Register**. Please see Section III.C.3 for additional discussion regarding the second and third elements. For additional discussion regarding the first element, see the corresponding separate action in today's **Federal Register** regarding the VMT Offset Plan.

For more discussion on the rationale for the actions being approved here, see the proposed approvals with their associated Technical Support Documents (TSD) and our response to comments found in Section II.

B. What Are the Motor Vehicle Emissions Budgets Being Approved in This Action?

Rate of Progress Budgets

The MVEBs established by the Post 1999 Rate of Progress plans and that we are approving today are contained in Table 1. We find the MVEBs consistent with all ROP SIP requirements. In addition, we are finding these budgets adequate for transportation conformity purposes pursuant to the criteria in 40 CFR 93.118(e)(4) as part of our action on the SIP rather than using the web posting process because we have moved forward on this SIP in a quick manner as described in *Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations* dated November 3, 1999.

TABLE 1.—ROP SIP MOTOR VEHICLE EMISSIONS BUDGETS

[Tons per day]

Pollutant	2002	2005	2007
VOC	100.07	68.52	79.51
NO_X	260.85	185.48	156.6

The new 2007 budgets are taken from the attainment demonstration modeling rather than directly from the ROP calculations. Emissions estimates used to demonstrate transportation conformity will be derived using the assumptions used to develop these emissions budgets for the 2007 attainment SIP MVEBs, pursuant to 40 CFR 93.122(a)(6). We find such MVEBs consistent with ROP.

Attainment Budgets

Table 2 contains the MVEBs established by the attainment plan. We are approving these budgets today and finding them adequate for transportation conformity purposes pursuant to the criteria in 40 CFR 93.118(e)(4) as limited below.

TABLE 2.—2007 ATTAINMENT YEAR MOTOR VEHICLE EMISSIONS BUDGETS

[Tons per day]

Pollutant	2007
VOC	79.51
NO_X	156.60

We find the MVEBs consistent with all pertinent SIP requirements and, as described in our proposals, the MVEBs are approved and adequate for conformity purposes only until these emission budgets have been revised pursuant to the State's enforceable commitments to use MOBILE6 and to adopt additional measures necessary for attainment and we have found the revised budgets adequate for the purposes of transportation conformity.

All States whose attainment demonstration includes the effects of EPA's Tier II/Low Sulfur program have committed to revise and resubmit their budgets after EPA releases MOBILE6.(MOBILE6 is the latest version of the EPA model for estimating mobile emissions. Its official release is expected in the near future.) The State committed in its April 2000 submission to perform new mobile source modeling for the HG area using MOBILE6 within 24 months of the model's official release. If transportation conformity analysis is to be performed between 12 and 24 months of the official release of MOBILE6, transportation conformity will not be determined until the State submits a new budget which is developed using MOBILE6 and which we find adequate. The State has informed the transportation agencies of this commitment. Texas also commits to concurrently revise the MVEB if adoption of any shortfall measure affects the MVEB and submit the revision to EPA as a revision to the attainment SIP.

We are limiting the duration of our approval as described above because we are only approving the attainment demonstrations and MVEBs because the States have committed to revise them. Therefore, once we have confirmed that revised budgets are adequate, they will be more appropriate than the budgets we are approving today.

C. What Are the Key SIP Submissions Being Approved in This Action?

There have been a number of State submissions in response to the attainment demonstration requirements of the Act. In this notice, the key State submissions being considered were provided by the Governor in letters dated December 20, 2000, and October 4, 2001. The items in the October 4, 2001 submission have been parallel processed. Parallel processing means that EPA proposes action on a state rule before it becomes final under state law. Our July 12, 2001 proposal details the history of State and EPA actions that preceded these submissions (66 FR 36655).

D. What Previous Actions Has EPA Taken?

There are three proposals related to this action. First, on December 16, 1999 (64 FR 70548), we issued a proposed approval/proposed disapproval of the HG ozone attainment demonstration plan (the 1998 plan). This action outlined the actions we believed were

necessary for the State to develop a fully approvable plan. Second, on July 28, 2000 (65 FR 46383), we issued a notice of proposed rulemaking regarding how the adequacy of attainment MVEBs would be handled for the one-hour ozone nonattainment areas. Finally, on July 12, 2001 (66 FR 36655), we proposed approval of the HG ozone attainment demonstration plan (the December 2000 plan as proposed to be revised by the State and finally adopted and submitted in a letter dated October 4, 2001) and several related actions. In today's notice, we have addressed all of the comments received on the three proposals.

E. What Changes Have Been Made in Response to Comment on EPA and TNRCC Parallel Proposals?

In a letter dated June 15, 2001, the Governor of Texas submitted several items for parallel processing. These items were: certain commitments; recent legislative changes with their impacts on and revisions to the proposed control strategy for the HG area; the corrections and modifications to the Post 1999 ROP plans; a demonstration that all RACM have been adopted for the HG nonattainment area; and a modification to the attainment demonstration and MVEB to revise the emission projection for Heavy Duty Diesel vehicles.

Under parallel processing, EPA takes final action on its proposal if the final, adopted state submission is substantially unchanged from the submission on which the proposed rulemaking was based, or if significant changes in the final submission are anticipated and adequately described in EPA's proposed rulemaking or result from needed corrections determined by the State to be necessary through review of issues described in EPA's proposed rulemaking. Several minor changes were made by the State in response to comment.

Enforceable Commitments

Texas made the following changes to the language of their enforceable commitments. Italicized text has been added.

The commission commits to adopt measures necessary to achieve at least 56 tpd of NO_X emission reductions in the HGA area *above and beyond those reductions already identified by the control measures listed in Chapter 6, Table 6.1–2.*

To demonstrate progress towards *the 56 tpd* that commitment, the commission intends to evaluate the following measures and to adopt, by November 2002, sufficient measures in order to achieve at least 25% of the estimated 56 tpd needed.

TNRCC also in response to comments now lists all of the enforceable commitments for the HG area in a single location in Chapter 7.

We agree that these changes are not significant in that they clarify the intent of the enforceable commitments and therefore, remain approvable. No further notice is necessary since these changes do not substantively change the State's proposal.

Changes to the Rate of Progress Plan

TNRCC also revised the tables in the Post 1999 Rate of Progress Plans in response to EPA comments that the Tables did not reflect the revised implementation schedules for the point source NO_X rules. This issue was discussed in our proposed approval which was based on conservative estimates of the emission reductions. The revised tables in the October 4, 2001 SIP reflect the new implementation schedule. No further notice is required since the State made changes as discussed by EPA in the proposal notice. The following summary table is based on the revised estimates.

TABLE 1.—NO_X RATE OF PROGRESS

Milestone Year	2002	2005	2007.
Target Level	1127.08	1011.33	935.67.
Projected emissions after controls	1115.76	630.05	444.04.
Measures	Tier I NLEV RFG I/M Small Engine HDDV Standards.	Tier I/II I/M HDDV Standards NO_X Point Source controls	Tier I/II HDDV Standards NO_X Point Source controls.

II. What SIP Elements Did We Need To Take Final Action on Before We Could Approve the Attainment Demonstration?

In our proposed action on July 13, 2001, we explained that we could not finalize approval of the attainment demonstration for the HG area until we finalize approval of several related actions. These actions are listed below along with the status of their final approval.

1. Vehicle I/M program (30 TAC 114). Final approval published separately in this issue of the **Federal Register**.

2. Revised emission specifications in the HG area for NO_X Point Sources (30 TAC 117). Final approval published separately in this issue of the **Federal Register**.

3. NO_X Cap and Trade program (30 TAC 101). Final approval published separately in this issue of the **Federal Register**.

4. Low emission diesel fuel (30 TAC 114). Final approval published separately in this issue of the **Federal Register**.

5. Non-Road Large Spark-Ignition (LSI) Engines (30 TAC Chapter 114). Final approval published separately in this issue of the **Federal Register**.

6. Agreed Orders with Continental and Southwest Airlines and the City of Houston. Final approval published separately in this issue of the **Federal Register**.

7. Reasonably Available Control Technology (RACT) rules regulating VOCs from Batch Processes (30 TAC 115) and Offset Lithographers (30 TAC 115). Direct final action was published July 16, 2001 (66 FR 36913). No comments were received and this action became effective September 14, 2001.

8. A determination that the HG SIP includes all Reasonably Available Control Measures. Final approval in this action.

9. The 15% ROP Plan. Final approval in this action.

10. The Post 1999 ROP Plans and contingency measures. Final approval in this action.

11. The revisions to the 1990 base year inventory. Final approval in this action.

12. The speed limit reductions, the VMEP and the TCMs. Final approval in this action.

13. Lawn service equipment operating restrictions (30 TAC 114.452–459). Final approval published separately in this issue of the **Federal Register**.

14. Vehicle Miles Traveled (VMT) Offset Plan submitted August 25, 1997 and with minor, non-substantive revisions submitted on May 17, 2001. Final approval published separately in this issue of the **Federal Register** for the first element of 182(d)(1)(A). The last two elements of 182(d)(1)(A) are satisfied by this action.

15. Motor Vehicle Idling Limitations (30 TAC 114.500–509). Final approval

published separately in this issue of the **Federal Register**.

16. Stationary Diesel Generator rule (30 TAC 117.206). Final approval published separately in this issue of the **Federal Register**.

17. The Post 1996 ROP Plan and contingency measures. Direct final action was published April 25, 2000, 66 FR 20746. No comments were received and this rule became effective June 26, 2000.

III. Comments

A. What Comments Were Received?

i. What Comments Were Received on the December 1999 Proposed Approval/ Proposed Disapproval?

The following comment letters were received on the December 1999 proposal:

(1) February 14, 2000 letter from Robert E. Yuhnke, Attorney for Environmental Defense.

(2) February 14, 2000 letter from Jeffrey Saitas, Executive Director TNRCC.

(3) July 31, 2000 letter from James O. Bartholomew, ELM Packaging.

ii. What Comments Were Received on the July 28, 2000 Supplemental Proposal Concerning MVEBs?

The following comment letter was received on this supplemental proposal.

(1) August 28, 2000 letter from Environmental Defense.

iii. What Comments Were Received on the July 12, 2001 Proposal?

We received the following 13 comment letters on the July 12, 2001 proposal.

(1) Letter from D. Marrach, M.D. dated July 2, 2001.

(2) August 10, 2001 letter from Patrick Gallagher, Sierra Club.

(3) August 13, 2001 letter from John Wilson and Frank Blake, the Galveston-Houston Association of Smog Prevention (GHASP).

(4)August 13, 2001 letter from B.C. Carmine, Reliant Energy.

(5)August 13, 2001 letter from Ramon Alvarez, PhD, Environmental Defense.

(6) August 8, 2001 letter from Jack Steele, Houston Galveston Area Council.

(7) August 13, 2001 letter from Nelly Rocha, Baker and Botts for the Business Coalition for Clean Air Appeal Group.

(8) August 10, 2001 letter from Albert Axe, Jr., Jenkens & Gilcrest for TXI Operations.

(9) August 13, 2001 letter from John R. Evans, Lyondell.

(10) August 13, 2001 letter from T. Hefgott, Enterprise Products.

(11) August 3, 2001 letter from Howard Runser, private citizen.

(12) August 8, 2001 letter from Brant Mannchen, Houston Regional Group of the Sierra Club.

(13) August 13, 2001 letter from John D. Walke, Senior Attorney, NRDC.

No comments were received on the proposed approval of the 15% ROP plan or the proposed approval of revisions to the 1990 Base Year Inventory. These actions are being approved with out further discussion.

B. Response to Comments on Attainment Demonstration

1. General Comments

Comment: Several commenters urged EPA to disapprove the attainment plan because they believe the plan does not include complete modeling, enforceable versions of all Reasonably Available Control Measures (RACM) and a control strategy sufficient to achieve attainment. One commenter went on to say because they believe the plan should be disapproved and, under the consent decree in *NRDC* v. *Browner*, Civ. No. 99–2976, EPA must commence promulgation of a Federal Implementation Plan (FIP). One commenter supported the proposed approval.

Response: In the following responses, we address the specific concerns raised by the commenters in more detail. We believe the plan provided by the State of Texas is fully approvable under the Act and will provide for attainment as expeditiously as practicable which is by November 15, 2007 and the plan includes all reasonably available control measures. Therefore, we are finalizing our approval in this action. Furthermore, because we are fully approving the plan as meeting the requirements of 182(c)(2) and (d) of the Act, it is unnecessary to commence development of a FIP.

Comment: TNRCC has not provided modeling that shows attainment in 2007. (Really 2005 since 4 exceedences in that year ensures failure to meet the three-year standard.) A commenter also states that there is no demonstration of maintenance of the ozone standard below the 0.12 ppm one-hour standard beyond 2007.

Response: EPA has taken the position that for nonattainment areas subject to the requirements of subpart 2 of part D of the Act, that the area needs to demonstrate that in the attainment year, the area will have air quality such that the area could be eligible for the two one-year extensions provided under section 181(a)(5) of the Act. Under section 181(a)(5), an area that does not have three–years of data demonstrating attainment of the ozone NAAQS, but has complied with all of the statutory requirements and that has no more than one exceedance of the NAAQS in the attainment year, may receive a one-year extension of its attainment date. Assuming those conditions are met the following year, the area may receive an additional one-year extension. If the area has no more than one exceedance in this final extension year, then it will have three-years of data indicating that it has attained the ozone NAAQS.

This position is consistent both with EPA's modeling guidance and with the structure of subpart 2 of the Act. Under EPA's modeling guidance, states model air quality for the attainment year—they do not model air quality for the three-year period preceding the attainment year. This is largely a function of how the model operates that the data produced only predicts the air quality for one year. EPA's modeling guidance has existed for many years and has been relied on by numerous areas for demonstrating attainment of the ozone standard.

Moreover, EPA believes this approach is consistent with the statutory structure of subpart 2. Under subpart 2, many of the planning obligations for areas were not required to be implemented until the attainment year. Thus, Congress did not assume that all measures needed to attain the standard would be implemented three years prior to the area's attainment date. For example, areas classified as marginal—which had an attainment date of three years following enactment of the 1990 Clean Air Act amendments were required to adopt and implement RACT and I/M ''fix-ups'' that clearly could not be implemented three years prior to their attainment date. Similarly, moderate areas were required to implement RACT by May 1995, only 18 months prior to their attainment date of November 1996. Also, the ROP requirement for moderate and above areas, including the 15% plan for reductions by November 1996, applies through the attainment year. Thus, EPA believes that Congress did not intend that these additional mandatory reductions be in excess of what is needed to achieve three-years of ''clean data.'' For these reasons, EPA does not agree with the commenter that the State's attainment demonstration needs to demonstrate that the area will have three years of data showing attainment in the attainment year. However, EPA does believe that the Act requires and that it is prudent for States to implement control as expeditiously as practicable. EPA also believes that for the HG area, all measures are being implemented as expeditiously as practicable and that the area has

demonstrated attainment consistent with EPA's modeling guidance.

A plan for maintenance of the Standard is not necessary for the attainment demonstration to be approved. A State is not required by the Act to provide a maintenance plan until the State petitions for an area to be redesignated to attainment which will not occur until the HG area has three years of data showing compliance with the Standard.

While it is not necessary for the State to provide for maintenance of the standard at this time, we do believe emissions in the HG area will continue to decrease after 2007 due to on and off road vehicle emission control programs that will continue to provide additional reductions as the fleet continues to turnover after 2007. So there is reason to believe that air quality will continue to improve after the attainment date.

Comment: Two commenters suggested the plan should address other air pollution concerns in addition to attainment of the one-hour standard. One commenter suggested the plan should provide as much progress as possible toward implementing the 8-hour standard as the requirements of the Act and EPA's implementing regulations allow. Another commenter said that ozone reduction should be used as a spur in reducing toxic emissions and particulate matter as well.

Response: As an initial matter, these comments are outside the scope of this rulemaking. EPA's review here is focused on whether the submitted plan meets the statutory requirements for attainment of the one-hour ozone standard. Nevertheless, EPA believes the reductions in ozone precursors in this plan will provide reductions both toward attainment of the one-hour standard and substantial progress toward the 8-hour standard. Furthermore, NO_X emissions are a precursor to particulate matter formation. So the large NO_X emissions reductions in the plan should provide improvements in particulate matter levels. In addition, while the focus of the plan is on reducing NO_X emissions, VOC emissions will also be reduced by approximately 40% from 1993 levels. Some of these VOCs are also air toxics. Again, while EPA believes these additional air quality benefits will result from the implementation of this plan, the approval of the plan depends, as a legal matter, only on whether the plan will result in attainment of the one-hour ozone standard.

2. Comments on the Photochemical Modeling

a. Model Performance

Comment: The photochemical modeling is fundamentally flawed and should not be used as proposed. The ozone plots prepared by TNRCC as part of its graphical performance analysis show significant subregional biases in the model with systematic under predictions and over predictions. The commenter states that the graphical analysis provides far more insight into the performance of the model than any other type of performance measure. The statistical measures distort the appearance of model performance by averaging out the subregional biases.

Response: EPA does not agree that the graphical analysis provides more insight into model performance than any other performance measures. EPA believes all model performance measures should be considered. There is no rigid criterion for model acceptance or rejection in assessing model simulation results for the performance evaluation. As recommended by EPA, the State's model performance evaluations for the selected episode included diagnostic and sensitivity analyses, and graphical and statistical performance measures. TNRCC used these performance measures in conjunction with one another to evaluate the performance of the model. Diagnostic and sensitivity analyses consisted of testing the response of modeled ozone to changes in the various model inputs (*i.e.,* meteorology, emission inventory, and initial & boundary conditions). The model performance evaluation was based upon graphical measures consisting of comparing time series of monitored and modeled ozone and ozone precursor concentrations, and comparing modeled ozone concentration contours with monitored ozone data. The model performance evaluation was also based upon statistical measures consisting of comparing the modeled versus monitored ozone. The ''Unpaired Peak Accuracy,'' ''Normalized Bias,'' and, ''Gross Error'' were all within the suggested limits in the EPA Guideline.

EPA did not dismiss any measures or analyses used by TNRCC for their model performance evaluation, nor should EPA weigh the graphical performance more heavily than the other performance measures. As indicated in the State's modeling results for the selected episode, the model responded generally as expected to the diagnostic/sensitivity analyses for the primary episode day (9/8/93). Overall, these analyses did not reveal any flaws in the CAMx model formulation. In addition, the statistical performance of the model for the primary episode indicated the model performed well. For all days modeled, the graphical performance for the majority of the monitor sites was very good. For instance, the time-series plots developed for each monitoring station in the HG area indicated no significant bias within the diurnal cycle as well as good agreement between the timing of the predicted and observed ozone maxima.

EPA has recognized, however, the graphical model performance for the primary episode day of 9/8/93 indicates the model at some locations underestimated ozone and at other areas the ozone was overestimated. Also, at some locations, there are no ozone monitors to substantiate the model's performance. The ozone plume peaks were simulated in different locations than occurred with the monitored results. EPA believes that most of the error can be best explained by the meteorological model having some difficulty in replicating the wind speed and direction. Discrepancies in wind speed and direction not surprisingly result in the model not predicting the maximum ozone concentration in precisely the right location, a possibility noted by the commenter.

TNRCC has spent considerable effort to better understand the land/sea breeze phenomenon which has added a level of complexity to the HG analysis not seen any where else in the country (with the exception of some lake breeze effects in the Lake Michigan area). Emissions in the HG area are emitted into the local atmosphere where ozone formation begins, later emissions and ozone formed are transported out over the warm air over the Gulf of Mexico where the warmer temperatures further activate the chemistry to form more ozone which is then transported back inland over the area. Current meteorological models have had difficulty in simulating this process. We believe our understanding of the process is sufficient, however, to interpret the photochemical model results.

TNRCC and EPA intend to continue evaluating how to more accurately simulate the HG area's meteorological conditions in the available models. The need for further studies does not mean, however, that the modeling relied upon today was unable to estimate the amount and type of emission reductions needed for attainment. EPA believes because the diagnostic/sensitivity tests reveal no flaws in model formulations and the model generally predicts the right magnitude of the peak which is confirmed by the statistical measures,

that the model does provide an acceptable tool for estimating the amount of emissions reduction. It is EPA's technical opinion that based on the weight-of-evidence and the modeling, the State's control strategy should provide for attainment by November 15, 2007.

Any new information derived from the further studies and evaluation will be incorporated by Texas into the SIP revision modeling to be submitted to EPA by May 1, 2004.

Comment: EPA previously expressed its persistent concern about the model's poor graphical performance. Now, EPA has simply ignored the concern. The commenter quoted a previous EPA comment letter sent to the TNRCC during the State's August 1999 public comment period for its proposed SIP revision. EPA's comment letter stated that ''due to the model's poor graphical performance caution is warranted in assessing the model's projected ozone reduction due to NO_X control strategies.''

Response: EPA disagrees that the discrepancies in graphical performance have been ignored. Texas made numerous enhancements to its August 1999 proposed SIP attainment demonstration modeling, based upon EPA's comments. TNRCC has used a new version of CAMx (i.e., version 2.03), which offers several enhancements over the original version, for the current modeling relied upon in the submitted attainment demonstration SIP revision. Also, major improvements have been made to the base year emission inventory. For instance, biogenic emissions and the emissions for diesel-powered construction equipment, commercial marine vessel emissions, airport ground support equipment emissions, and industrial equipment emissions have been updated with more accurate information. As a result, for all days modeled, the graphical performance, has been improved. For instance, the time-series plots indicate the model performance improved at a number of monitoring stations in the HG area (i.e., Galveston site, HRM sites 3 and 4, Texas City site and Clinton site). In addition, the statistical model performance for the current modeling which was similar to that for the past modeling base case indicated the model performed well. All of the statistical parameters are within the EPA suggested limits for the primary episode day. EPA continues to believe, taken together, the diagnostics, sensitivity, statistical and graphical performances of the model indicate the base case model performance is acceptable for assessing control strategy effectiveness.

Further, in EPA's letter where we said that caution is warranted in assessing the projected ozone reduction to NO_X control strategies, EPA was cautioning TNRCC that sufficient NO_X reductions should be provided to account for this uncertainty in the model. We were not saying that the graphical performance meant the model was unacceptable for assessing control strategy effectiveness. Rather, we were advising the State to take into account the graphical performance, i.e., by ensuring the control strategy took a more conservative approach and erred on the side of caution, in the amount of required NO_X reductions.

Comment: One commenter believes that the modeling fails to account for ozone spikes. The TNRCC's failure to account for these spikes necessarily means that the control strategy will not attain the standard. Further, this results in significant over estimates of NO_X emission reductions needed for attainment. The commenter asserts that the spikes are caused by highly reactive VOCs, a theory it believes to be supported by preliminary data and findings of the Texas 2000 Air Quality Study.

Response: Monitors measure concentration at a point in space, and in reality, these concentrations can vary significantly over a grid cell or an area. This is true especially for ozone if it is contained in a narrow plume. Inevitably, a grid type model will smooth some natural phenomena because natural conditions are averaged over the volume of each grid cell. For instance, model output represents a volume average, typically 4km x 4km by 50 meter column. As a result, reasonable comparisons between model predictions and monitor observations are not expected to match exactly. With reasonable performance, time series typically show similar diurnal cycles but not exact concentration levels. As a result, it is very difficult to obtain a precise equality between modeled concentration and monitored concentration. This is to be expected and does not necessarily call into question the model's utility as a tool to predict the level of emission reductions needed to reach attainment. As stated in previous comments, EPA believes the model provides reasonable predictions of ozone levels as confirmed by comparisons with monitoring data and therefore can provide an acceptable estimate of the amount of emissions needed for attainment. Certainly, any difficulty the model has in replicating rapid increases in ozone, does not indicate that the model is calling for an ''overestimate'' of the amount of NO_X emission reductions needed for attainment. Furthermore, even if the model is shown during the mid-course review to be overestimating the amount of NO_X emission reductions needed for attainment, a State is always free to adopt a control strategy that is more stringent. See *Union Electric* v. *EPA,* 427 U.S. 246 (1976); *Train* v. *NRDC,* 421 U.S 60 (1975).

EPA is following with interest the findings being presented from the Texas 2000 Air Quality Study, particularly the information on concentrations of highly reactive VOCs found in the ambient air in the HG area. We understand Texas intends to incorporate, as much as possible, the findings of this study into its next modeling effort, which is currently underway and they expect to submit by the end of 2002. This study may improve our present understanding of ozone formation in the HG area and result in an improved effectiveness of the control strategy being implemented by the TNRCC. Nevertheless, based upon all available evidence, the State's control strategy shows attainment for the HG area by the statutory deadline and that the NO_X emission reductions are needed for attainment.

Comment: The 2007 post-control strategy peak concentration is 141 ppb at a monitoring site where the model underestimated the monitored peak by 27 ppb during the validation run. Thus, if the control strategy had been in effect during the episode used for validating the model, the actual ozone concentration would likely have been higher than 141 ppb.

Response: EPA disagrees. As is always the case in a photochemical modeling exercise, there are areas within the simulation that do not correspond exactly with observations. As discussed in other comments, in this case, the modeled wind fields tended to move the ozone plumes formed on all four days away from the areas where the highest concentrations were observed. Although the modeled peak on the primary episode day (i.e., September 8, 1993) was pushed west of the observed peak, the results of the State's model performance evaluation analyses for that day indicate overall the model performed well for the majority of the monitoring sites. Misplacing the peak does not necessarily mean the model is providing inaccurate results or predicting less ozone on that day. In addition, this tendency does not, by itself, mean that the model is not useful for developing control strategies. Therefore, again, we feel the model provides a reasonable estimate of the

emission reductions needed for attainment.

Comment: A commenter criticized the State model's inability to replicate ozone levels on September 8, 1993 and recommends that TNRCC estimate the magnitude of emission reductions needed for attainment from the modeling results of September 10 and 11, 1993. One commenter believes the best way to manage the risks of making the wrong decision on the magnitude of the needed controls is to base HG's control strategy on the modeling simulations that have the least uncertainty. Though all four days of the September 8–11, 1993 base case simulation are characterized by poor graphical performance, the greatest uncertainties by far exist for September 8 and 9, 1993. Therefore, the commenter believes that the control strategy should be based on modeling results from September 10 or 11, 1993.

Response: EPA disagrees. As discussed in previous comments, we believe the model performance is acceptable on all four days. Furthermore, EPA guidance recommends that a minimum of three episode days representing different meteorological regimes be modeled(Guideline for the Regulatory Application of the Urban Airshed Model, July 1991). With only four days (i.e., Sept. 8–11), the number of episode days being used by TNRCC for control strategy development is only marginally above the recommendation. Removing days would not provide an appropriate number of modeling days. EPA believes that the September 8, 1993 episode day chosen by TNRCC presents a reliable and accurate modeling scenario for ozone attainment demonstration in the HG area. September 8, 1993 is the controlling day because the meteorological conditions experienced that day require the most control to reach attainment. September 8, 1993 also had the highest observed ozone during the 4 day episode. Though observed and predicted concentrations do not match exactly, plausible inputs resulted in plausible predictions. The overall model performance for the September 8, 1993 episode day meets EPA criteria. Model performance on September 11, 1993 was similar to that observed on September 8, 1993, but is not suitable to design control strategies, since it was a Saturday. Controls based on that day would still need to be shown to be effective in controlling ozone on a weekday, since the Saturday emissions from mobile and area sources differ considerably from their weekday counterparts.

In addition, during episode selection, TNRCC used a modification of the Predominant Wind Direction (PWD) method to analyze each potential episode day. The wind analysis is based on morning winds and afternoon winds. The largest category was calm/calm with 10 of 71 cases where most frequent wind pattern for high ozone days occurred in the HG region. The second was calm/SSE with 9 cases. September 11, 1993 is in this category. The third category was calm/ESE with 8 cases. September 8, 1993 is in this category. The PWD for September 10, 1993 is NNW/ESE, which had one case. Meanwhile, the PWD for September 9, 1993 is NNW/NNW, which had none. Therefore, each of these episode days covers different meteorological conditions that are correlated with high ozone levels in the HG area. To remove one or more of the four episode days would remove conditions that should be evaluated to provide assurance that the controls adopted in the SIP would be expected to show attainment of the NAAQS for potential meteorological conditions conducive to ozone formation in the HG area. In addition, September 10, 1993 had an observed peak value that was significantly lower than the design value. Control strategies based on absolute model predictions on this day may not be sufficient to bring the area into attainment. Therefore, no days should be dropped from the State's attainment demonstration.

Comment: Evaluating the equations used to estimate the shortfall for September 10 and 11, 1993, results in gaps of 21 tpd and 37 tpd, respectively, for which could be filled (with surplus) from the list of gap measures given in Table 6.1–2 of the proposal.

Response: As stated in previous responses, September 8, 1993 must be considered in the control strategy to have confidence that the HG area will attain under a commonly observed meteorological condition. In any case, after revisions to the inventory, modeling now indicates that the additional reductions estimated for attainment on September 8, 1993 and September 10, 1993 is 90.9 tpd and 93.7 tpd NO_X, respectively; thus even on September 10, 1993 the State has a shortfall because Texas has only been able to adopt measures to achieve 38 tons/day of additional measures.

Comment: TNRCC has presented no evidence that the model is accurately simulating NO_X or VOC levels, or other intermediate chemical species in the vicinity of the modeled peaks.

Response: EPA disagrees. There is no monitoring data in the area where the modeled peak occurred to indicate one way or the other how well the model compared to measurements of NO_X, VOC and intermediate species. As a part of the 1993 COAST study, VOC concentrations were measured at two locations in the HG nonattainment area, and comparisons have been made between modeled and monitored concentrations. Similarly, for each of the locations where NO_X was monitored, comparisons have been made between modeled and monitored concentrations. All of these comparisons are included and discussed in the '98 and '99 SIPs submitted to EPA. Therefore, the attainment demonstration we are approving relies upon evidence that the model provided results in a reasonable agreement with the measurements considering that the comparison is between a point measurement and a simulated volumetric average.

Monitors measure the concentration at a point in space, and in practice, these concentrations can vary significantly from a volume average that is 4km square and up to 50 meter high. This is true for VOC and NO_X precursors, and is especially true for precursors emitted by point sources. The comparisons that have been made indicate reasonable agreement between monitored and modeled concentrations given the considerations cited above (see Appendix B entitled ''Time Series Plots of Observed, CAMx and UAM–V Ozone Precursors Over the H/G Modeling Domain for The Base Case Simulation'') of the Appendix B (entitled ''Modeling the Houston/ Galveston Ozone Attainment Demonstration'')) of the December 2000 SIP revision. Besides, the CAMx photochemical model, which is an ozone model, was developed and optimized for that purpose. As expected, some other chemical species will not compare as well with ambient data as does ozone. As mentioned above, there are no monitoring data for intermediate species, which have not been recommended for use in validating model results since they are not reliable. Instead, these are often used to validate model inputs (i.e., emission inventory), if they become available.

Comment: Because of doubts regarding the accuracy of the model predictions, commenters recommend that new emission controls be based on proven cost-effective technology and that stakeholders be given as much time to implement controls as the Act allows. The model simulations and basic science that are the foundations of the commission's control strategy are currently not strong enough to support the unproven, technically infeasible, or

economically challenging measures in the State's adopted control strategy.

Response: As described in previous comments, we believe that the model performance is acceptable and provides an appropriate assessment of the amount of emission reductions needed for the HG area to attain. TNRCC and its contractors have used state-of-the-science approaches to support the adopted control strategy. All appropriate and pertinent data submitted during the State's comment periods to improve the model were incorporated or addressed by the State. As discussed in our RACM and the shortfall enforceable commitment responses, it is EPA's position that the control measures in the HG control strategy are feasible. Therefore, it is our position that the controls that have been adopted by Texas have been shown to be needed for the HG area to attain by the statutory deadline. These controls are being implemented as expeditiously as practicable as required by the Act.

Comment: A commenter believes that the TNRCC must address the risk that the modeling uncertainties may have led the commission to a wrong estimate of the magnitude of emission reductions needed to attain the ozone NAAQS.

Response: In the earlier submitted SIPs, the effect of the uncertainty of the emissions relative to the reductions needed to attain the NAAQS was addressed. This involved developing an alternate emissions inventory that reflected uncertainties, evaluating base case model performance, and the effect on the reductions needed to attain the NAAQS with the future 2007 emissions. This modeling showed that the control path needed to attain the NAAQS did not change (a NO_X rather than VOC-directed control strategy), and that the order of magnitude of the required reductions did not change much. This reinforced the necessity of obtaining the level of NO_X and VOC reductions contained in this SIP revision.

The current approach does not show attainment of the NAAQS at all locations on all days that were modeled, but uses modeling in combination with weight of evidence to show that this level of NO_X and VOC reductions are adequate to attain the standard. Furthermore, the mid-course evaluation can be used by Texas to reassess the level of controls needed to attain the NAAQS and ensure that timely progress is being made toward attainment of the standard.

Comment: One commenter supports the recent contract commissioned by Harris County with Environ. This work will re-run the model with an alternate meteorological simulation model in a further attempt to address the non-performance of the grid cells in question.

Response: EPA understands that TNRCC has worked with Harris County and Environ on the alternate meteorological simulation of the episode modeled by the commission. It takes substantial time and effort to develop meteorological data to be run in the photochemical model. After the data are developed, the model results must be evaluated for adequate meteorological model performance. Then the data must be used in the photochemical model to evaluate base-case model performance with the new data set. If the revised base case modeling meets the performance requirements, then the model will be applied to the future 2007 emissions, and various control scenarios modeled. If these efforts provide a better representation of meteorological conditions in the HG area, then Texas would address them in the mid-course review.

Comment: Because of the model's performance one commenter disagrees with the following proposals:

(1) The model activities were performed as outlined in the Protocols.

(2) The model activities were performed according to the Guideline For Regulatory Application of UAM.

(3) That the model performed within EPA's recommended ranges.

(4) That the base case model is suitable for control strategy testing.

(5) The proposal to accept the base case model as a basis for attainment demonstration modeling.

(6) The implicit finding that the TNRCC validated the performance of the base case modeling.

(7) That the simulated ozone contour plots from the base case model depict the area of ozone to be only ''somewhat at odds geographically'' with the monitors.

(8) The implicit finding that the base case model fails only to ''precisely predict'' the position of the cloud of ozone geographically.

(9) That the base case model's predicted position of the cloud of ozone does not by itself, mean that the base case model is not acceptable for control strategy development.

(10) That the statistical measures from the base case model are within EPA recommended limits for all days of September 8–11, 1993.

(11) That the results of the statistical measures are within EPA recommended ranges.

(12) That the spatial and temporal patterns of ozone generated by the base case model indicate it is acceptable for use in the Attainment Demonstration.

(13) The diagnostic, sensitivity, statistical and graphical performance of the base case model indicate it is acceptable for use in the Attainment Demonstration.

(14) That reductions of NO_X will be most effective in bringing HGA into attainment.

(15) That the quadratic equation used by the TNRCC to determine the additional amount of additional emission reductions is consistent with the 1999 guidance.

(16) That the quadratic equation is an improvement over the 1999 guidance.

(17) That an additional 96 tons/day of NO_X emission reduction are necessary to bring the HG area into attainment.

Response: As discussed in previous comments, we believe the model performed acceptably for use in control strategy development. Therefore, we disagree with the commenter and continue to support the findings in the conclusions from our proposed approval that are cited above.

b. Model Inputs

Comment: Off-road shipping emissions may be underestimated based on preliminary results from the Texas Air Quality 2000 Study.

Response: The State conducted a study of actual shipping activity in the HG area and applied EPA emission factors to the activity to calculate the shipping emissions. This site-specific methodology is approved by EPA and provides the best estimate of emissions at this time. The results from the Texas Air Quality Study 2000 are just now being made available for analysis. The results were not available to the State at the time the SIP was prepared, and the State needs additional time to evaluate the data. It is hoped that the data can be used by Texas for its mid-course review. However, there is no evidence presently before EPA showing that off-road shipping emissions were underestimated by the State.

Comment: Industrial VOC emissions are understated based on the preliminary results of the Texas 2000 Air Quality Study.

Response: As discussed above, TNRCC has followed EPA approved methodologies in preparing its emissions inventory. They have gone to substantial effort to characterize all the categories, including the industrial emissions. This has included detailed inventories from all of the major emitters and inclusion of episodic releases that were reported during the 1993 episode. We believe that the emissions inventory is based on the best

available techniques and data and meets all EPA criteria and requirements.

TNRCC is continuing to work to improve the inventory. This is a major emphasis of the Texas 2000 Air Quality study. We are aware some of the preliminary findings of this study indicate that industrial VOC emissions may be understated. This indication is based upon only preliminary findings at this time, however. Texas has reached no final conclusions. EPA will work with TNRCC and other stakeholders to address improvements to the inventory so that the mid-course review modeling incorporates any new and appropriate data.

Comment: The commission and its contractors have worked commendably to develop what may be, in many respects, the most accurate emissions inventory ever used in photochemical modeling. But major uncertainties still exist in other respects and in the model's representation of the chemical reactions and meteorological processes that determine the location, time, and magnitude of high ozone levels in Houston-Galveston.

Response: EPA disagrees that there are major uncertainties with the modeling. As discussed above in previous responses, it is EPA's technical position that the modeling adequately represents the meteorological processes for the HG area to allow its use for control strategy purposes. Further, the modeling is acceptable in its representation of the chemical reactions in the HG area. TNRCC and its contractors have used state-of-the-science modeling approaches for development of the meteorological parameters used in the modeling.

The chemical algorithms used in the modeling reflect the latest developments in the state-of-the-science today. TNRCC is currently investigating various alternate chemical mechanisms, and they plan to continue this activity with analyses on the Texas 2000 study results. If enhancements are identified for the chemical algorithms, they can be utilized in the mid-course evaluation, and Texas would include them in the mid-course review SIP.

Comment: It was noted that the 91 tpd increase in point source NO_X emissions produced daily maximum ozone increases ranging from 1.5 ppb (on September 10) to 6.1 ppb (on September 11). The commenter also noted that the 91 tpd decrease in on-road mobile and non-road mobile source NO_X emissions produced ozone decreases, relative to HRM Strategy 1, ranging rom 6.9 ppb (on September 11) to 10.8 ppb (on September 8). From this, the commenter sees relatively small benefits from the commission's 90% point source control proposal relative to a 75% point control level, but sees greater benefits if the same amount of incremental emissions was reduced from mobile sources. It was also noted that mobile source emission reductions ranged from 1.1 to 7.0 times more effective than point source NO_X reductions at reducing ozone levels (given the ratio of mobile source to point source NO_X effectiveness). From this, it follows that mobile source NO_X emission reductions are on average 3 times more effective at reducing ozone levels than are point source emission reductions.

Response: It is quite possible that mobile source controls may be more effective in reducing ozone levels for certain nonattainment areas. The State, however, analyzed the ensemble of emission reductions modeled for the SIP development for the HG area based on an analysis of potential reductions available from all of the various source categories. As discussed in other sections, Texas has adopted all RACM for mobile as well as stationary sources. It is not EPA's role to disapprove the State's choice of control strategies if that strategy will result in attainment of the one-hour standard and meets all other applicable statutory requirements. See *Union Electric* v *EPA,* 427 U.S. 246 (1976); *Train* v. *NRDC,* 421 U.S 60 (1975).

Comment: One commenter states that the modeled control strategy contained in the Attainment Demonstration includes measures that were modified or removed from the SIP. The State did not remodel to determine the impact of these changes. Particularly, one measure that was modified was a relaxation in utility controls from 93% to 90%.

Another commenter supported the changes to the required emission rates for utilities because these revisions will be offset by emission reductions from grandfathered facilities in attainment counties surrounding the HG area.

Response: During the State's settlement negotiations and trial court proceedings this summer in *BCCA Appeal Group, et al.* v. *Texas Natural Resource Conservation Commission, et al.* in the District Court of Travis County, Texas 250th Judicial District, Cause No. GN1–00210, TNRCC determined that the amount of control for utilities should be reduced from 93% control to 90% control. Due to time constraints and the necessity for submitting an approvable attainment demonstration in time for EPA action before the NRDC consent decree deadline of October 15, 2001 for proposing a FIP in the absence of a fully approved SIP, the revised utility controls were not modeled by TNRCC. TNRCC believes, and EPA agrees, that any potential loss in ozone benefit from reducing the utility point source requirement will be *de minimis*, based upon a review of certain information gathered from the 2000 Texas Air Quality Study. The information in the Study indicates that Reliant Energy's Parish power plant, located in the HG area has an ozone production efficiency which is 3 to 5 times smaller than the ozone production efficiency expected for the grand-fathered utility and non-utility sources based on Southern Oxidant Study results for the Memphis area. Ozone production efficiency is a measure of the efficiency that a particular NO_X plume generates ozone and is an indication of the reactivity of the VOCs with which the NO_X plume comes in contact. The Parish plant is located outside the central urban area and apparently not in an area of highly reactive biogenic emissions. The remaining units affected by the reduced control requirement are mainly peaking units which deliver their increased emissions during the hot afternoon hours. Modeling for the construction ban and lawn-care activities has consistently shown that emissions in the afternoon contribute less to ozone formation in the HG area than emissions generated in the morning.

To counterbalance the reduced controls on utilities in the HG area, Texas will control grandfathered sources in East and Central Texas by 50% as required by recent State legislation. These controls are in addition to controls on utility sources, Alcoa and Texas Eastman that are already included in the model results. These new controls would apply to all non-utility sources, particularly pipeline compressor station emissions would be reduced by 50%. These emission reductions can be expected to achieve an ozone benefit in the HG area to counterbalance the loss in NO_X reductions from the change in utilities from 93–90% control.

Because the impact of the emission increases for utilities in the HG area will be small and there is a program to offset these *de minimis* increases, EPA believes it is appropriate to accept the modeling and weight of evidence as showing that attainment can be achieved in the HG area by the statutory deadline.

TNRCC currently intends to conduct modeling based on the data results of the Texas 2000 Air Quality Study, in 2002. Pursuant to the State's mid-course review enforceable commitment, Texas will submit a revised attainment demonstration SIP by May 1, 2004 that

will include modeling that incorporates all scientific advancements made since the recent SIP revisions, as appropriate.

Comment: As required by recent legislation, the TNRCC repealed the time-of-day construction ban. To provide for the benefits that would have been achieved by the construction ban, the Texas legislature adopted a diesel emission reduction incentive program. However, TNRCC failed to model the control strategy with the diesel engine incentive program replacing the morning construction ban. EPA may not approve the photochemical modeling and the subsequent gap calculation because these emission reductions were revised and not modeled.

Response: Texas legislation, enacted in May, 2001, established a diesel emission reduction incentive program and required TNRCC to repeal its rules for a morning construction ban and accelerated purchase of diesel equipment. Due to time constraints and the necessity for submitting an approvable attainment demonstration in time for EPA action before the NRDC consent decree deadline of October 15, 2001 for proposing a FIP in the absence of a fully approved SIP, the State could not specifically model the diesel engine incentive program in their attainment demonstration. The TNRCC had, however, conducted numerous control scenario modeling runs, which combined federal, state and local measures, designed to provide significant ozone reductions in the area. The results of one control scenario modeling run indicated that the benefit of the construction ban was approximately 3 ppb of ozone. Based on the quadratic curve, TNRCC estimated that this 3 ppb reduction in the ozone concentration level was equivalent to a 6.7 tpd reduction of NO_X emissions. EPA believes the State used acceptable procedures for determining this estimate. As discussed in other responses to comments regarding the diesel engine incentive Program, EPA believes that this program will achieve greater NO_X emission reductions in the HG area than 6.7 tpd. EPA and State calculations project that this new program will cover the loss in reductions from the construction ban and the accelerated purchase rules, and also fill a portion of the shortfall. EPA believes that the incentive program will likely produce somewhat greater benefits than the morning construction ban because it can achieve emission reductions not only from construction diesel equipment but also from additional categories such as tug/tow boats which are located in the portion of the HG area where the highest ozone levels often occur. In addition, TNRCC currently intends to conduct modeling based on the data results of the 2000 Texas Air Quality Study, in 2002. Pursuant to the State's mid-course review enforceable commitment, Texas will submit a revised attainment demonstration SIP by May 1, 2004 that will include modeling that incorporates all scientific advancements made since the recent SIP revisions, as appropriate.

Comment: TNRCC has not correctly estimated point source growth in attainment counties of East and Central Texas. The commenter provided Public Utility Commission estimates of new capacity.

Response: As noted by the commenter, Appendix H of the SIP contains documentation of the projected newly permitted growth. Texas examined all of the permits issued by TNRCC for the 8 county HG area and the counties within 100 miles of the HG area. Permitted projects in this area were included in the model's future base inventory. EPA believes that Texas used a reasonable method of estimating the growth for the area most likely to impact the HG area's air quality.

Comment: One commenter stated the attainment and rate of progress demonstrations are flawed because they assume a fleet mix that does not accurately reflect the growing proportion of sport utility vehicles and gasoline trucks. EPA and the states have not followed a consistent practice in updating SIP modeling to account for changes in vehicle fleets. EPA cannot rationally approve SIPs that are based on such materially inaccurate assumptions. Continued use of out-dated assumptions is inconsistent with the duty imposed by the Act section 182(a)(3) to triennially update the emission inventory. If the motor vehicle inventory has not been updated in preparing the current SIP submission, the SIP should be disapproved. One commenter compared the numbers from the Dallas/Fort Worth area to the HG area and provided the results of a Contractor Study of vehicle registration data to support its claims that the portion of SUVs in the Houston fleet are understated.

Response: The November 1999 HG area attainment demonstration SIP's associated mobile source budgets were based on fleet mix information updated based on a December 1998 Texas Transportation Institute (TTI) Report, ''Development of Gridded On-road Inventory for the Houston/Galveston Ozone Nonattainment Area,'' found in Appendix G of the November 1999 SIP revision. TTI relied on vehicle classification count data recorded on roadways throughout the 8-county area by Texas Department of Transportation (TxDOT) personnel utilizing automatic vehicle classification (AVC) equipment. This equipment is set up along the roadway and is calibrated to classify all of the passing vehicles into thirteen vehicle types. Due to the fact that AVC equipment cannot distinguish vehicle fuel type on the roadway, the various vehicle categories are then separated out into their gasoline and diesel classifications, based on a combination of MOBILE5 defaults and county vehicle registration data. The fleet mix information was based on vehicle counts that were a mix of 1996 data for week days, and 1993 and 1998 data for weekends. This was the most recent data available when Texas submitted the attainment demonstration SIP for the HG area in November 1999.

The December 2000 SIP included data provided by TTI from the most recently available observed AVC data which was from 1997, 1998, and 1999. In order to avoid year-to-year fluctuations in the data set, TTI averaged the AVC data from these three years in order to obtain a more recent VMT mix, which was used in the revised 2007 inventory. This data was used to update the modeling provided in December 2000. At the time the TNRCC modeling for the December 2000 SIP was being completed, this data set was the most recent data available. The data used for the modeling is more recent than the most recently completed periodic inventory (1996). The 1999 inventory is expected to be completed soon and include the more recent data.

EPA requires the most recent available data to be used, but we do not require it to be updated on a specific schedule. Therefore, different SIPs base their fleet mix on different years of data. Our guidance does not suggest that SIPs should be disapproved on this basis. Nevertheless, we do expect that revisions to these SIPs that are submitted using MOBILE6 (as required in those cases where the SIP is relying on emissions reductions from the Tier 2 standards) will use updated vehicle registration data appropriate for use with MOBILE6, whether it is updated local data or the updated national default data that will be part of MOBILE6.

In the November 3, 1999, ''Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations,'' we state that, when developing motor vehicle emissions budgets, the MOBILE inputs (including vehicle fleet characteristics) should be appropriate and up-to-date as outlined in EPA's guidance on SIP inventories and the MOBILE user's guide. The SIP

has been based on the most recent information and meets the intended purpose of the existing guidance.

A particular concern raised by a commenter was that registration data from the TXDOT data base indicate that 13.2% of the vehicles registered in the 8 county area are light duty gas trucks two (LDGT2) as compared to the VMT mix figures provided by TTI which project this category at only 4.5% of the mix. The commenter also pointed out that LDGT2 were estimated as 11.4% of the mix for the Dallas/Fort Worth area SIP and the EPA national default is 8.8%. The LDGT2 category includes large SUV and pickups. The percentage of miles traveled by these vehicles is important because they currently have higher emission standards than passenger cars.

The EPA believes that vehicle registration data alone does not necessarily represent the most accurate estimation of fleet mix characteristics that actually exist on the current transportation network system. The best possible approach would be to use a combination of both AVC and conventional registration data. However, EPA believes that field AVC data of vehicles traveling on the roadways throughout the 8-county area provide a reasonable estimate of the types of vehicles and distance these vehicles are driven. This is because vehicles from some categories are driven more than other categories. Heavy Duty Diesel Trucks, in particular, account for more miles than the values that may be reflected by the vehicular registration process. Registration distribution is different than VMT mix and actual data is the best possible information. In addition, while one might expect the numbers to be similar between DFW and Houston, they are two different cities with many different social and economic variables. One cannot presume Houston to be the same as DFW when the location specific data does not support this conclusion.

It is worth noting that the Tier II standards will eliminate the difference between (i) passenger car and (ii) larger truck and SUV emissions standards. Therefore, as Tier II vehicles become more widespread, possible discrepancies in the percentage of trucks and SUVs will become less important for air quality planning purposes. The Tier II standards begin taking affect in new vehicle manufactured in 2004.

The EPA has encouraged and required use of the latest assumptions and data in forecasting the on-road mobile source emissions whenever possible. Updating the data and using the latest information is a continuous planning process which does not end with this SIP and will continue in the future for emissions inventory updates, SIP development, and for conducting conformity determinations. In addition, the refinements in the emissions inventory procedures and use of the MOBILE6 model will further enhance not only the VMT mix issue but also other parametric inputs in computing the on-road mobile source emissions. However, it must be recognized that because of many constraints associated with availability and timing of new information, the process of updating the vehicular and other data does not necessarily follow the SIP development cycle, and thus there is likely to be a lag time. The EPA is committed to ensure that the best available data are used in any air quality analysis and this SIP is no exception. Therefore, based on the information documented in the SIP and the EPA's current guidance, the EPA believes that Texas has made reasonable assumptions and has utilized the most recent available data in determining the on-road mobile source emissions.

Comment: The model's failure to account for episodic emissions events is a serious flaw. The commenter cited a description in the SIP of a butadiene release as evidence of this problem.

Response: TNRCC made every effort to account for episodic emissions in the model. It surveyed companies to determine if any specific events occurred during the modeling episode, including reported upset events. The reported episodic emissions were included in the modeling. Consequently, we believe Texas used the best information available to address episodic emissions and therefore, the SIP is approvable.

The growing availability of ambient VOC data from the Photochemical Assessment Monitoring Stations (PAMS) network, however, indicates that more may need to be done in this area. The butadiene release cited by the commenter is a case in point. In addition, the Texas 2000 Air Quality Study is providing a wealth of information that is just being analyzed. This data, it is hoped, will shed more light on the impact of episodic emissions on ozone levels. The mid-course review SIP, due to EPA in May 2004, will contain the most recent data available for that SIP's planning.

Comment: EPA should investigate the impact on the plan of any changes being considered in the EPA's 90-day review of the New Source Review (NSR) progam. The commenter is concerned that relaxed NSR requirements may affect the level of emissions from point sources in the Region.

Response: The 90-day review of the NSR program is not complete at this time. It is expected that any modifications to the Federal NSR provisions will include provisions for strict caps for the pollutants and therefore should be as stringent as the present NSR rule. Moreover, any changes made through this review will not affect the NSR rules approved for the HG area in the current SIP. If Texas determines that the HG area rules should be modified in response to the 90-day review, Texas will need to submit those changes as a SIP revision and under Section 110(l) of the Act, EPA will need to consider the effect of those changes on the HG area's attainment demonstration.

c. Weight of Evidence Analysis

Comment: Several commenters stated that the weight of evidence approach does not demonstrate attainment or meet CAA requirements for a modeled attainment demonstration. Commenters added several criticisms of various technical aspects of the weight of evidence approach, including certain specific applications of the approach to particular attainment demonstrations. These comments are discussed in the following response.

Response: Under section 182(c)(2) and (d) of the Act, serious and severe ozone nonattainment areas were required to submit by November 15, 1994, demonstrations of how they would attain the one-hour standard. Section 182(c)(2)(A) provides that ''[t]his attainment demonstration must be based on photochemical grid modeling or any other analytical method determined by the Administrator, in the Administrator's discretion, to be at least as effective.'' As described in more detail below, the EPA allows states to supplement their photochemical modeling results, with additional evidence designed to account for uncertainties in the photochemical modeling, to demonstrate attainment. This approach is consistent with the requirement of section 182(c)(2)(A) that the attainment demonstration ''be based on photochemical grid modeling,'' because the modeling results constitute the principal component of EPA's analysis, with supplemental information designed to account for uncertainties in the model. This interpretation and application of the photochemical modeling requirement of section 182(c)(2)(A) finds further justification in the broad deference Congress granted EPA to develop appropriate methods for

determining attainment, as indicated in the last phrase of section 182(c)(2)(A).

The flexibility granted to EPA under section 182(c)(2)(A) is reflected in the regulations EPA promulgated for modeled attainment demonstrations. These regulations provide, ''The adequacy of a control strategy shall be demonstrated by means of applicable air quality models, data bases, and other requirements specified in (40 CFR part 51, Appendix W) (Guideline on Air Quality Models).''[1] 40 CFR 51.112(a)(1). However, the regulations further provide, ''Where an air quality model specified in appendix W. * * * is inappropriate, the model may be modified or another model substituted (with approval by EPA, and after) notice and opportunity for public comment. * * *.'' Appendix W, in turn, provides that, ''The Urban Airshed Model (UAM) is recommended for photochemical or reactive pollutant modeling applications involving entire urban areas,'' but further refers to EPA's modeling guidance for data requirements and procedures for operating the model. 40 CFR part 51, Appendix W, section 6.2.1.a. The modeling guidance discusses the data requirements and operating procedures, as well as interpretation of model results as they relate to the attainment demonstration. This provision references guidance published in 1991, but EPA envisioned the guidance would change as we gained experience with model applications, which is why the guidance is referenced, but does not appear, in Appendix W. With updates in 1996 and 1999, the evolution of EPA's guidance has led us to use both the photochemical grid model, and additional analytical methods approved by EPA.

The modeled attainment test compares model predicted one-hour daily maximum ozone concentrations in all grid cells for the attainment year to the level of the NAAQS. The results may be interpreted through either of two modeled attainment or exceedance tests: A deterministic test or a statistical test. Under the deterministic test, a predicted concentration above 0.124 parts per million (ppm) ozone indicates that the area is expected to exceed the standard in the attainment year and a prediction at or below 0.124 ppm indicates that the area is expected to not exceed the standard. Under the statistical test, attainment is demonstrated when all predicted (i.e., modeled) one hour ozone concentrations inside the modeling domain are at, or below, an acceptable upper limit above the NAAQS permitted under certain conditions (depending on the severity of the episode modeled).[2]

In 1996, EPA issued guidance[3] to update the 1991 guidance referenced in 40 CFR part 50, App. W, to make the modeled attainment test more closely reflect the form of the NAAQS (i.e., the statistical test described above), to consider the area's ozone design value and the meteorological conditions accompanying observed exceedances, and to allow consideration of other evidence to address uncertainties in the modeling databases and application. When the modeling does not conclusively demonstrate attainment, EPA has concluded that additional analyses may be presented to help determine whether the area will attain the standard. As with other predictive tools, there are inherent uncertainties associated with air quality modeling and its results. The inherent imprecision of the model means that it may be inappropriate to view the specific numerical result of the model as the only determinant of whether the SIP controls are likely to lead to attainment. The EPA's guidance recognizes these limitations, and provides a means for considering other evidence to help assess whether attainment of the NAAQS is likely to be achieved. The process by which this is done is called a weight of evidence determination. Under a weight of evidence determination, the state can rely on, and EPA will consider in addition to the results of the modeled attainment test, other factors such as other modeled output (e.g., changes in the predicted frequency and pervasiveness of one-hour ozone NAAQS exceedances, and predicted change in the ozone design value); actual observed air quality trends (i.e. analyses of monitored air quality data); estimated emissions trends; and the responsiveness of the model predictions to further controls.

In 1999, EPA issued additional guidance[4] [5] that makes further use of model results for base case and future emission estimates to predict a future design value. This guidance describes the use of an additional component of the weight of evidence determination, which requires, under certain circumstances, additional emission reductions that are or will be approved into the SIP, but that were not included in the modeling analysis, that will further reduce the modeled design value. An area is considered to monitor attainment if each monitor site has air quality observed ozone design values (4th highest daily maximum ozone using the three most recent consecutive years of data) at or below the level of the standard. Therefore, it is appropriate for EPA, when making a determination that a control strategy will provide for attainment, to determine whether or not the model predicted future design value is expected to be at or below the level of the standard. Since the form of the one-hour NAAQS allows exceedances, it did not seem appropriate for EPA to require the test for attainment to be ''no exceedances'' in the future model predictions. The method outlined in EPA's 1999 guidance uses the highest measured design value from all sites in the nonattainment area for each of three years.[6] The three year ''design value'' represents the air quality observed during the time period used to predict ozone for the base emissions. This is appropriate because the model is predicting the change in ozone from the base period to the future attainment date. The three yearly design values (highest across the area) are averaged to account for annual fluctuations in meteorology. The result is an estimate of an area's base year design value. The base year design value is multiplied by a ratio of the peak model predicted ozone concentrations in the attainment year (i.e., average of daily maximum concentrations from all days modeled) to the peak model predicted ozone concentrations in the base year (i.e., average of daily maximum

[1] The August 12, 1996 version of ''Appendix W to Part 51—Guideline on air Quality Models'' was the rule in effect for these attainment demonstrations. EPA is proposing updates to this rule which will not be in effect until the new rule is promulgated.

[2] Guidance on the Use Of Modeled Results to Demonstrate Attainment of the Ozone NAAQS. EPA–454/B–95–007, June 1996.

[3] Ibid.

[4] [5] ''Guidance for Improving weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled.'' U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Emissions, Monitoring, and Analysis Division, Air Quality Modeling Group, Research Triangle Park, NC 27711. November 1999. Web site: *http://www.epa.gov/ttn/scram*. http://www.ncdc.noaa.gov/ol/climate/research/1999/perspectives.html and ''Regional Haze and Visibility in the Northeast U.S.'', NESCAUM at http://www.nescaum.org/pdf/pubslist.pdf

[6] A commenter criticized the 1999 guidance as flawed on grounds that it allows the averaging of the three highest air quality sites across a region, whereas EPA's 1991 and 1996 modeling guidance requires that attainment be demonstrated at each site. This has the effect of allowing lower air quality concentrations to be averaged against higher concentrations thus reducing the total emission reduction needed to attain at the higher site. The commenter's concern is misplaced. EPA relies on this averaging only for purposes of determining one component, *i.e.*,—the amount of additional emission reductions not modeled—of the weight of evidence determination. The weight of evidence determination, in turn, is intended to be a qualitative assessment of whether additional factors (including the additional emissions reductions not modeled), taken as a whole, indicate that the area is more likely than not to attain.

concentrations from all days modeled). The result is an attainment year design value based on the relative change in peak model predicted ozone concentrations from the base year to the attainment year. Modeling results also show that emission control strategies designed to reduce areas of peak ozone concentrations generally result in similar ozone reductions in all core areas of the modeling domain, thereby providing some assurance of attainment at all monitors.

In the event that the attainment year design value is above the standard, the 1999 guidance provides a method for identifying additional emission reductions, not modeled, which at a minimum provide an estimated attainment year design value at the level of the standard. This step uses a locally derived factor which assumes a relationship between ozone and the precursors.

Although a commenter criticized this technique for estimating ambient improvement because it does not incorporate complete modeling of the additional emissions reductions, the regulations do not mandate nor does EPA guidance suggest that States must model all control measures being implemented. Moreover, a component of this technique-the estimation of future design value, should be considered a model predicted estimate. Therefore, results from this technique are an extension of ''photochemical grid'' modeling and are consistent with section 182(c)(2)(A). Also, a commenter believes EPA has not provided sufficient opportunity to evaluate the calculations used to estimate additional emission reductions. EPA provided a 60-day period for comment on the methodology and calculations in December 1999 and a 30-day comment period in July 2001 on the HG area's calculated shortfall. Texas also provided a public comment period and public hearings in September, 2000 on this issue.

A commenter states that application of the method of attainment analysis used for the December 16, 1999 NPRs will yield a lower control estimate than if we relied entirely on reducing maximum predictions in every grid cell to less than or equal to 124 ppb on every modeled day. However, the commenter's approach may overestimate needed controls because the form of the standard allows up to 3 exceedances in 3 years in every grid cell. If the model over predicts observed concentrations, predicted controls may be further overestimated. EPA has considered other evidence, as described above through the weight of evidence determination.

When reviewing a SIP, the EPA must make a reasonable determination that the control measures adopted more likely than not will lead to attainment. Under the Weight of evidence determination, EPA has made this determination for the HG area based on all of the information presented by the State and available to EPA. The information considered includes model results for the majority of the control measures. Though all measures were not modeled, EPA reviewed the model's response to changes in emissions as well as observed air quality changes to evaluate the impact of additional measures, not modeled. EPA's decision was further strengthened by the State's commitment to check progress towards attainment in 2004 and to adopt additional measures, if the anticipated progress is not being made.

A commenter further criticized EPA's technique for estimating the ambient impact of additional emissions reductions not modeled on grounds that EPA employed a rollback modeling technique that, according to the commenter, is precluded under EPA regulations. The commenter explained that 40 CFR part 51, App. W, section 6.2.1.e. provides, ''Proportional (rollback/forward) modeling is not an acceptable procedure for evaluating ozone control strategies.'' Section 14.0 of appendix W defines ''rollback'' as ''a simple model that assumes that if emissions from each source affecting a given receptor are decreased by the same percentage, ambient air quality concentrations decrease proportionately.'' Under this approach if 20% improvement in ozone is needed for the area to reach attainment, it is assumed a 20% reduction in VOC would be required.

The ''proportional rollback'' approach is based on a purely empirically/mathematically derived relationship. EPA did not rely on this approach in its evaluation of the attainment demonstrations. The prohibition in Appendix W applies to the use of a rollback method which is empirically/mathematically derived and independent of model estimates or observed air quality and emissions changes as the sole method for evaluating control strategies. For the demonstrations, EPA used a locally derived (as determined by the model and/or observed changes in air quality) relationship of the change in emissions to change in ozone to estimate additional emission reductions to achieve an additional increment of ambient improvement in ozone. For example, if monitoring or modeling results indicate that ozone was reduced by 25 ppb during a particular period, and that VOC and NO_X emissions fell by 20 tons per day and 10 tons per day respectively during that period, EPA developed a relationship for ozone improvement related to reductions in VOC and NO_X. This formula assumes a quadratic relationship between the precursors and ozone for a small amount of ozone improvement, but it is not a ''proportional rollback'' technique. Further, EPA uses these locally derived adjustment factors as a component to estimate the extent to which additional emissions reductions—not the core control strategies—would reduce ozone levels and thereby strengthen the weight of evidence test. EPA uses the UAM to evaluate the core control strategies. This limited use of adjustment factors is more technically sound than the unacceptable use of proportional rollback to determine the ambient impact of the entire set of emissions reductions required under the attainment SIP. The limited use of adjustment factors is acceptable for practical reasons: It obviates the need to expend more time and resources to perform additional modeling. In addition, the adjustment factor is a locally derived relationship between ozone and its precursors based on air quality observations and/or modeling which is more consistent with recommendations referenced to in Appendix W and does not assume a direct proportional relationship between ozone and its precursors. In addition, the requirement that areas perform a mid-course review (a check of progress toward attainment) provides a margin of safety.

A commenter expressed concerns that EPA used a modeling technique (proportional rollback) that was expressly prohibited by 40 CFR part 51, Appendix W, without expressly proposing to do so in a notice of proposed rulemaking. However, the commenter is mistaken. As explained above, EPA did not use or rely upon a proportional rollback technique in this rulemaking, but used UAM to evaluate the core control strategies and then applied its WOE guidance. Therefore, because EPA did not use an ''alternative model'' to UAM, it did not trigger an obligation to modify Appendix W. Furthermore, EPA did propose to use the November 1999 guidance, ''Guidance for Improving Weight of Evidence Through Identification of Additional Emission Reductions, Not Modeled,'' in the December 16, 1999 NPR and has responded to all comments received on the application of that guidance elsewhere in this document.

A commenter also expressed concern that EPA applied unacceptably broad discretion in fashioning and applying the WOE determinations. For all of the attainment submittals proposed for approval in December 1999 concerning serious and severe ozone nonattainment areas, EPA first reviewed the UAM results. In all cases, the UAM results did not pass the deterministic test. In two cases—Milwaukee and Chicago—the UAM results passed the statistical test; in the rest of the cases, the UAM results failed the statistical test. The UAM has inherent limitations that, in EPA's view, were manifest in all these cases. These limitations include: Only selected time periods were modeled, not the entire three-year period used as the definitive means for determining an area's attainment status. Also, there are inherent uncertainties in the model formulation and model inputs such as hourly emission estimates, emissions growth projections, biogenic emission estimates, and derived wind speeds and directions. As a result, for all areas, even Milwaukee and Chicago, EPA examined additional analyses to indicate whether additional SIP controls would yield meaningful reductions in ozone values. These analyses did not point to the need for additional emission reductions for Springfield, Greater Connecticut, Metropolitan Washington DC, Chicago and Milwaukee, but did point to the need for additional reductions, in varying amounts, in the other areas. As a result, the other areas submitted control requirements to provide the indicated level of emissions reductions. EPA applied consistent methodologies in these areas, but because of differences in the application of the model to the circumstances of each individual area, the results differed on a case-by-case basis.

The commenter also complained that EPA has applied the WOE determinations to adjust modeling results only when those results indicate nonattainment, and not when they indicate attainment. First, we disagree with the premise of this comment: EPA does not apply the WOE factors to adjust model results. EPA applies the WOE factors as additional analysis to compensate for uncertainty in the air quality modeling. Second, EPA has applied WOE determinations to all of the attainment demonstrations proposed for approval in December 1999. Although for most of them, the air quality modeling results by themselves indicated nonattainment, for two metropolitan areas—Chicago and Milwaukee, including parts of the States of Illinois, Indiana, and Wisconsin, the air quality modeling did indicate attainment on the basis of the statistical test.

For the HG area, the primary evidence, in addition to the modeled control strategy that the HG area will attain the standard, is the estimation of the ozone benefits from the emission reductions that were not modeled (*i.e.,* approximately 90.9 tpd). Additional evidence for the HG area is provided by the good model performance which lends credence to the results. Further evidence is the substantial reduction in the area of nonattainment projected for the control strategy case. The State showed the modeled control strategy resulted in a 93.6% reduction in grid cells over the standard. Finally, the state's commitment to perform a mid-course review provides further confidence that the State's overall plan will result in attainment by 2007. Collectively, the above information supported EPA's decision. These determinations were made based on EPA's best understanding of the problem and relied on a qualitative assessment as well as quantitative assessments of the available information.

The commenter further criticized EPA's application of the weight of evidence determination on grounds that EPA ignores evidence indicating that continued nonattainment is likely, such as, according to the commenter, monitoring data indicate that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM model. EPA did consider the monitoring data along with other information in these determinations. When reviewing the monitoring data, EPA considered other factors. For example, high monitoring values may have occurred for many reasons including, fluctuations due to changes in meteorology and lack of emission reductions. The 1999 monitor values do not reflect several control programs, both local and the regional which are scheduled for implementation in the next several years. And the 1999 meteorology in the Northeast was such that July 1999 was one of the warmest (ranked 9th) ever experienced since 1895.[7] In addition to the heat, the middle and southern portions of the Northeast were also drier than average during this month. This information supports EPA's belief that the high exceedances observed in 1999 are not likely to reoccur frequent enough to cause a violation, once the controls adopted in these SIP's are implemented. There is little evidence to support the statement that ozone levels in many cities during 1999 continue to exceed the NAAQS by margins as wide or wider than those predicted by the UAM. Since areas did not model 1999 ozone levels using 1999 meteorology and 1999 emissions which reflect reductions anticipated by control measures, that are or will be approved into the SIP, there is no way to determine how the UAM predictions for 1999 compare to the 1999 air quality. Therefore, we can not determine whether or not the monitor values exceed the NAAQS by a wider margin than the UAM predictions for 1999. In summary, there is little evidence to support the conclusion that high exceedances in 1999 will continue to occur after adopted control measures are implemented.

In addition, the commenter argued that in applying the weight of evidence determinations, EPA ignored factors showing that the SIPs under-predict future emissions, and the commenter included as examples certain mobile source emissions sub-inventories. EPA did not ignore possible under-prediction in mobile emissions. EPA is presently evaluating mobile source emissions data as part of an effort to update the computer model for estimating mobile source emissions. EPA is considering various changes to the model, and is not prepared to conclude at this time that the net effect of all these various changes would be to increase or decrease emissions estimates. For the HG area's attainment demonstration SIP that relies on the Tier 2/Sulfur program for attainment (and reflects these programs in its motor vehicle emissions budgets), Texas has committed to revise the motor vehicle emissions budgets after the MOBILE6 model is officially released by EPA. EPA will work with Texas if the new emission estimates raise issues about the sufficiency of the present attainment demonstration. If analysis indicates additional measures are needed, EPA will take appropriate action.

Comment: The 1999 Guidance Document was criticized on grounds that EPA could not apply it, by its terms, to the Houston area because the result of such application would have been absurd. The commenter added that the technique used to estimate the additional needed emission reductions for the Houston area does not identify a sufficient level of emission reductions to reach attainment. In addition, according to the commenter, the

[7] http://www.ncdc.noaa.gov/ol/climate/research/1999/perspectives.html and ''Regional Haze and Visibility in the Northeast U.S.'', NESCAUM at http://www.nescaum.org/pdf/pubslist.pdf

technique used for the Houston area is substantially at variance with the UAM modeling analyses performed by Texas and submitted to EPA as SIP revisions. Specifically, Texas showed in its May 1998 SIP submission that emissions in the Houston area would have to be reduced to 230 tons per day to attain. By contrast, according to the commenter, EPA's combination of techniques would allow 305 tons per day of emissions, and yet EPA claims that the area will attain with even this higher level of emissions. The commenters believe that Texas should not be able to use the gap calculation when modeling exists that demonstrates how attainment can be achieved. A commenter also asserted that Texas should not be able to use a gap calculation method that differs from what other areas must use and the gap calculation fails to account for real world chemistry.

Response: Direct application of the two methods discussed in EPA's November 1999 guidance, using available data for the HG area, produced a mathematical impossibility. The results indicated that all ozone precursor emissions would have to be reduced to less than zero. Thus, the two methods described in the 1999 guidance are not directly applicable to Houston. The 1999 guidance describes two techniques for estimating additional levels of emission reductions. Both techniques (methods) described in the 1999 guidance are based on the assumption that EPA can estimate the relationship between ozone and its precursors. EPA Region 6 and TNRCC worked together to develop a revised method that is consistent with the concepts in the 1999 guidance for estimating the relationship, but applicable to the Houston area's modeling results. The methods in the guidance use a linear extrapolation of model results to determine expected ozone benefits from additional precursor reductions. The method for the HG area is also an extrapolation of model results. Because, the method for the HG area extends model results, it does, in fact account for real world chemistry. Instead of a linear extrapolation, however, a quadratic extrapolation was developed based on the results of three of the modeling runs. A quadratic extrapolation is necessary because of the non-linearity of the ozone response to NO_X reductions in the HG area. Therefore, the method is a refinement in the methods described in the 1999 guidance, since it is based on the most recently available modeling for the Houston area. The factors used in the method for the Houston area are based on model results for the majority of the control measures and, consequently, are scientifically sound for the HG area. We believe this approach is consistent with the intent and criteria of the 1999 guidance and, in the case of the Houston area, gives a better approximation (than the other two methods) of the amount of emission reductions that will be necessary to achieve the standard. Therefore, this method fulfills the purposes of the EPA guidance, and it is as rigorous, if not more rigorous, than the two methods discussed in the 1999 guidance. As a result, EPA concludes that the State of Texas used an acceptable method under the November 1999 guidance and applied it correctly.

In the strategy upon which the NO_X mobile vehicle emissions budget is based, Texas modeled NO_X emissions reduced to a level of approximately 396 t/d. Since the model predicted future ozone design values above the standard, using the refinement of the 1999 guidance (discussed above) EPA determined additional emission reductions were needed and the level of NO_X needed for attainment is 305 t/d.

The 230 tons per day emission level in the May 1998 SIP submission was based upon ''across-the-board'' emission sensitivity modeling and not specific control measures, as was submitted in the November 1999 attainment demonstration. Thus, the 230 tons per day emission level is not associated with any control measures, and it is not appropriate as a regulatory emission level for an attainment SIP. In addition, there have been many notable changes to the modeling emissions inventory subsequent to the May 1998 SIP submission. These include revised biogenic emissions, revised non-road emissions, and revised 2007 future year on-road mobile source emissions. Thus, it is not appropriate to compare the 305 t/d and the 230 t/d, since they are really based upon different applications of the model. Further, it is not correct to say modeling exist that demonstrates how attainment can be achieved.

With regards to whether the approach used for the HG area sufficiently identifies the expected additional amount of emission reductions needed for attainment by the deadline, for the reasons noted above, we believe the modeling and weight of evidence techniques used for the HG area do provide a reasonable estimate of the emission reductions necessary for attainment. Furthermore, these emission reductions are quite substantial. The projected attainment level of 305 t/d of NO_X is a 71% reduction from the projected 2007 NO_X emissions of 1052 t/d and a 77% reduction from the 1993 NO_X emissions of 1337 t/d. This is a significant amount of NO_X reductions and based on the analyses presented, EPA believes these level of reductions will bring the area into attainment.

Comment: A commenter stated that TNRCC took into account modeling performance concerns in developing a weight of evidence analysis to support its October 1999 SIP revision and concluded that a modeled control strategy, nearly identical to the one described in its December 2000 SIP revision would produce attainment even though attainment was not conclusively demonstrated by the model. EPA rejected this analysis, however, and prescribed a new method that the commenter goes on to criticize.

Response: EPA did not believe that sufficient emission reductions had been identified in the control strategy modeled in the November 1999 episode. EPA proposed its preliminary analysis of the November 1999 SIP revision that a shortfall of 11% NO_X emission reduction existed. Significantly, we received no comments at the time of that proposal that the 11% shortfall was too high. We received comments to the contrary that the needed additional emission reductions were understated.

EPA does not agree with the characterization that EPA ''prescribed'' a new method. Other weight of evidence techniques, as described in EPA guidance were still available to Texas and could have been considered. We worked with Texas in the development of the quadratic method that was used as weight of evidence for the HG area to provide a method that we and Texas believed gave an accurate estimate of the needed additional emission reductions.

Comment: A commenter criticizes that in contrast to the 1999 Guidance, the weight of evidence method EPA developed for the HGA does not employ a relative reduction factor or a future design value calculation. The quadratic extrapolation is neither consistent with nor an improvement on the 1999 guideline methods and EPA's description of it as such is erroneous. The commenter goes on to compare and contrast specific differences between the method developed for Houston and the 1999 guidance.

Response: EPA continues to believe, in the case of the HG area, the method developed is an improvement over the November 1999 guidance. This guidance was developed for estimating the additional reduction needed to support the one-hour ozone NAAQS for those nonattainment areas using a weight of evidence approach to

demonstrating attainment. This guidance describes two methods for calculating the amount of the additional reductions needed, but does not prohibit the use of an alternative method. Both methods assume that the relationship between ozone and the NO_X and VOC precursors can be estimated. Direct application of the two methods discussed in EPA's November 1999 guidance using available data for the Houston area, produced a mathematical impossibility. The results indicated that all ozone precursor emissions would have to be reduced to less than zero. Thus, the two methods described in the 1999 guidance are not directly applicable to Houston. EPA and TNRCC worked together to develop a revised method that is consistent with the concepts in the 1999 guidance for estimating the relationship, but applicable to the Houston area's modeling results. The methods in the guidance use a linear extrapolation of model results to determine expected ozone benefits from additional precursor reductions. The method for the Houston area is also an extrapolation of model results. Instead of a linear extrapolation, however, a quadratic extrapolation was developed based on the results of three of the modeling runs. A quadratic extrapolation is necessary because of the non-linearity of the ozone response to NO_X reductions in the Houston area. Therefore, the method developed for the HG area is a refinement the two methods in the 1999 guidance, since these two methods are also based on modeling. The factors used in the method for the Houston area are based on model results for the majority of the control measures and, consequently, are scientifically sound for the Houston area. We believe this approach is consistent with the intent and criteria of the 1999 guidance and, in the case of the Houston area, gives a better approximation of the amount of emission reductions that will be necessary to achieve the standard. Therefore, this method fulfills the purposes of the EPA guidance, and it is as rigorous, if not more rigorous, than the two methods discussed in the 1999 guidance. Furthermore, it cannot be accurate to characterize the methods in the 1999 guidance as better when, in fact, they produce a mathematical impossibility for the HG area.

3. Comments on Control Strategies

Comment: One commenter stated that the plan should provide evidence that Texas Senate Bill 5 (SB–5) provisions can be implemented and will lead to at least 6.7 tons/day of NO_X emission reductions. Another commenter stated EPA should not give credit to the Texas Emission Reduction Plan created by SB–5 without assurances of long-term funding levels and details about long-term funding. They also cite information that the funding for the program might be less than EPA assumed because of legal challenges.

Response: Based on experience in California with the Carl Moyer program, the Diesel Emission Reduction Program provided by the Texas Legislature should be able to provide emissions reduction in the range of $3000–5000/ton. This is documented in the report ''The Carl Moyer Memorial Air Quality Standards Attainment Program (The Carl Moyer Program) Guidelines-Approved Revision 2000, November 16, 2000 California Environmental Protection Agency Air Resources Board.'' The clear intent of the legislation, as stated on the TNRCC website, is ''The highest priority for using the funds under the Emissions Reduction Grants Program will be to replace NO_X emissions reductions removed from the State Implementation Plans (SIPs) for the HG area and Dallas/Fort Worth (DFW) nonattainment areas as a result of S.B. 5. Using an average of $5,000 per ton of NO_X reduced, the TNRCC has determined that it will require $6.7 million per year in HGA to replace the construction shift and accelerated Tier II/III rules. Another $7.5 million will be required to partially fill (20 tons) the 56 ton gap, making the HG area total $14.2 million.''

EPA's estimates are not as optimistic but we do believe the $24.7 million/yr projected on the TNRCC website should result in at least 25 tons/year of emission reductions, an amount sufficient to offset the construction shift and accelerated Tier II/III and contribute to reducing the shortfall. We will work with Texas to refine the estimates of emission reductions. It is clear that if more money is needed for the HG area as the program is implemented to make additional reductions in the shortfall, the TNRCC has the discretion to channel more money to the Houston area.

With regard to legal challenges to the program's funding mechanisms, EPA will not anticipate a court's findings. If a court finds the funding mechanism illegal, Texas will have to revise the SIP at that time to address the loss in emission reductions or find alternative funding sources. In the absence of timely State action to address any adverse court ruling, EPA could take action to ensure attainment is not jeopardized.

Comment: Commenters questioned the emissions benefit of the low emission diesel rule.

Response: The EPA has just completed a study of the benefits of low emission diesel fuels, such as the Texas Clean Diesel fuel. EPA determined the Texas fuel will result in NO_X reductions. However, it appears that the NO_X reductions based on the just-completed study will be slightly less than those projected by Texas. EPA believes, because the emissions impact is expected to be small and because Texas has committed to address any change to the amount of needed emission reductions at the mid-course review, the recent study findings do not change the approvability of the attainment demonstration. We will work with Texas to incorporate the findings of the study into future SIP revisions.

Comment: One commenter supported the fact that EPA did not take any action on morning construction ban.

Response: EPA determined not to take action on the construction ban since the legislature had removed the TNRCC's authority to implement this measure.

Comment: EPA must discount the emission reduction credit from the Airport Ground Support Equipment agreed orders because these orders do not assign specific budgets to individual airlines and therefore do not insure the achievement of any particular ton/day emissions.

Response: The agreed orders require percentage reductions from a 1996 baseline which achieve the same purpose as an emissions limitation. The reductions specified in each order are enforceable against the owner/operator of the equipment, thus providing a comfortable degree of certainty that the reductions will take place.

Comment: The EPA should discount the emission reductions from I/M based on the recently released National Research Council (NRC) Report.

Response: The NRC recommendation provides that the models projecting emissions from I/M programs should be improved to reflect actual reductions more accurately. EPA agrees that emission performance of vehicles has improved since the data that form the basis of existing models were generated. Most of the data for MOBILE5 was based on evaluation of early 1980's vehicles.

EPA's soon-to-be-released MOBILE6 model has been substantially updated to better reflect actual emissions and actual I/M benefits. The model has also been made more flexible to better incorporate local data on compliance, technician training, and the inclusion/exclusion of vehicles of certain ages. As technologies and characteristics of the

fleet change, data collection, analysis, and model improvement will likely continue to be warranted. Texas has committed to revise the Mobile Vehicle Emissions Budget using MOBILE6 no later than 2 years after its official release. If a transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 official release, transportation conformity will not be determined until Texas submits an MVEB which is developed using MOBILE6 and which we find adequate. Further, it is our understanding that TNRCC intends to use Mobile 6 in the attainment demonstration modeling planned for submission in December 2002.

Comment: The Act requires the SIP to include a program to provide for enforcement of the adopted measures. Most plans address this requirement, however, none of the plans clearly set out programs to provide for enforcement. Another commenter said the EPA should take steps to insure adequate enforcement of permit standards. Other commenters said the plan includes unenforceable items such as the restriction on commercial lawn mowing.

Response: State enforcement program elements are contained in SIP revisions previously approved by EPA under obligations set out in section 110 of the Act. Once approved by the EPA, there is no need for states to readopt and resubmit their enforcement programs with each and every SIP revision generally required by other sections of the Act.

EPA will monitor the effectiveness of the new programs, such as the commercial lawn mowing restriction, and work with Texas to revise the programs if necessary.

Comment: The State submittal should include creditable, adequate rules to achieve attainment that should also provide for a margin for error.

Response: EPA generally agrees with the comment. EPA believes that the Margin of Error for the HG area plan, while small, is appropriate in light of the significant level of reductions in the plan and the commitment to perform the mid-course review and to adopt additional measures as appropriate.

Comment: One commenter stated that there is over crediting of national rules for architectural coatings, auto-refinishing coatings and consumer products. They state the credit claimed is based on EPA estimates of emission reductions from proposed versions of these rules, but the final versions of the rules are weaker than the proposed rules. Therefore, the credit claimed for these national rules should be recalculated to reflect only the actual emission reductions that can be expected under the final EPA rules.

Response: Architectural Coatings: EPA's March 22, 1995 memorandum [8] indicated EPA's view that it was acceptable for states to claim a 20% reduction in VOC emissions from the AIM coatings category in ROP and attainment demonstration plans based on the anticipated promulgation of a national AIM coatings rule. In developing the attainment SIP for the Houston area, Texas relied on this memorandum to estimate emission reductions from the anticipated national AIM rule. EPA promulgated the final AIM rule in September 1998, codified at 40 CFR part 59, subpart D. In the preamble to EPA's final AIM coatings regulation, EPA estimated that the regulation will result in 20% reduction of nationwide VOC emissions from AIM coatings categories (63 FR 48855). The estimated VOC reductions from the final AIM rule resulted in the same reductions as those estimated in the March 1995 EPA policy memorandum. In accordance with EPA's final regulation, Texas has assumed a 20% reduction from AIM coatings source categories in its attainment modeling. AIM coatings manufacturers were required to be in compliance with the final regulation within one year of promulgation, except for certain pesticide formulations which were given an additional year to comply. Thus all manufacturers were required to comply, at the latest, by September 2000. EPA believes that all emission reductions from the AIM coatings national regulation will occur by 2002 and therefore are creditable in the attainment plan for the Houston area.

Autobody Refinish Coatings Rule: According to EPA's guidance [9] and proposed national rule, many States have claimed a 37% reduction from this source category based on a proposed rule. However, EPA's final rule, ''National Volatile Organic Compound Emission Standards for Automobile Refinish Coatings,'' published on September 11, 1998 (63 FR 48806), did not regulate lacquer topcoats and will result in a smaller emission reduction of around 33% overall nationwide. The 37% emission reduction from EPA's proposed rule was an estimate of the total nationwide emission reduction. Since this number was an overall average, it was not applicable to any specific area. For example, in California the reduction from the national rule is zero because its rules are more stringent than the national rule.

Texas did not rely on the above guidance. Instead, as part of the development of their 15% Rate of Progress plan, Texas used data for auto-refinishing coating use specific for Texas to estimate the emission reductions from existing state rules. To avoid double counting, for the purposes of the attainment demonstration, they did not assume any additional emission reductions due to the national rule. Therefore, the Houston area's attainment demonstration SIP relied on state rules, not the national rule for its emission reductions. On EPA's approval of the 15% ROP plan, EPA approves the credit Texas is now relying on for attainment.

Consumer Products Rule: According to EPA's guidance [10] and proposed national rule, States have generally claimed a 20% reduction from this source category. The final rule, ''National Volatile Organic Compound Emission Standards for Consumer Products,'' (63 FR 48819), published on September 11, 1998, will result in a 20% reduction. Therefore the reductions obtained by States from the final national rule are consistent with credit which was claimed.

Comment: One commenter included by reference their comments on the TNRCC proposed rules. They include several comments opposing the Construction Hour shift, Accelerated Tier II/III, NO_X Reduction Systems (a requirement to retrofit off-road equipment), and low sulfur gasoline.

Response: As all of these measures have been dropped from the State's plan and were not submitted to EPA. Thus, no response is necessary.

4. Comments on Enforceable Commitments

Comment: Several commenters claim that EPA should not approve the attainment demonstration for the HG area because the plan contains, in part, commitments to adopt measures that are necessary to reach attainment. The commenters contend that EPA does not have authority to accept enforceable commitments to adopt measures in the

[8] ''Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rules,'' March 22, 1995, from John S. Seitz, Director, Office of Air Quality Planning and Standards to Air Division Directors, Regions I–X.

[9] ''Credit for the 15 Percent Rate-of-Progress Plans for Reductions from the Architectural and Industrial Maintenance (AIM) Coating Rule and the Autobody Refinishing Rule,'' November 27, 1994, from John S. Seitz, Director, OAQPS, to Air Division Directors, Regions I–X.

[10] ''Regulatory Schedule for Consumer and Commercial Products under Section 183(e) of the Clean Air Act,'' June 22, 1995, from John S. Seitz, Director, OAQPS, to Air Division Directors, Regions I–X.

future in lieu of adopted control measures.

The commenters contend that the 56 tpd gap must be closed now. The commenters are concerned that Texas has proposed a process that will take three more years—until 2004—to develop and adopt the final control measures needed for attainment. Deferred adoption and submittal are not consistent with the statutory mandates and are not consistent with the Act's demand that all SIPs contain enforceable measures. EPA does not have authority to approve a SIP if part of the SIP is not adequate to meet all tests for approval. Because the submittal consists in part of commitments, Texas has not adopted rules implementing final control strategies, and the plan includes insufficient reduction strategies to meet the emission reduction goals established by the TNRCC. Thus, Texas has failed to adopt a SIP with sufficient adopted and enforceable measures to achieve attainment. For these reasons, the submittal also does not meet the NRDC's consent decree definition of a ''full attainment demonstration SIP,'' which obligates EPA to propose a federal implementation plan if it does not approve the HG area SIP. For these reasons, EPA should reject the HG area SIP and impose sanctions on the area and publish a proposed FIP no later than October 15, 2001.

Response: EPA disagrees with the comments, and believes—consistent with past practice—that the Act allows approval of enforceable commitments that are limited in scope where circumstances exist that warrant the use of such commitments in place of adopted measures.[11] Once EPA determines that circumstances warrant consideration of an enforceable commitment, EPA believes that three factors should be considered in determining whether to approve the enforceable commitment: (1) Whether the commitment addresses a limited portion of the statutorily-required program; (2) whether the state is capable of fulfilling its commitment; and (3) whether the commitment is for a reasonable and appropriate period of time.

As an initial matter, EPA believes that present circumstances for the New York City, Philadelphia, Baltimore and Houston nonattainment areas warrant the consideration of enforceable commitments. The Northeast states that make up the New York, Baltimore, and Philadelphia nonattainment areas submitted SIPs that they reasonably believed demonstrated attainment with fully adopted measures. After EPA's initial review of the plans, EPA recommended to these areas that additional controls would be necessary to ensure attainment. Because these areas had already submitted plans with many fully adopted rules and the adoption of additional rules would take some time, EPA believed it was appropriate to allow these areas to supplement their plans with enforceable commitments to adopt and submit control measures to achieve the additional necessary reductions. For the HG area, the State has submitted supporting information that EPA has confirmed indicating that Texas has adopted for the HG area NO_X controls that are as tight or tighter than any other area including the one extreme area—South Coast. Thus, because the State has adopted many strict controls that were included in the submitted plan and needs additional time to consider technologies that are still in the developmental stages, EPA determined that it is appropriate to consider an enforceable commitment for the remaining necessary reductions. For the HG area, EPA has determined that the submission of enforceable commitments in place of adopted control measures for this limited set of reductions will not interfere with the area's ability to meet its rate-of-progress obligations.

EPA's approach here of considering enforceable commitments that are limited in scope is not new. EPA has historically recognized that under certain circumstances, issuing full approval may be appropriate for a submission that consists, in part, of an enforceable commitment. See e.g., 62 FR 1150, 1187 (Jan. 8, 1997) (ozone attainment demonstration for the South Coast Air Basin); 65 FR 18903 (Apr. 10, 2000) (revisions to attainment demonstration for the South Coast Air Basin); 63 FR 41326 (Aug. 3, 1998) (federal implementation plan for PM–10 for Phoenix); 48 FR 51472 (State Implementation Plan for New Jersey). Nothing in the Act speaks directly to the approvability of enforceable commitments.[12] However, EPA believes that its interpretation is consistent with provisions of the Act. For example, section 110(a)(2)(A) provides that each SIP ''shall include enforceable emission limitations and other control measures, means or techniques * * * *as well as schedules and timetables for compliance,* as may be necessary or appropriate to meet the applicable requirement of the Act.'' Section 172(c)(6) of the Act requires, as a rule generally applicable to nonattainment SIPs, that the SIP ''include enforceable emission limitations and such other control measures, means or techniques * * * as may be necessary or appropriate to provide for attainment * * * by the applicable attainment date * * *'' (Emphasis added.) The emphasized terms mean that enforceable emission limitations and other control measures do not necessarily need to generate reductions in the full amount needed to attain. Rather, the emissions limitations and other control measures may be supplemented with other SIP rules—for example, the enforceable commitments EPA is approving today—as long as the entire package of measures and rules provides for attainment. EPA's interpretation that the Act allows for a approval of limited enforceable commitments has been upheld by the courts of appeals in some circuits. *See City of Seabrook* v. *EPA,* 659 F.2d 1349 (5th Cir. 1981); *Connecticut Fund for the Environment* v. *EPA,* 672 F.2d 998 (2d Cir.), cert. denied 459 U.S. 1035 (1982); *Friends of the Earth* v. *EPA,* 499 F.2d 1118 (2d Cir. 1974); *Kamp* v. *Hernandez,* 752 F.2d 1444 (9th Cir. 1985).

As provided above, after concluding that the circumstances warrant consideration of an enforceable commitment—as they do for the HG area—EPA would consider three factors in determining whether to approve the submitted commitments. First, EPA believes that the commitments must be limited in scope. In 1994, in considering EPA's authority under section 110(k)(4) to conditionally approve unenforceable commitments, the Court of Appeals for the District of Columbia Circuit struck down an EPA policy that would allow

[11] These commitments are enforcd by the EPA and citizens under, repesctively, sections 113 adn 301 of the Act. In the past, EPA has approved enforceable commitments and courts have enforced these actions against states that failed to comply with those commitments. *See, e.g., American Lung Association of New Jersey v. Kean,* 670 F. Supp. 1285 (D.N.J 1987), affirmed, 871 F.2d 319 (3rd Cir. 1989); *NRDC v. N.Y. State Dept. of Environmental Conservation,* 668 F. Supp. 848 (S.D.N.Y. 1987); *Citizens for a Better Environment v. Deukmejian,* 731 F. Supp. 1448, reconsideration granted in part, 746 F. Supp. 976 (N.D. Cal. 1990); *Coalition for Clean Air, et al. v. South Coast Air Quality Management District, CARB and EPA,* No. CV 97–6916 HLH, (C.D. Cal. August 27, 1999). Further, if a state fails to meet its commitments, EPA could make a finding of failure to implement the SIP under Section 179(a), which would start an 18-month period for the State to begin implementation before mandatory sactions are imposed.

[12] Section 110(k)(4) provides for ''conditional approval'' of commitments that need not be enforceable. Under that section, a State may commit to ''adopt specific enforceable measures'' within one-year of the conditional approval. Rather than enforcing such commitments against the State, the Act provides that the conditional approval will convert to a disapproval if ''the State fails to comply with such commitment.''

States to submit (under limited circumstances) commitments for entire programs. *Natural Resources Defense Council* v. *EPA,* 22 F.3d 1125 (D.C. Cir. 1994). While EPA does not believe that case is directly applicable here, EPA agrees with the Court that other provisions in the Act contemplate that a SIP submission will consist of more than a mere commitment. *See NRDC,* 22. F.3d at 1134.

In the present circumstances, the commitments address only a small portion of the plan. For the HG area, the commitment addresses only 6% of the emission reductions necessary to attain the standard. Already adopted measures include controls to reduce NO_X emissions by approximately 90% from industrial sources, a more stringent and expanded I/M program, a Clean Diesel Program, a well-funded incentive program to encourage the early introduction of cleaner diesel equipment, controls on airport ground support equipment, and several voluntary measures to reduce emissions from mobile sources.

As to the second factor, whether the State is capable of fulfilling the commitment, EPA considered the current or potential availability of measures capable of achieving the additional level of reductions represented by the commitment and whether the State has or is capable of getting the requisite authority to adopt measures to achieve those reductions.

For HG area, the SIP submittal already includes substantial reductions, covering every significant NO_X source category. The SIP for the HG area already includes NO_X control requirements that, overall, are more expensive and technologically advanced, and apply to smaller emitters, than those in any other SIP in the nation other than the South Coast—the one area classified as extreme for the 1-hour ozone standard. Thus, determining measures that will generate the necessary additional reductions is significantly more complex than for the northeastern States. However, the State has provided EPA with sufficient information to assure EPA that it will be capable of adopting controls to achieve the necessary level of emission reductions. First, the State has identified advanced technologies and innovative ideas that, in EPA's opinion, are or will be shortly available and thus could be adopted and implemented in sufficient time for the HG area to attain by 2007. Furthermore, the State has identified a range of emission reductions that potentially could be achieved by each of these advanced technologies and innovative strategies. While at this time the State—in conjunction with EPA—is still working to assess the appropriate level of reductions that may be achieved by these technologies and strategies, EPA believes that the totality of the current information is sufficient to assure EPA that Texas can meet its commitment to adopt measures that will achieve the level of reductions necessary to meet the HG area's shortfall.

The third factor, EPA has considered in determining to approve limited commitments for the HG area attainment demonstration is whether the commitment is for a reasonable and appropriate period. EPA recognizes that both the Act and EPA have historically emphasized the need for submission of adopted control measures in order to ensure expeditious implementation and achievement of required emissions reductions. Thus, to the extent that other factors—such as the need to consider innovative control strategies—support the consideration of an enforceable commitment in place of adopted control measures, the commitment should provide for the adoption of the necessary control measures on an expeditious, yet practicable, schedule.

Texas is faced with exploring cutting-edge technology, as it has already required extremely stringent controls. Thus, in considering the appropriate amount of time for Texas to meet its commitment, EPA considered that Texas needs time to develop and assess the capabilities of these technologies in addition to the time it needs to adopt the measures that will achieve the needed level of emission reductions. Because some of the measures that Texas is considering are further along in the development process, Texas has committed to adopt measures to fill a portion of the shortfall in the near term and to adopt the remaining measures by an intermediate-term date. Thus, Texas has committed to adopt controls to achieve 25% of the needed emission reductions by December 2002 and to adopt controls to achieve the remaining level of reduction by May 1, 2004. EPA believes that this schedule is expeditious in light of the types of cutting-edge controls that Texas needs to evaluate, develop and then adopt in order to achieve the level of reductions needed in the HG area. In addition, EPA believes that these adoption dates will not impede Houston's ability to attain the 1-hour ozone standard by November 15, 2007 nor will it impede Houston's ability to meet the ROP requirement because the HG area can meet the ROP requirement with already adopted measures.

The enforceable commitments submitted for the HG nonattainment area, in conjunction with the other SIP measures and other sources of emissions reductions, constitute the required demonstration of attainment and the commitments will not interfere with the area's ability to make reasonable progress under section 182(c)(2)(B) and (d). EPA believes that the delay in submittal of the final rules is permissible under section 110(k)(3) because the State has obligated itself to submit the rules by specified short-term and intermediate-term dates, and that obligation is enforceable by EPA and the public. Moreover, as discussed in the proposal and TSD, the SIP submittal approved today contains major substantive components submitted as adopted regulations and enforceable orders.

EPA does not agree with the assertion that the HG area SIP does not meet the NRDC consent decree definition of a ''full attainment demonstration.'' The consent decree defines a ''full attainment demonstration'' as a demonstration according to CAA section 182(c)(2). As a whole, the attainment demonstration—consisting of photochemical grid modeling, adopted control measures, an enforceable commitment with respect to a limited portion of the reductions necessary to attain, and other analyses and documentation—is approvable since it ''provides for attainment of the ozone (NAAQS) by the applicable attainment date.'' *See* section 182(c)(2)(A).

Comment: The SIP includes explicit enforceable commitments to consider relaxing regulations on industrial point sources. EPA must reject any efforts to relax effective control measures on the books before the TNRCC eliminates the identified shortfall in emission reductions. Proposed changes to the plan would commit the TNRCC to consider steps that will unlawfully increase the gap between predicted emission reductions resulting from regulatory measures and the emission reduction goals established by the TNRCC. Further, it is unlawful for the SIP to contain a promise to relax NO_X point sources in exchange for implementation of measures to control upset emissions.

Response: The TNRCC has included in Chapter 7 of the SIP its commitment to developing an enforceable plan to reduce releases of reactive hydrocarbon emissions and emissions of chlorine. Recent findings from the Texas 2000 Air Quality Study indicate that highly reactive hydrocarbons and/or chlorine emissions may be primary causes of the rapid build-up of ozone in the HG area.

TNRCC goes on to say that to the extent that the science confirms the benefit from this program then it is the intent of the commission to implement such a program through a SIP revision which would also decrease NO_X reductions required from industrial sources down to 80% control. At this time, EPA is not acting on whether this potential, future SIP revision would be approvable. At this time, we are considering only the effective State rules before us that include 90% control on industrial source NO_X emissions. The State's commitment to consider alternative control strategies in the future has no bearing on this approval. The Supreme Court has consistently held that under the Act, initial and primary responsibility for deciding what emissions reductions will be required from which sources is left to the discretion of the States. *Whitman* v. *Am. Trucking Ass'ns,* 531 U.S. 457 (2001); *Train* v. *NRDC,* 421 U.S. 60 (1975). This discretion includes the continuing authority to revise choices about the mix of emission limitations. *Train* at 79. Therefore, EPA believes that it is appropriate and authorized under the Act for a State to continue to update its growth projections, inventories, modeling analyses, control strategies, etc., and submit these updates as a SIP revision based on newly available science and technology.

However, section 110(l) of the Act governs EPA's review of a SIP revision from a state that wishes to make changes to its approved SIP. This section provides that EPA may not approve a SIP revision if it will interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of the Act.[13] Therefore, if we receive an attainment demonstration SIP revision from Texas that contains relaxed control measures or the replacement of existing control measures, we would consider the revised plan's prospects for meeting the current attainment requirements and other applicable requirements of the Act. See, the Act section 110(k)(3), *Union Electric* v. *EPA,* 427 U.S. 246 (1976) and *Train,* 421 U.S. at 79.

In summary, the State may choose to submit a SIP revision in 2002 or 2003 as it has suggested it may do. If we receive a SIP revision that meets our completeness criteria, we will review it against the statutory requirements of section 110(l). Further, the Act requires us to publish a notice and to provide for public comment on our proposed decision. EPA believes that it is in the context of that future rulemaking, not EPA's current approval, that the commenter's concern regarding the appropriateness of any replacement measures adopted by the State should be considered.

Comment: The mid-course review process outlined by TNRCC is not a permissible substitute for a currently complete attainment demonstration or adopted enforceable control measures. The mid-course review will delay final approval of the SIP until 2004, 10 years after the SIP was required under the Act.

Response: The mid-course review is not intended as a replacement for a complete attainment demonstration or as a replacement for adopted control measures. As provided elsewhere in the responses to comments, EPA believes the State's commitment to adopt additional measures is appropriate. It is intended to reflect the reality that the modeling techniques and inputs are uncertain. Thus, the progress of implementing the plan should be evaluated so that adjustments can be made to ensure the plan is successful. EPA is fully approving the attainment demonstration based on the information currently available. The mid-course review allows the State and EPA an opportunity to consider additional information closer to the attainment date to assess whether adjustments are necessary.

In the case of Texas, the State has extensive plans to fully evaluate the inputs to the model and the modeling itself using the most up to date information possible. The State will also be evaluating several new control measures for inclusion in the SIP. We are fully supportive of this continued evaluation of the science supporting the plan to reach attainment.

Comment: TNRCC has failed to meet its commitment to provide a plan by July 8, 2001. The TNRCC has reneged on previous commitments to model attainment. These demonstrate reasons for our objection to EPA's reliance on commitments.

Response: We do not agree that TNRCC has reneged on previous commitments to model attainment. As discussed in the response to comments on modeling, using weight of evidence in conjunction with the model is an appropriate method of demonstrating attainment. Further, Texas has made every effort to adopt all of the necessary measures to demonstrate attainment. Therefore, as discussed previously, EPA believes that it is acceptable to allow additional time for the development of new programs or measures for a small percentage of the needed reductions.

Comment: Texas provided a comment letter on EPA's December 1999 proposal. In this letter, Texas explained their plans to provide the following elements and enforceable commitments by April 2000: (1) A list of measures that could be used to achieve attainment (2) a commitment to provide a new mobile source emissions budget using MOBILE6 by May 2004, (3) a reenforcement of their previous commitment to adopt the majority of necessary rules for attainment by December 31, 2000, and to adopt the remainder if necessary by July 31, 2001, and (4) a commitment to perform a mid-course review.

Response: TNRCC adopted these elements in April 2000. We are now approving the commitments that are still relevant. (See the final action section).

Comment: One commenter suggested several specific language changes to the enforceable commitments in the Texas SIP.

Response: EPA and TNRCC met and agreed that some but not all of the language changes should be made. The section on changes from the proposal explain these changes. Other specific language changes proposed by the commenters are not necessary for approvable enforceable commitments.

5. Comments on Motor Vehicle Emissions Budgets

a. Comments on the July 12, 2001 Proposal

Comment: The commenters raised several questions concerning the Motor Vehicle Emissions Budgets (the budgets) established in the Houston attainment demonstration SIP. The commenters stated that the budgets submitted in the SIP should not be called adequate or be approved by the EPA because the attainment demonstration SIP does not provide for attainment. One commenter specifically pointed to the need for adopted and enforceable control measures.

Response: The rate-of-progress (ROP) budgets for the year of 2007 are 79.5 tpd and 156.7 tpd for VOC and NO_X, respectively. The commenters support these budgets. In addition, these budgets are identified as the budgets for the 2007 attainment demonstration SIP which are being approved by the EPA only until revised budgets pursuant to the State's commitments relating to MOBILE6 and shortfall measures are

[13] The Supreme Court under the 1970 CAA, observed that EPA's judgment in determining the approval of a SIP revision is to ''measure the existing level of pollution, compare it with the national standards, and determine the effect on this comparison of specified emission modifications.'' *Train* at 93.

submitted and we have found them adequate for transportation conformity purposes. Approval of the attainment budgets is based on the current control measures specified in the SIP and the enforceable commitments made for additional controls which will be implemented in the interim period. Because all measures which have not yet been adopted are included in written commitments in the SIP, EPA believes that it can find the budgets adequate. The EPA believes that consistency of the budgets related to the emissions inventory, and SIP control strategy are demonstrated and meet the requirements of 40 CFR 93.118(e). Therefore, the budgets for the attainment demonstration SIP are adequate for transportation conformity purposes. Also, it should be noted that the conformity rules allow emission reduction credit to be taken for purposes of conformity determinations for any measures that have been either adopted by the enforcing jurisdiction, included in the applicable implementation plan, contained in a written commitment in the submitted implementation plan, or promulgated by EPA as a federal measure. See 40 CFR 93.122(a)(3).

As described in the November 3, 1999 memorandum entitled ''Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations,'' from Marylin Zaw-Mon, Office of Mobile Sources, to Air Division Directors, Regions I–VI, there are circumstances in which the EPA could find a SIP's motor vehicle emissions budgets adequate even though additional emission reductions are necessary in order to demonstrate attainment. Specifically, the EPA's position is that the motor vehicle emissions budgets could be adequate for conformity purposes if the State commits to adopt, for the area, measures that will achieve the necessary additional reductions, and the State identifies a menu of possible measures that could achieve the reductions without requiring additional limits on highway construction. The HG area's SIP contains such commitments and such a menu.

We believe that the budgets can be found adequate and approvable because the budgets will not interfere with the area's ability to adopt additional measures to attain the ozone standard and they are consistent with the attainment demonstration SIP. While the area is adopting its additional measures, the SIP's budgets will cap motor vehicle emissions and thereby ensure that the amount of additional reductions necessary to demonstrate attainment will not increase. The budgets are consistent with and clearly related to the emissions inventory and the control measures and consistent with attainment. EPA disagrees that the SIP does not provide for attainment. For further explanation of how this attainment demonstration SIP as an overall plan provides for attainment please see other responses directly relating to the sufficiency of the overall attainment plan, control strategy, enforceable commitments, etc. contained in this final action.

Comment: The commenters asserted that further NO_X reductions needed for attainment will require additional on-road mobile source controls and these controls will result in a lower motor vehicle emissions budget. The commenters felt that the budgets established in the SIP are too high and the NO_X budgets should be reduced by 30 or more tpd.

Response: Agency policy for the areas needing additional emission reductions has provided that, in certain cases, EPA may determine the budget adequate even when the SIP includes commitments to additional measures. In a November 3, 1999, Memorandum entitled ''Guidance on Motor Vehicle Emissions Budgets in One-Hour Ozone Attainment Demonstrations,'' EPA issued guidance regarding such commitments in the ozone attainment demonstrations for the HG area as well as other areas. We indicated that budgets could be based on potential control measures identified in the SIP that, when implemented, would be expected to achieve the emission reductions necessary for attainment of the standard and a commitment to adopt measures to achieve the reductions. These measures may not involve additional limits on highway construction beyond the restrictions already imposed under the submitted motor vehicle emissions budget. As long as the additional measures do not involve additional limits on highway construction, allowing new transportation investments consistent with the submitted budgets will not prevent the area from achieving the additional reductions that it needs for attainment. This allows the EPA to consider the budgets adequate for transportation conformity purposes. The HG area SIP contains such commitments and measures. The SIP demonstrates that the budgets will not interfere with the HG area's ability to adopt additional measures to attain.

The budgets established in the SIP are consistent with the process in 40 CFR 93.118(e), and the EPA does not consider them too high within the context of the ozone attainment demonstration SIP as described above and further documented in the SIP and EPA's TSD. The budgets are consistent with and clearly related to the emissions inventory and the control measures and consistent with attainment. Our approval of the budgets is limited until revised budgets are submitted and we have found them adequate for transportation conformity purposes. Texas has committed to revise the budgets relating to MOBILE6 and the shortfall measures. While the list of potential measures does include measures that pertain to motor vehicles, none of the measures involves additional limits on highway construction; therefore, if lower budgets do result, the transportation investments will still be consistent with the budgets and will not prevent the HG area from achieving attainment.

Comment: The motor vehicle emissions budgets are inadequate because they do not provide for all reasonably available control measures to attain the standard as expeditiously as practicable.

Response: The motor vehicle emissions budgets are adequate. The SIP includes all necessary RACM and provides for expeditious attainment as explained further in the RACM section of this action.

b. Comments on July 28, 2001 Supplemental Notice

Comment: One commenter generally supports a policy of requiring motor vehicle emissions budgets to be recalculated when revised MOBILE models are released.

Response: The Phase II attainment demonstrations that rely on Tier 2 emission reduction credit contain commitments to revise the motor vehicle emissions budgets after MOBILE6 is released.

Comment: The revised budgets calculated using MOBILE6 will likely be submitted after the MOBILE5 budgets have already been approved. EPA's policy is that submitted SIPs may not replace approved SIPs.

Response: This is the reason that EPA proposed in its July 28, 2000 Supplemental Notice of Proposed Rulemaking (65 FR 46383) that the approval of the MOBILE5 budgets for conformity purposes would last only until MOBILE6 budgets had been submitted and found adequate. In this way, the MOBILE6 budgets can apply for conformity purposes as soon as they are found adequate.

Comment: If a State submits additional control measures that affect the motor vehicle emissions budgets but does not submit revised motor vehicle

emissions budgets, EPA should not approve the attainment demonstration.

Response: EPA agrees. The motor vehicle emissions budgets in the HG area attainment demonstration reflect the motor vehicle control measures in the attainment demonstration. In addition, Texas would be required to submit a new budget if any adopted measures would change the budget, and Texas has committed to submit a new budget if they adopt additional control measures that reduce on-road vehicle emissions.

Comment: EPA should make it clear that the motor vehicle emissions budgets to be used for conformity purposes will be determined from the total motor vehicle emissions reductions required in the SIP, even if the SIP does not explicitly quantify a revised motor vehicle emissions budget.

Response: EPA will not approve SIPs without motor vehicle emissions budgets that are explicitly quantified for conformity purposes. The HG attainment demonstration contains explicitly quantified motor vehicle emissions budgets which EPA has found adequate and approvable.

Comment: If a state fails to follow through on its commitment to submit the revised motor vehicle emissions budgets using MOBILE6, EPA could make a finding of failure to submit a portion of a SIP, which would trigger a sanctions clock under section 179.

Response: If a state fails to meet its commitment, EPA could make a finding of failure to implement the SIP, which would start a sanctions clock under section 179 of the Act.

Comment: If the budgets recalculated using MOBILE6 are larger than the MOBILE5 budgets, then attainment should be demonstrated again.

Response: As EPA proposed in its December 16, 1999 notices, we will work with States on a case-by-case basis if the new emissions estimates raise issues about the sufficiency of the attainment demonstration.

Comment: If the MOBILE6 budgets are smaller than the MOBILE5 budgets, the difference between the budgets should not be available for reallocation to other sources unless air quality data show that the area is attaining, and a revised attainment demonstration is submitted that demonstrates that the increased emissions are consistent with attainment and maintenance. Similarly, the MOBILE5 budgets should not be retained (while MOBILE6 is being used for conformity demonstrations) unless the above conditions are met.

Response: EPA agrees that if recalculation using MOBILE6 shows lower motor vehicle emissions than MOBILE5, then these motor vehicle emission reductions cannot be reallocated to other sources or assigned to the motor vehicle emissions budget unless the area reassesses the analysis in its attainment demonstration and shows that it will still attain. In other words, the area must assess how its original attainment demonstration is impacted by using MOBILE6 vs. MOBILE5 before it reallocates any apparent motor vehicle emission reductions resulting from the use of MOBILE6. In addition, Texas will be submitting new budgets based on MOBILE6 so the MOBILE5 budgets will not be retained in the SIP indefinitely.

Comment: We received a comment on whether the grace period before MOBILE6 is required in conformity determinations will be consistent with the schedules for revising SIP motor vehicle emissions budgets (''budgets'') within 1 or 2 years of MOBILE6's release.

Response: This comment is not germane to this rulemaking, since the MOBILE6 grace period for conformity determinations is not explicitly tied to EPA's SIP policy and approvals. However, EPA understands that a longer grace period would allow some areas to better transition to new MOBILE6 budgets. EPA is considering the maximum 2-year grace period allowed by the conformity rule, and EPA will address this in the future when the final MOBILE6 emissions model and policy guidance is released.

Comment: One commenter asked EPA to clarify in the final rule whether MOBILE6 will be required for conformity determinations once new MOBILE6 budgets are submitted and found adequate.

Response: This comment is not germane to this rulemaking. However, it is important to note that EPA intends to clarify its policy for implementing MOBILE6 in conformity determinations when the final MOBILE6 model is released. EPA believes that MOBILE6 should be used in conformity determinations once new MOBILE6 budgets are found adequate.

Comment: One commenter did not prefer the additional option for a second year before the state has to revise the conformity budgets with MOBILE6, since new conformity determinations and new transportation projects could be delayed in the second year.

Response: EPA proposed the additional option to provide further flexibility in managing MOBILE6 budget revisions. The supplemental proposal did not change the original option to revise budgets within one year of MOBILE6's release. State and local governments can continue to use the 1-year option, if desired, or submit a new commitment consistent with the alternative 2-year option. EPA expects that state and local agencies have consulted on which option is appropriate and have considered the impact on future conformity determinations. Texas has committed to revise its budgets within 2 years of MOBILE6's release for the HG area. Texas has committed that if a transportation conformity analysis is to be performed between 12 months and 24 months after the MOBILE6 official release, transportation conformity will not be determined until Texas submits an MVEB which is developed using MOBILE6 and which we find adequate.

6. Comments on RACM

a. Comments on December 16, 1999 Proposal

Comment: Several commenters stated in response to the December 16, 1999 proposed approval/proposed disapprovals for the severe areas and certain serious areas that there is no evidence in several states that they have adopted reasonably available control measures (RACM) or that the SIPs have provided for attainment as expeditiously as practicable. Specifically, the lack of Transportation Control Measures (TCMs) was cited in several comments, but potential stationary source controls were also covered. One commenter stated that mobile source emission budgets in the plans are by definition inadequate because the SIPs do not demonstrate timely attainment or contain the emissions reductions required for all RACM. That commenter claims that EPA may not find adequate a motor vehicle emission budget (MVEB) that is derived from a SIP that is inadequate for the purpose for which it is submitted. The commenter alleges that none of the MVEBs submitted by the states that EPA is considering for adequacy is consistent with either the level of emissions achieved by implementation of all RACM nor are they derived from SIPs that provide for attainment. Some commenters stated that for measures that are not adopted into the SIP, the State must provide a justification why they were determined to not be RACM.

Response: The EPA reviewed the November 1999 submission for the HG area and determined that it did not include sufficient documentation concerning available RACM measures. For all of the severe areas for which EPA proposed approval in December 1999, EPA consequently issued policy guidance memorandum to have these

States address the RACM requirement through an additional SIP submital. (Memorandum of December 14, 2000, from John S. Seitz, Director, Office of Air Quality Planning and Standards, re: ''Additional Submission on RACM from States with Severe 1-hour Ozone Nonattainment Area SIPs.''

On May 30, 2001, TNRCC proposed a RACM analysis which we proposed to approve on July 13, 2001 through parallel processing. The State finalized its RACM analysis on September 26, 2001. The Governor submitted this final RACM analysis in a letter dated October 4, 2001. Based on this SIP supplement, EPA concluded that the SIP for the HG area meets the requirement for adopting RACM.

Section 172(c)(1) of the Act requires SIPs to contain RACM and provides for areas to attain as expeditiously as practicable. EPA has previously provided guidance interpreting the requirements of 172(c)(1). See 57 FR 13498, 13560 (April 16, 1992). In that guidance, EPA indicated its interpretation that potentially available measures that would not advance the attainment date for an area would not be considered RACM. EPA also indicated in that guidance that states should consider all potentially available measures to determine whether they were reasonably available for implementation in the area, and whether they would advance the attainment date. Further, states should indicate in their SIP submittals whether measures considered were reasonably available or not, and if measures are reasonably available they must be adopted as RACM. Finally, EPA indicated that states could reject measures as not being RACM because they would not advance the attainment date, would cause substantial widespread and long-term adverse impacts, would be economically or technologically infeasible, or would be unavailable based on local considerations, including costs. The EPA also issued a recent memorandum re-confirming the principles in the earlier guidance, entitled, ''Guidance on the Reasonably Available Control Measures (RACM) Requirement and Attainment Demonstration Submissions for Ozone Nonattainment Areas.'' John S. Seitz, Director, Office of Air Quality Planning and Standards. November 30, 1999. Web site: *http://www.epa.gov/ttn/oarpg/t1pgm.html*.

EPA evaluated the Texas RACM demonstration and performed an additional analysis of TCMs as described in the TSD for the July 12, 2001 proposed approval. Specific comments on the RACM demonstration are addressed in later responses to comments.

Although EPA does not believe that section 172(c)(1) requires implementation of additional measures for the HG area, this conclusion is not necessarily valid for other areas. Thus, a determination of RACM is necessary on a case-by-case basis and will depend on the circumstances for the individual area.[14] In addition, if in the future EPA moves forward to implement another ozone standard, this RACM analysis would not control what is RACM for these or any other areas for that other ozone standard.

Also, EPA has long advocated that States consider the kinds of control measures that the commenters have suggested, and EPA has indeed provided guidance on those measures. See, *e.g., http://www.epa.gov/otaq/transp.htm.* In order to demonstrate that they will attain the 1-hour ozone NAAQS as expeditiously as practicable, some areas may need to consider and adopt a number of measures-including the kind that Texas itself evaluated in its RACM analysis—that even collectively do not result in many emission reductions. Furthermore, EPA encourages areas to implement technically available and economically feasible measures to achieve emissions reductions in the short term-even if such measures do not advance the attainment date-since such measures will likely improve air quality. Also, over time, emission control measures that may not be RACM now for an area may ultimately become feasible for the same area due to advances in control technology or more cost-effective implementation techniques. Thus, areas should continue to assess the state of control technology as they make progress toward attainment and consider new control technologies that may in fact result in more expeditious improvement in air quality. The mid course review process outlined by Texas in Chapter 7 of the SIP contains the State's commitment to continue to evaluate new technologies as potentially RACM, for inclusion later in the plan. The TNRCC adopted an enforceable commitment to submit a revised SIP no later than May 1, 2004, addressing any new information including an ''ongoing assessment of new technologies and innovative ideas to incorporate into the plan.''

Because EPA is finding that the SIP meets the Clean Air Act's requirement for RACM and that there are no additional reasonably available control measures that can advance the attainment date, EPA concludes that the attainment date being approved is as expeditiously as practicable

EPA previously responded to comments concerning the adequacy of the MVEBs submitted with the November 1999 SIP submission when EPA took final action determining the budgets (associated with that 1999 plan) adequate and does not address those issues again here. The responses are found at *http://www.epa.gov/oms/transp/conform/pastsips.htm.* It should be noted, since that time, EPA has found the MVEBs in the November 1999 HG attainment demonstration SIP inadequate. (66 FR 35420, July 5, 2001) We are now approving and finding adequate through parallel processing the budgets finally submitted by Texas in a letter dated October 4, 2001. The section of this notice on MVEBs explains why the budgets are adequate and indicates that the budgets are consistent with the conclusion that the SIP contains all necessary RACM for expeditious attainment.

b. Comments on July 12, 2001 Proposal

Comment: EPA cannot invent rationales for the states: EPA concedes that Texas failed to adequately justify rejection of RACMs identified as measures to be considered in the future, or provides its own rationales for why Texas might have rejected other RACMs not included on the list to be considered in the future. The Act and EPA guidance require the State to perform the required RACM analysis. EPA's role is limited to reviewing what the states have submitted, and approving or disapproving it. 42 U.S.C. 7410(k)(3); *Riverside Cement Co.* v. *Thomas,* 843 F.2d 1246 (9th Cir. 1988). EPA ''may either accept or reject what the state proposes; but EPA may not take a portion of what the state proposes and amend the proposal ad libitum.'' *Id.* If states are going to reject control measures, their decision to do so and the rationale therefore must be subject to notice and hearing at the state and local level. This comment is essentially the same as a comment provided on EPA's October 12, 2000 Notice of Availability proposing action regarding RACM for the three serious areas of Atlanta, Washington DC and Springfield, MA.

Response: In the case of the HG SIP, Texas has performed an analysis of whether all RACM were included in the SIP. Based upon its analysis, the State concluded that one additional measure not included in the December 2000 SIP

[14] See, *Ober* v. *EPA*, 84 F.3d 304, 311 (9th cir. 1996) (citing the General Preamble, 57 Fed.Reg. at 13560 (April 16, 1992) which held that EPA did not abuse discretion when changing the interpretation of the RACM provisions of the Act.

submission, control of small liquid fired engines, was reasonably available and therefore proposed and adopted a rule to control these sources. Otherwise, the State concluded all RACM were in place. The public did have a chance to comment at the State level on the State's conclusion that no additional RACM were required. The EPA believes that the State analysis was adequate. We reviewed the State's proposed analysis and discussed our evaluation of it in the TSD for our July 2001 proposed action on the State's RACM analysis. The EPA did not amend the SIP; EPA evaluated the State's analysis and for transportation control measures, supplemented the State's rationale with additional thoughts on why we believed the RACM analysis was adequate. We explain in the TSD why we agree with the State that no additional measures are RACM for the HG area and therefore the RACM requirement of the Act is met.

The commenter cites *Riverside Cement* for the proposition that EPA cannot perform an analysis of whether the State's plan complies with the Act's RACM requirement. The EPA believes that the holding of that case is inapplicable to these facts. In *Riverside Cement,* EPA approved a control requirement establishing an emission limit into the SIP and disregarded a contemporaneously-submitted contingency that would allow the State to modify the emission limit. Thus, the court concluded that EPA ''amended'' the State proposal by approving into the SIP something different than what the State had intended. 843 F.2d at 1248. In the present circumstances, EPA did not attempt to modify a substantive control requirement of the submitted plan. Rather, EPA evaluated the State's analysis plus performed additional analysis to determine if the plan, as submitted, fulfilled the substantive RACM requirement of the Act. As a general matter, EPA believes that States should perform their own analyses of RACM (as well as submitting other supporting documents for the choices they make), which is what Texas did in this instance for the Houston area. The statute places primary responsibility on the States to submit plans that meet the Act's requirements. However, nothing in the Act precludes EPA from performing those analyses, and the Act clearly provides that EPA must determine whether the State's submission meets the Act's requirements. Under that authority, EPA believes that it is appropriate, though not mandated, that EPA perform independent analyses to evaluate whether a submission meets the requirements of the Act if EPA believes such analysis is necessary. The EPA has not attempted to modify the State's submission by either adding or deleting a substantive element of the submitted plan. By virtue of the State's analysis and EPA's evaluation of it, and EPA's supplemental RACM analysis for transportation control measures, EPA has concluded that the State's submission contains control measures sufficient to meet the RACM requirement.

Comment: Inappropriate grounds for rejecting RACM. The commenter claims that EPA's bases for rejecting measures as RACM are inappropriate considerations: (a) The measures are ''likely to require an intensive and costly effort for numerous small area sources''; or (b) the measures ''do not advance the attainment dates'' for the areas. 65 FR 61134. Neither of these grounds are legally or rationally sufficient bases for rejecting control measures. This comment is essentially the same as a comment provided on EPA's October 12, 2000 Notice of Availability proposing EPA's RACM action for the three areas of Atlanta, Washington D.C. and Springfield, MA.

Response: The EPA's approach toward the RACM requirement is grounded in the language of the Act. Section 172(c)(1) states that a SIP for a nonattainment area must meet the following requirement, ''In general.—Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.'' [Emphasis added.] The EPA interprets this language as tying the RACM requirement to the requirement for attainment of the national primary ambient air quality standard. The Act provides that the attainment date shall be ''as expeditiously as practicable but no later than * * *'' the deadlines specified in the Act. EPA believes that the use of the same terminology in conjunction with the RACM requirement serves the purpose of specifying RACM as the way of expediting attainment of the NAAQS in advance of the deadline specified in the Act. As stated in the ''General Preamble for the Implementation of Title I of the Clean Air Act Amendments of 1990 (General Preamble)'' (57 FR 13498 at 13560, April 16, 1992), ''The EPA interprets this requirement to impose a duty on all nonattainment areas to consider all available control measures and to adopt and implement such measures as are reasonably available for implementation in the area as components of the area's attainment demonstration.'' [Emphasis added.] In other words, because of the construction of the RACM language in the Act, EPA does not view the RACM requirement as separate from the attainment demonstration requirement. Therefore, EPA believes that the Act supports its interpretation that measures may be determined to not be RACM if they do not advance the attainment date. In addition, EPA believes that it would be unreasonable to require implementation of measures that would not in fact advance attainment. See 57 FR 13560. EPA has consistently interpreted the Act as requiring only such RACM as will provide for expeditious attainment since the agency first addressed the issue in guidance issued in 1979. See 44 FR 20372, 20375 (April 4, 1979).

The term ''reasonably available control measure'' is not actually defined in the definitions in the Act. Therefore, the EPA interpretation that potential measures may be determined not to be RACM if they require an intensive and costly effort for numerous small area sources is based on the common sense meaning of the phrase, ''reasonably available.'' A measure that is reasonably available is one that is technologically and economically feasible and that can be readily implemented. Ready implementation also includes consideration of whether emissions from small sources are relatively small and whether the administrative burden, to the States and regulated entities, of controlling such sources was likely to be considerable. As stated in the General Preamble, EPA believes that States can reject potential measures based on local conditions including cost (57 FR 13561). See *Ober* v. *EPA*, 84 F3d at 312 (9th Circuit 1996).

Also, the development of rules for a large number of very different source categories of small sources for which little control information may exist will likely take much longer than development of rules for source categories for which control information exists or that comprise a smaller number of larger sources. The longer time frame for development of rules by the State would decrease the possibility that the emission reductions from the rules would advance the attainment date. Texas has determined and we agree that such additional measures in the HG area could not be developed soon enough to advance the attainment date.

Comment: Failure to quantify reductions needed to attain sooner: Even if advancement of the attainment date were a relevant test for RACM, EPA has failed to rationally justify its claim that additional control measures would not meet that test. To begin with, neither the Agency nor the states have quantified in a manner consistent with EPA rules and guidance the emission reductions that would be needed to attain the standard prior to achievement of emission reductions required under the NO_X SIP call. Nowhere is there an analysis that shows what it would take to attain in 2004, 2005, 2006 or 2007. This comment generally repeats a comment provided on EPA's October 12, 2000 Notice of Availability proposing EPA's RACM action for the three areas of Atlanta, Washington DC and Springfield, MA.

Response: First, note that while the commenter makes reference to the NO_X SIP call, Texas is not included in the mandatory NO_X SIP call. However, it should also be noted that even though Texas was not included, Texas adopted control measures for regional NO_X emissions reductions (including in attainment areas) as part of the HG attainment demonstration SIP, in a manner similar to those undertaken by the states included in the NO_X SIP call. These regional reductions will occur by May 2003 in Texas. In *Michigan* v. *EPA*, 200 WL 1341477 (D.C. Cir. 2000) (order denying motion to stay mandate pending appeal from 213 F.3d 663(D.C. Cir. 2000)) the court held the NO_X control measures could not be required by EPA until May 31, 2004 in order to allow sources in subject States 1309 days from the date of the court order to implement the measures as provided in the original rule. These regional measures in Texas are thus being implemented on a more expeditious schedule and as expeditiously as is practicable.

Further, it would be futile for TNRCC to attempt to quantify the emission reductions that could be possible for the HG area to attain prior to the 2007 deadline. With all of the adopted control measures, and with the enforceable commitments to achieve the additional 56 tons/day of NO_X emission reductions needed for attainment, plus the necessary reliance upon Federal measures, including the amount of cleaner on and off-road vehicles that will enter the fleet, there are simply no additional measures that EPA is aware of that are reasonably available or economically feasible that could be implemented, much less implemented in time, to achieve attainment in advance of when the measures are being implemented in this plan.

The following respond to the issue of whether additional specific potentially available measures are RACM for the HG area.

Comment: Inadequate RACM analysis: EPA's RACM analysis is grossly inadequate in several key respects.

Comment a: EPA's analysis fails to provide the technical basis and calculations by which it developed its emission reduction estimates for various measures. EPA failed to provide citations to the literature regarding estimates of emission reductions for various TCMs. EPA failed to specify the level of implementation assumed for some of the TCMs in the analysis.

Response a: First, note that EPA's analysis contained in the TSD was intended to evaluate and in one instance supplement the TNRCC analysis and conclusion that all RACM had been adopted. We evaluated the TNRCC's technical basis and calculations for the emission reduction estimates for controls possible for all of the source categories in the emission inventory. Regarding the TCM category, we provided additional technical analysis and calculations. The commenter apparently believes EPA's analysis of potential TCMs as not being RACM for the HG area is insufficient, however. EPA's technical basis for the supplemental TCM RACM analysis and the assumptions used in the calculation of estimated emission reductions from additional potential TCMs were derived from a review of the literature on the implementation and effectiveness of TCM's.[15] The TCMs evaluated depend on the level of implementation. Implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even practically possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available. In summary, the technical basis is provided in Appendix B to the TSD and Chapter 7 of TNRCC's SIP. In conclusion, we determined that at a reasonable level of implementation, all potential categories of TCMs taken together would not be sufficient to advance the attainment date.

Comment b: EPA's analysis looks at only a small universe of potential measures, and does not evaluate all of the measures identified in public comment and other sources. Several commenters suggested that a variety of measures were Reasonably Available and should be included in the SIP.

Response b: It is EPA's position that the TNRCC's RACM analysis identified and addressed all potential categories of stationary and mobile sources in the HG area, that could provide additional emission reductions, and measures that might be considered RACM. The EPA believes not only that Texas identified and addressed all the potential source categories but that it also addressed identified measures raised by commenters. The TNRCC considered a wide range of potential measures, including all measures adopted in other severe and serious areas and the California South Coast's extreme attainment demonstration SIP.

The following addresses specific measures that were suggested by commenters.

VOC Control Measures

Comment: An adequate plan would emphasize reductions in all precursors not just one.

Response: The two primary precursors to ozone are Volatile Organic Compounds (VOCs) and Oxides of Nitrogen (NO_X). These classes of chemicals react in the atmosphere in the presence of sunlight to form ozone. Under 182(c)(2), States must base their attainment demonstration on photochemical modeling or any other analytical method determined by EPA to be at least as effective. Modeling is generally regarded as the most reliable basis for ascertaining which precursors should be emphasized for control in order to obtain a reduction in ozone concentration levels. In the HG area, the photochemical modeling indicates that NO_X emission reductions are much more effective in reducing ozone and thus, NO_X emission reductions have appropriately been the emphasis in the plan's control strategy. As discussed further in the next comment/response, EPA agrees that no additional VOC measures would advance the attainment date.

Future studies may revise the emphasis of the control strategy. EPA is aware that some of the preliminary results of the Texas Air Quality Study 2000 indicate that reactive VOC's may need to be considered for additional control. Further, there is no clear evidence, at this time, that indicates that the control of other pollutants, such as particulate matter, would help in reducing the ozone concentration levels in the HG area.

[15] Transportation Control Measures: State Implementation Plan Guidance, US EPA 1992; Transportation Control Measure Information Documents, US EPA 1992; Costs and Effectiveness of Transportation Control Measures: A Review and Analysis of the Literature, National Association of Regional Councils 1994.

Comment: A commenter stated that TNRCC has not developed adequate VOC controls. The document presents evidence that categories of emissions representing the ''vast majority'' of point source emissions are regulated but does not determine whether in fact the facilities are regulated. The commenter felt the proper analysis would present an inventory of controlled emissions and compare it with total emissions.

Response: EPA believes the analysis in Chapter 7 of the SIP and in the TSD does demonstrate further VOC controls are not required as RACM based on the information currently available. This conclusion is based on three factors. First, EPA believes Texas has regulated all major sources of VOCs in the HG area to at least a RACT level. We took action on these RACT rules in separate **Federal Register** actions. We found that the State had implemented RACT on all major sources in the HG area except those that were to be covered by post-enactment Control Technique Guidelines (CTGs)(60 FR 12437, March 7, 1995). Since that time many expected CTGs were issued as Alternative Control Technique documents—ACTs. Of the expected CTGs and ACT's, the HG area had major sources in the following categories; batch processing, industrial wastewater, reactors and distillation, and wood furniture. We have approved measures for all of these categories as meeting RACT.

Batch Processing—July 16, 2001 66 FR 36913

Industrial Wastewater—December 10, 2000 65 FR 79745

Reactors and Distillation—January 26, 1999, 64 FR 3841

Wood Furniture—October 30, 1996, 61 FR 55894

Further, EPA agrees with the conclusion drawn by Texas in its RACM analysis that the majority of VOC point source emissions (whether emitted from major sources or minors) are already regulated by the rules contained in Chapter 115 of the State Implementation Plan. The State's VOC rules go beyond RACT level controls for some categories such as fugitive emissions and gasoline loading emissions. EPA has approved Chapter 115 as meeting the RACT requirements.

Second, because of the particular chemistry in the HG area VOC controls are not nearly as effective as NO_X controls in reducing ozone. TNRCC has demonstrated through modeling that 12–15 tons/day of VOC emission reductions are needed to achieve the same ozone benefit as one ton/day of NO_X emission reductions as shown in Chapter 7 of the October 2001 SIP revision. Thus, the particular chemistry in the HG area makes additional ozone benefits very difficult to achieve through VOC reductions. In fact, modeling indicates that if all man made VOC's were reduced to zero, the area would not reach attainment.

Third, Texas analyzed the controlled VOC inventory to determine if any source categories remained where additional VOC controls could be implemented that could advance the attainment date in light of the modeling evidence. As discussed previously, EPA does not believe that section 172(c)(1) requires implementation of potential RACM measures that will not be sufficient to allow the area to achieve attainment in advance of full implementation of all other required measures, in this case, full implementation of the NO_X controls called for in the plan including the 56 tons/day NO_X reductions called for by the enforceable commitments. In the TNRCC analysis, a VOC source category had to have at least 12–15 tons per day of emissions to warrant further analysis. This level was chosen because it might be theoretically possible to reduce these categories enough to achieve as much as the equivalent of one ton/day of NO_X reduction. Given that the final 121 tons/day of point source reductions, out of a total of almost 600 ton/day of emission reductions, will not be implemented until spring 2007 emission reductions from measures that achieve less than the equivalent one ton/day of NO_X reductions even if combined with several measures of similar magnitude cannot advance the attainment date. The TNRCC presents in the SIP Narrative, Chapter 7, a summary of the inventory that reflects the controlled level of emissions. Based on the above screening level one category, storage tanks, was examined for additional control. Based on controls in the Alternative Technique Guideline, only 2.2 tpd of additional reduction in VOC could be achieved which is far less than the equivalent of one ton/day of NO_X reduction and therefore would not advance attainment.

Texas also reviewed all VOC area source (as opposed to points source) categories to see if any categories were emitting greater than 11 tons/day in emissions. While some area source categories emitted more than 11 tons/day, these categories already are subject to rules. TNRCC did not believe additional controls on already regulated categories would be reasonable in light of the amount of VOC reductions needed to achieve ozone benefits.

In summary, the modeling indicates that it takes substantial VOC emission reductions to achieve ozone reductions in the HG area. Already all major sources of VOC's in HG have RACT in place. Emission reductions beyond RACT on major VOC sources may be achievable but could not achieve sufficient ozone benefit for the HG area to achieve attainment in advance of the measures in the SIP we are approving today. Significant area source categories are also regulated. Therefore, no emission reduction measures were identified that would achieve attainment in advance of the measures contained in the plan.

Comment: For States that need additional VOC reductions, this commenter recommends a process to achieve these VOC emission reductions, which involves the use of HFC–152a (1,1 difluoroethane) as the blowing agent in manufacturing of polystyrene foam products such as food trays and egg cartons. HFC–152a could be used instead of hydrocarbons, a known pollutant, as a blowing agent. Use of HFC–152a, which is classified as VOC exempt, would eliminate nationwide the entire 25,000 tons/year of VOC emissions from this industry.

Response: This comment was not provided to TNRCC. EPA has met with the commenter and has discussed the technology described by the company to reduce VOC emissions from polystyrene foam blowing through the use of HFC–152a (1,1 difluoroethane), which is a VOC exempt compound, as a blowing agent. Since the HFC–152a is VOC exempt, its use would give a VOC reduction compared to the use of VOCs such as pentane or butane as a blowing agent. However, EPA has not studied this technology exhaustively. It is each State's prerogative to specify which measures it will adopt in order to achieve the additional VOC reductions it needs. In evaluating the use of HFC–152a, States may want to consider claims that products made with this blowing agent are comparable in quality to products made with other blowing agents. Also the question of the over-all long term environmental effect of encouraging emissions of fluorine compounds would be relevant to consider. This is a technology which States may want to consider, but ultimately, the decision of whether to require this particular technology to achieve the necessary VOC emissions reductions must be made by each affected State. Finally, EPA notes that under the significant new alternatives policy (SNAP) program, created under CAA § 612, EPA has identified acceptable foam blowing agents many of which are not VOCs *(http://www.epa.gov/ozone/title6/snap/).*

In the case of the HG area, the analysis in chapter 7 did not show this category of emissions as one with more than 11 tons/day of emissions so, as discussed in a previous comment, there cannot possibly be enough emission reductions from this category to achieve sufficient ozone benefit for the HG area to reach attainment in advance of the full implementation of the measures in this SIP.

Comment: Two commenters suggested that a portable gasoline container buy back program should be adopted in the HG area to introduce gasoline containers meeting the California Air Resources Board (CARB) standards to the HG area. It was estimated based on CARB experience that controls on containers would be able to achieve 23 tpd of VOC reductions in the HG area.

Response: This measure was suggested to TNRCC as a replacement to their Commercial Lawn Service operating restrictions. TNRCC evaluated the measure and decided the measure would not achieve equivalent reductions to the operating restrictions.

EPA is aware that CARB has projected significant emission reductions from this measure. This is based on their studies of the emissions from evaporation and spillage from gasoline containers in California. TNRCC in their RACM analysis of the HG emission inventory, however, did not identify this source category, i.e., gasoline containers, as having the same level of emissions and therefore the potential to achieve the same level of emission reductions as was found in California. TNRCC used EPA approved methodology to develop its inventory. EPA concludes, based on the record supporting the State's RACM analysis, that Texas used appropriate assumptions for determining emission reductions from this measure. Based on the emission estimates contained in the approved inventory, EPA agrees with Texas that this measure cannot be considered RACM at this time because the measures cannot achieve sufficient ozone benefit for the HG area to achieve attainment in advance of the full implementation of the measures in the SIP we are approving today. Future study of this portion of the inventory utilizing information developed by CARB may indicate that more emissions arise from this category in the HG area and this measure may have to be revisited.

Comment: One commenter pointed to the results of the Channelview Source Reduction Project as evidence that significant levels of VOC emission reductions can be achieved. The Channelview Project resulted in the following improvements: Additional gas flow meters, reduced flaring of off-spec product, elimination of flaring of extra-contract product, improved flare systems, and prevention of unnecessary shutdowns.

Response: The November 14, 2000 ''Source Reduction Project, Report on Phase I'' documents the cooperative effort between the Community Advisory Panel and Lyondell and Equistar (CAPLE) to reduce air emissions at these companies. It documents several improvements and significant emission reductions that have been made at these plants through focusing on source reduction. It is not clear from the report, however, whether or not the measures instituted by these companies have general applicability within the chemical industry. The measures taken by these companies to reduce emissions have promise as measures that can achieve emission reductions throughout the HG area but it will take further study by us and the State to determine if they can be applied to other facilities, are technically and economically feasible and achieve reductions that could advance attainment, and thus can be considered potential RACM for the HG area. Therefore, at this time, EPA cannot find these measures feasible. EPA agrees with Texas that this type of project cannot currently be considered RACM.

Comment: One commenter suggested that the State should reduce fugitive VOC emissions by 90%.

Response: The commenter did not suggest how the 90% emission reduction from fugitive VOC emissions could be achieved. EPA is not aware of any technology or programs that have been demonstrated to achieve this level of reductions. TNRCC already has in place a leak detection and repair requirement that goes beyond the levels in EPA's control technique guidelines to control refinery and chemical plant fugitive emissions. EPA has approved this requirement for fugitive emissions as meeting the RACT requirement for the HG area. Based on the above, EPA concludes that this measure is not technically feasible at this time.

Upset Emissions

Comment: TNRCC has failed to adopt reasonably available control measures for controlling upset emissions because the TNRCC rules fail to meet at a minimum EPA guidance for upset emissions. The rule violates the requirements regarding creating an affirmative defense because (1) it is a blanket exemption, (2) it covers sources whose individual contributions of pollutants have the potential to cause an exceedence, (3) it covers both penalties and injunctive relief, and (4) it could be interpreted as barring citizen and/or EPA enforcement action.

Response: On November 28, 2000, EPA issued a direct final approval of a revision to the Texas SIP addressing excess emissions from start-up, shutdown, malfunction and maintenance. 65 FR 70792. In that notice, EPA explained that it determined that the rule was consistent with the EPA guidance referenced by the commenter, ''State Implementation Plans: Policy Regarding Excess Emissions During Malfunctions, Startup and Shutdown,'' September 20, 1999. This determination included EPA's conclusion that the Texas rule does not provide an exemption from compliance for periods of excess emissions. No adverse comments were received and EPA's approval became effective on January 29, 2001. Through the proposed actions on which EPA is taking today, EPA is not re-opening its past approval of SIP requirements. Thus, the commenters attempt to now raise issues about whether EPA's approval of that rule was appropriate are untimely.

Point Source NO_X Controls

Comment: The Phase II NO_X limits agreed to by OTC States are clearly RACM for all areas, as they are widely in effect. States that have not adopted such measures have not adopted enforceable NO_X RACT limits for all relevant facilities. It is not sufficient for States to assert that they will adopt additional NO_X controls if needed.

Response: That the OTC states have implemented the OTC Phase II NO_X limits does not automatically prove that these limits are RACM for all areas. EPA concedes that the wide-spread adoption of such programs and EPA's own analysis of NO_X control on large stationary sources would warrant consideration whether such limits meet the technological and economical feasibility criteria of RACM and would advance attainment. However, such an analysis is not relevant in the case of the HG ozone nonattainment area. Texas has already adopted programs for the HG area to implement limits that are more stringent than the OTC Phase II limits.

Comment: A commenter suggested energy efficiency improvements are not just for residential and commercial buildings and suggested savings could be achieved by more efficient motor and drive systems.

Response: We agree that improved energy efficiency is a desirable method of reducing air emissions. There are difficulties in including such measures in a SIP because it is not always clear

where the benefits of the reduced electrical demand will occur. The reduced demand could result in emission reductions outside the HG area. There are initiatives in Texas to reduce growth in demand in Texas such as the State wide building codes established by Senate Bill 5. The State of Texas has committed to further examine the benefits and methods of improving energy efficiency for possible inclusion in the SIP at the mid-course review. EPA concludes that there is not enough information at this time to determine the appropriate emission benefits and therefore energy efficiency cannot currently be considered RACM.

Comment: Just as Integrated Resource Planning (IRP) for electric utilities resulted in demand side management programs that conserved electricity, IRP for natural gas utilities will have the same impact on conserving natural gas usage and resulting emissions. A number of states have effectively implemented IRP for natural gas.

Response: As noted above, EPA agrees that improved energy conservation-regardless of the form of energy-is a desirable method of reducing air emissions. Since such measures would likely have to rely on voluntary efforts, the State would have to estimate the effect on emission reductions that would result. Putting in place even a voluntary effort to conserve natural gas that could be quantified in terms of its emission reduction benefits would likely require a significant amount of time. EPA is aware that the State had devoted a tremendous amount of resources in developing and adopting the number of control measures that it did for the HG area's one-hour ozone SIP, and even with that had to commit to fill a shortfall of 56 tons/day of NO_X reductions. EPA believes it is unlikely-given the time spent on the bulk of the SIP-that the State had the time to develop such a quantifiable voluntary program that would have yielded enough NO_X reductions to advance the attainment date. Furthermore, it appears unlikely that such a quantifiable program could be put into place in sufficient time to advance the attainment date given the resources that the State will have to spend over the next several years simply developing and adopting the emission controls to achieve the 56 tons/day NO_X emission reductions. Therefore, EPA believes that this measure is not RACM, at this time, for the HG area.

Comment: Stringent Standards for Stationary Diesel Engines: The TNRCC should establish the same requirements for new and existing stationary diesel engines in the HG area that are not used exclusively during infrequent emergency or backup situations.

Response: The State received a similar comment. In their response they explained that based on information in the emissions inventory and contact with diesel engine vendors and others familiar with the stationary diesel engines in the HG area, the State is unaware of any existing stationary diesel engines that are being operated in situations other than generation of electricity in emergency situations or operation for maintenance and testing. The Chapter 117 rule requires that all testing and maintenance be done outside the hours of 6 am to 12 am. As discussed in the comments on the modeling inputs, emissions in the morning are the most conducive to ozone formation. Emissions outside this period are much less conducive to ozone formation. Therefore, the rules for maintenance represent RACM for the HG area.

TNRCC believes and EPA agrees that few existing engines will be moved from emergency service to routine or peak shaving operations for the following reasons. Any existing engines at a site with a collective design capacity to emit (from units with chapter 117 emission limits) greater than ten tpy of NO_X are subject to the Chapter 101 mass emissions cap and trade program if they choose to increase their operation to 100 hours per year or more (based on a rolling 12-month average) and, in addition to having to comply with the Chapter 117 rules, will only be issued NO_X emissions allocations based on their historical activity level which would be much lower than 100 hrs/year. Existing engines theoretically could be switched to peak shaving service up to 100 hours/year but in reality only about 40 hours/year would be available for this type of operation. The remaining time would have to be used for normal routine testing of the engines. It is unlikely that the profit from sale of electricity, would justify the cost of the modifications to the switching system for only about 40 hours of operation. EPA concludes that additional control beyond the existing program is not economically feasible and therefore would not represent RACM.

On-Road Control Measures

Comment: Two commenters suggested that 15 ppm sulfur gasoline should be adopted in the HG area as a reasonably available control measure.

Response: The Act preempts states from establishing state fuels under section 211(c)(4)(A). Waivers from preemption are possible under section 211(c)(4)(C) if the state can show necessity for that fuel to meet the NAAQS, and if no other reasonable or practicable non-fuel measures exist that could be implemented in place of a state fuel. For a state to obtain a waiver of preemption, an acceptable demonstration must be submitted to EPA that can justify the need for a particular state fuel. This provision of the Act was included to discourage the development of a patchwork of fuel requirements from State to State.

Texas considered adopting a 15 ppm sulfur standard in gasoline, but withdrew the proposal once the 30 ppm Federal low sulfur gasoline standard became final. They received comments both for and against the proposal. Comments against cited excessive costs when compared with the emissions benefit, the difficulties in producing a boutique fuel, and anticipated distribution problems and conflicts with on-going efforts to comply with the federal low-sulfur requirements of 30 ppm. Texas only projected a 1.15 ton/day of emission reduction from the institution of a 15 ppm fuel. The BCCA estimates that the cost of these reductions is $400,000/ton to refiners. Based on TNRCC cost estimates, the cost is over $500,000/ton to consumers.

Because of the general preemption in the Act and the low projected cost effectiveness, EPA does not consider this fuel requirement to be RACM for the HG area.

Comment: One commenter suggested that Texas adopt diesel fuel that meets a 15 ppm sulfur standard by 2003.

Response: Texas adopted a low emission diesel fuel in December 2000, that includes a low sulfur component. The state's low sulfur component phases in beginning May 1, 2002, with 500 ppm sulfur statewide for on-highway use and 110 counties in east and central Texas for non-road use. On June 1, 2006, the sulfur level drops to 15 ppm in east and central Texas for off-highway use to be consistent with Federal low sulfur diesel fuel for on-highway use. Thus, TNRCC has already adopted a standard more stringent than the Federal Standards.

In order for Texas to adopt statewide fuel controls that are more stringent than Federal controls, the state must show necessity to achieve the NAAQS in the nonattainment areas and justify implementing a fuel measure over nonfuel measures statewide. Texas has requested and EPA is granting in a separate **Federal Register** a waiver under 211(c)(4)(A) for this fuel. EPA does not believe the accelerated schedule of implementing the low sulfur standard suggested by the commenter is reasonable or will result

in ozone benefits because the low sulfur requirement does not result in NO_X emission reductions by itself but instead enables catalyst technologies. Under Federal regulations, new vehicles will not be required to meet the new emission standard enabled by low sulfur diesel until 2007. Therefore, EPA does not consider calling for these fuel requirements earlier as suggested by the commenter to be RACM.

Comment: Two commenters gave comments that the Inspection and Maintenance Program could be improved. One said that adequate resources to develop and implement an I/M program must be assigned; otherwise, the program cannot be considered credible. A second commenter stated that the program should be established based on where the vehicle owner usually works.

Response: EPA has reviewed the I/M program developed by the State of Texas. In a separate **Federal Register** notice, we are approving the State's I/M program. The new program, using the Accelerated Simulation Mode (ASM) test method will be implemented in all eight counties of the HG nonattainment area and covers more vehicles than are required by the Federal I/M rules. Expanding the program to cover vehicles not registered in the program area is beyond the scope of the Federal rules and would be extremely difficult to implement and enforce. Further, the prior, less stringent program met the minimum I/M requirement for the HG area. The new program goes beyond those requirements. As such, we believe TNRCC has adopted an I/M program that meets the RACM requirement. We agree that adequate resources will have to be devoted to the implementation of this program by the Texas Department of Public Safety and TNRCC for the goals of the program to be achieved. At this time, we have no information to support a determination that the program will not be fully implemented.

Comment: One commenter suggested that public and large commercial fleets be required to have low emitting vehicles.

Response: Texas adopted Fleet provisions and submitted them to EPA on August 27, 1998 as the Texas Clean Fuel Fleet (CFF) substitute plan. EPA approved this provision on February 7, 2001 (66 FR 9203) as meeting the Clean Fuel Fleet Requirements of the Act. These provisions ensure that fleets meet a reasonable level of control in serious and above nonattainment areas. Texas' CFF substitute plan relies on a State fleet program—the Texas Clean Fleet (TCF) program—supplemented with additional volatile organic compound (VOC) and nitrogen oxide (NO_X) emission controls. The emission reductions for Texas' plan greatly exceed the reductions that would have been achieved with the Federal CFF program. Therefore, the State's substitute plan will meet the Federal CFF requirement for VOC and NO_X emissions reductions. EPA believes that TNRCC has instituted RACM for this source category.

Comment: One commenter suggested that the State should encourage the early introduction of Tier 2 vehicles.

Response: In the last session, the Texas legislature passed Senate Bill 5 which includes an incentive program for the purchase of vehicles that meet the more stringent Tier II vehicle standards. This program should result in more cleaner vehicles coming into use in Texas then would be required under the Federal Program. It is uncertain, however, how much additional emission reduction will come from this program as it apparently is the first of its kind in the country. Therefore, EPA concludes that further acceleration of this program would not constitute RACM for the HG area.

Comment: A commenter suggested that non-USA registered trucks should be subject to an I/M inspection.

Response: It is not clear whether the State has the legal authority to require trucks from a foreign country to be inspected. As a practical matter, there are no proven test methods to employ for Diesel I/M programs. Therefore, this cannot be considered a reasonably available measure.

Comment: One commenter felt all highway construction in HG area should be limited. The HG area must absorb on-going expansions at the airports, medical center plus population and job growth. There is no room for the above ongoing new emissions generating projects let alone any new large emissions generating projects. The same commenter later said that the Transportation Improvement Plan and other proposed changes to Regional Highway system must demonstrate full conformity with the Act.

Response: EPA agrees that the Regional Transportation Plans must demonstrate conformance to the State Implementation Plan consistent with section 176(c) of the Act and our transportation conformity rules at 40 CFR 93.100; however, these are separate requirements from demonstrating attainment of the NAAQs. Transportation conformity is the process whereby the transportation plans have to be reconciled with and show they are consistent with the plans for attainment. In this SIP, the State has established an emissions budget for motor vehicle emissions consistent with attainment. The Houston/Galveston Area Council will have to show for all future plans, taking into account existing roads and future growth how they will conform to these budgets. Given the severe impact a ban on road construction would place on the HG area, EPA concludes that this is not a reasonably available measure.

Comment: One commenter suggested the State institute an auto license fee tied to actual vehicle NO_X emission rates.

Response: EPA is not aware of anywhere where this measure has been instituted. It is not clear how much emission reductions could be achieved and at what fee levels. Because of the lack of localized information on the costs and benefits of this program this cannot be considered a RACM.

Texas is already instituting a program to provide rebates for the purchase of vehicles meeting the cleanest Tier II standards. This program should influence positively the introduction of cleaner vehicles into the fleet.

Off Road Measures

Comment: Three commenters recommended measures they felt were appropriate to control emissions from construction equipment. One commenter felt that all diesel equipment should be required to register. He felt this would result in a 70% reduction in emissions. Two other commenters felt that all State and Local Government contracts should have requirements that require lower emission equipment be used.

Response: The Texas legislature has passed an incentive program that will pay for the cost of upgrading diesel equipment to meet cleaner standards. Texas plans to direct 24.7 million dollars/year to the HG area from the Texas Emission Reduction Program passed under Senate Bill 5. Based on experience from similar programs in California, we expect substantial reductions to be achieved. We therefore believe that additional measures to reduce emissions from this category are not RACM.

Comment: One commenter suggested the following measures to achieve additional emission reductions from aircraft operations: (1) Mandatory Powering of Jets at gates with Electric Power (2)Reduced Idling on the runway (3) Congestion Pricing at Rush Hours at Airports.

Response: First, the State has executed agreed Orders with the major airlines and the City of Houston to achieve emission reductions from Ground Support Equipment (GSE) at

airports in the HGA area. These Orders require a phased-in replacement of current combustion engine equipment with electric equipment or to achieve equivalent reductions. Equipment powering jets at gates is included in the definition of GSE; thus, over a period of time jets at gates will be powered with electric equipment or equivalent emission reductions will be achieved. Second, although planning of airline operations during rush hours to reduce idling on runways to reduce emissions may have merit, the State does not have the authority to impose regulations on airlines to require this planning. The Federal Aviation Administration has jurisdiction over airline operations once the aircraft leaves the gate and State regulation is pre-empted. Third, since the State has no authority to control airline operations, and congestion is a function of the higher level of operations during rush hours, congestion pricing is likely to place an unnecessary economic burden on the traveling public with no air quality benefits. State controls on pricing are expressly preempted by the Air Deregulation Act. Therefore, EPA concludes that such measures are not reasonably available.

Transportation Control Measures and Land Use

Comment: Transportation Control Measures as RACM: EPA gives virtually no consideration to the emission reduction benefits of transportation programs, projects and services contained in adopted regional transportation plans (RTPs), or that are clearly available for adoption as part of RTPs adopted for a nonattainment area. In addition, it is arbitrary and capricious for EPA not to require as RACM economic incentive measures that are generally available to reduce motor vehicle emissions in every nonattainment area. One commenter provided a report ''Studies on the Travel and Air Quality Effects of Transit, Land Use Intensification, and Auto Pricing Policies.'' The commenter felt this report contained measures that are RACM.

Response: A similar comment was received in response to the analysis EPA performed as part of EPA's notice of availability where an analysis of Reasonably Available TCMs was performed for four serious ozone nonattainment areas: Greater Connecticut, Springfield, MA, Washington, DC and Atlanta. In the Technical Support Document for the July 12, 2001 proposal on RACM, EPA performed a similar analysis for the HG area. This analysis was performed to evaluate the State's conclusion that further TCMs are either economically infeasible or would not advance attainment.

EPA's TSD for the July 12, 2001 proposal on RACM for the HG area does consider transportation programs, projects and services that are generally adopted, or available for inclusion in a nonattainment area's SIP. The RACM analysis includes seven broad categories and twenty-seven subcategories of Transportation Control Measures (TCMs) that represent a range of programs, projects and services. The inclusion of a TCM in an RTP or TIP does not necessarily mean that it meets EPA's criteria for RACM and must be included in the SIP. The measure must also contribute to expeditious attainment. EPA concluded from its analysis that the State's assertion that further TCMs are not RACM was appropriate.

Some of these TCMs, such as parking cashout, transit subsidies, and parking pricing, are explicitly economic incentive programs. Furthermore, these categories of TCMs, as well as most of the others, could be infinitely differentiated according to criteria, such as the method of implementation, level of promotional effort or market penetration, stringency of enforcement, etc. The application of economic incentives to increase the effectiveness of a TCM is one such criterion. These implementation variables, representing levels of implementation effort, are implicit in the range of effectiveness for each category of TCM. EPA does not believe it is necessary, or even practically possible, to evaluate every explicit variation of TCM's in order to adequately determine if it is reasonably available.

From the analysis for the HG area, EPA identified 1.7 to 22.4 tpd of NO_X emission reductions as theoretically achievable from TCMs. The EPA believes that emission reductions which are in the low- to mid-point range of EPA's analysis are achievable with careful planning, adequate implementation resources, aggressive public information programs and a sustained commitment by the implementing agencies. TNRCC has identified in its SIP the implementation of a wide range of TCMs which are projected to achieve 4.86 tpd of emission reductions. The TCM's identified in the HG analysis are in the low- to mid-point range. Additional emission reductions beyond this level that could be reasonably achieved would not advance attainment given that the final 121 tons/day of NO_X emissions reductions from the point source rules will not be achieved until spring of 2007.

There are many important reasons why a state, regional, or local planning agency might implement TCMs in an integrated traffic management plan beyond whatever air quality benefits the TCMs might generate, including preserving open space, water shed protection, avoiding sprawl, mitigating congestion, and ''smart growth'' planning generally. So the fact that TCMs are being implemented in certain ozone nonattainment areas does not necessarily lead one to the conclusion that those TCMs represent mandatory RACM when they are analyzed primarily for the purpose of determining whether they would advance the ozone attainment date.

The report, ''Studies on the Travel and Air Quality Effects of Transit, Land Use Intensification, and Auto Pricing Policies,'' provides case studies from two areas of the country, Portland OR, and Sacramento, CA and a literature survey. EPA's analysis included consideration of measures in the same categories as provided in this report. Based on this analysis, EPA does not believe implementation of these measures would advance the HG area's attainment. Further, as stated in the General Preamble, 57 FR 13560, EPA believes that local circumstances vary to such a degree from city-to-city that a national presumption of RACM is not appropriate. It is more appropriate for States to consider TCM's on an area-specific basis and to consider groups of interacting measures, rather than individual measures. Therefore, based on EPA's analysis, EPA cannot conclude that these measure suggested in the report are RACM for the HG area.

Comment: A number of specific TCMs and economic incentive programs to reduce vehicle miles traveled were identified by various commenters. These include: Telecommuting, satellite offices, college/university traffic control measures, Bike and Walk pathways, Increased Government Use of the Web, Voluntary No Drive Days, Trip Reduction Ordinances, Employer Based Transportation Management, Road Pricing, Ride Share Incentives, Insurance Pricing, Commuter Choice, Parking Cashout, Taxes on Paid Parking, Congestion Pricing, Location Efficient Mortgages, Fee Bate on Suburban Mortgages, Tax Incentives for Living Near Place of Employment, Incentives for Transit Oriented Development and improved incident response.

Response: As stated in the previous response, EPA does not believe it is necessary, or even practically possible, to evaluate every explicit variation of

TCM's in order to adequately determine if it is reasonably available. EPA notes that many of the measures listed above are being encouraged in the HG area as part of the commuter choice program such as telecommuting, ride share incentives, and employer based transportation management. As discussed in the previous comment Texas has identified 4.83 tpd of NO_X emission reductions from reasonably available Transportation Control Measures which, based on the literature survey, falls into the low to midpoint of emission reductions theoretically achievable from these programs. Also, as noted above, this small amount of emissions reductions would not advance attainment prior to the implementation of all other measures in the plan. Therefore, EPA believes the small amount of additional reductions that could reasonably be achieved would not advance attainment.

Comment: EPA's analysis also completely fails to consider the additional benefits likely from combined implementation of complementary TCMS e.g., parking management along with transit improvements. It is arbitrary and irrational for EPA to assume that these measures can and will be implemented in complete isolation from one another.

Response: EPA recognizes that many control measures, particularly TCMS, are more effective if done in conjunction with others. EPA maintains, however, that it is not practically possible to analyze a seeming infinite set of combinations of measures for possible benefits. The EPA's analysis did look at all measures in various categories at a reasonable level of implementation and concluded that as a whole these categories of measures, taken together, would not advance attainment or would otherwise not be reasonably available.

General RACM Comments

Comment: One commenter suggested that the SIP should include enforcement of New Source Review such that grandfathered plants would get emissions permits with emission limits that are identical to new construction as of June 2001.

Response: Existing industrial sources in the HG area are required to comply with Chapter 115 for VOC and Chapter 117 for NO_X controls regardless of whether the sources are permitted or grandfathered. These rules have been approved as RACT. In addition all sources, both existing and new, are subject to the NO_X mass emissions cap in Chapter 101. Requiring all existing sources to obtain permits is not likely to result in any additional emission reductions beyond those achieved by the Chapter 115 and Chapter 117 rules.

Comment: One commenter incorporated in their comments to EPA their comment to the TNRCC where they encouraged the State to use Market Incentives to the extent possible.

Response: We believe the State has employed market based incentives in a variety of programs. The cap and trade program and the Texas Emission Reduction Program are the two main examples of programs that use markets to provide significant flexibility in how emission reductions are achieved.

Comment: STAPPA's 1993 report recommended adoption of California or South Coast Air Quality Management District (SCAQMD) controls/limits for various source categories. The commenter mentions further possible control measures as well, and notes that none of the states offered consideration of these measures accompanied by reasoned explanations for their rejection.

Response: Texas used the EPA survey ''Serious and Severe Ozone Nonattainment areas: Information on Emissions Control Measures Adopted or Planned and Other Available Control Measures'' as a basis to determine if all reasonably available control measures had been implemented. This report includes measures from the STAPPA 1993 report and other measures that EPA considers potentially reasonably available. TNRCC did not identify any additional measures that were considered reasonable for the HG area.

Comment: By absorbing ozone and reducing air temperatures, trees actually account for a small but measurable reduction in ozone levels. The EPA should work with TNRCC to encourage public funding for tree planting and local ordinance that require canopy cover in new private development.

Response: EPA agrees that tree planting can result in a possible reduction in ozone formation. Unfortunately, at this time, these benefits are difficult to quantify. Efforts are currently underway to complete a modeling study to quantify the impacts of various urban heat island mitigation strategies using the photochemical model. It is hoped that these studies will provide information that will allow tree planting strategies to be included as a creditable portion of the SIP at a later date, perhaps for the mid-course review SIP submission. Texas is involved in this effort and intends to incorporate such programs in the SIP should they prove effective and reasonably available.

C. Response to Comments on Local Measures

1. Comments on Speed Limits

Comment: Three commenters indicated the speed limit measure would not be enforced or was not enforceable and that EPA should not give credit unless TNRCC develops a mechanism to demonstrate that speeds actually decrease.

Response: The mechanism to enforce reduced speed limits is already in place with the Department of Public Safety and local municipalities. EPA acknowledges that it is unlikely that 100% of vehicles will comply with the new speeds. The modeling projections assume that the average speed will be 10% higher than the posted speed limits on roads that currently have average speeds above the reduced speeds. Thus, the State has made reasonable assumptions to anticipate the level of compliance with this rule. We believe we can approve these reasonable planning assumptions about speed reductions. It would not be appropriate to wait until Texas proves that the speeds have been reduced to give credit for this measure just as we would not wait until industrial sources have accomplished their emission reductions before approving point source rules. We do believe that the effectiveness of this measure, as with all measures, should be monitored. Data is collected in the HG area by Transtar and Texas Department of Transportation. This data could be used to evaluate the efficacy of this measure in reducing speeds.

2. Comments on the VMEP

Comment: The plan includes impermissible reductions for ''Voluntary controls.'' EPA has no legal basis for issuing SIP credit for the VMEP program; the VMEP measures do not meet the test of being real, permanent, and enforceable to qualify for emission reductions.

Response: EPA disagrees with the comments, and continues to believe that the voluntary measures proposed by Texas for inclusion in the SIP are approvable under the Act. EPA acknowledges that, by themselves, the measures would not be approvable, because, as noted by the commenter, they are not enforceable against the entities producing the emissions reductions and thus do not meet the enforceability requirement of section 110(a)(2)(A). However, EPA did not propose to approve the measures by themselves. EPA proposed to approve them only in conjunction with an enforceable commitment by the state of Texas to monitor implementation of the

voluntary measures, determine whether the anticipated reductions from the measures were in fact achieved, and if not to either alter the program such that the requisite reductions will be achieved, adopt substitute measures, or demonstrate that the attainment and maintenance goals of the ozone SIP can still be met without the reductions from these measures. Thus, EPA did not propose to approve voluntary measures as satisfying the enforceability requirements of section 110. Rather, EPA proposed to approve the voluntary programs into the SIP as part of the overall attainment scheme, and proposed to approve the state's enforceable commitment to monitor, assess, and rectify any shortfall as meeting the enforceability requirements of the Act.

EPA continues to believe that this approach is a proper means of encouraging implementation of innovative mobile source control measures while providing an enforceable SIP backstop measure. Ideally, the voluntary measures will produce the estimated emissions reductions without need for any state backfill or federal or citizen enforcement. However, should any shortfall result, Texas will be bound by the enforceable SIP commitment to rectify the problem and supply the necessary emissions reductions. Both EPA and private citizens retain all of their rights under sections 113 and 304 to bring appropriate enforcement pressure to bear against the state should Texas fail to monitor, assess or fill any shortfall in emissions reductions resulting from implementation of the voluntary measures in the SIP. Contrary to the commenter's allegations, the emissions reductions associated with the voluntary measures in the HG area SIP are required to be achieved; it is however the state and not the individuals implementing the voluntary measures who must ultimately produce them.

Comment: Two commenters raise numerous arguments concerning the unenforceability of the voluntary measures.

Response: The commenter makes no mention of the enforceable state commitment other than to refer to it as insufficient. This statement without further explanation does not give EPA any guidance on the alleged inadequacy of the commitment nor how the commenter would have EPA improve upon it. Therefore, EPA continues to maintain that the commitment is approvable as meeting the enforceability requirements of the Act. In the past, EPA has often approved enforceable state commitments to take future actions under the SIP, and these actions have been enforced by courts against states that have failed to comply with those commitments.[16] EPA believes that the Texas commitments associated with the voluntary measures portion of the SIP are similarly enforceable and thus approvable. NRDC alleges that the Act requires all control measures to be enforceable against individual polluters and not just against states. However, many mobile source control measures are enforceable only against the state or local transit operator, and not the individual entities actually producing the emissions reductions, for instance in the case of state obligations to establish vehicle inspection and maintenance programs or to purchase buses or expand transit systems. The Act does not require federal enforcement capability against individual vehicle owners or transit users prior to approval of such programs into the SIP.[15]

Comment: A commenter alleges that the public cannot adequately monitor implementation of the voluntary measures nor determine whether the emissions reductions are achieved. The commenter admonishes the State to commit to a solid evaluation or auditing framework to monitor performance of measures in the VMEP.

Response: Texas is required by its enforceable commitment to conduct the evaluation and audit mentioned by ED, and should make such assessments available to the public in the normal course of administrative practice. The commenters also claim that the state itself has raised concerns about the emissions reductions that will be achieved from these measures. Such concerns may be valid, nevertheless Texas has made a commitment to fill any shortfall in emissions, which both EPA and citizens can enforce under the Act.

Comment: A commenter makes various arguments about the unacceptability of the voluntary measures program stemming from the stationary source permitting program under Title V of the Act.

Response: Title V is totally irrelevant to these mobile source programs. The voluntary measures program Texas has included in the HG SIP applies only to mobile sources that are not subject to regulation under the Title V stationary source operating permit program.

Comment: EPA can not alter its past interpretations without completing notice-and-comment rulemaking.

Response: EPA believes that this action is consistent with its past interpretations that enforceable state commitments to take future action are approvable SIP measures. For example, see EPA actions approving California plans at 62 FR 1150 (January 8, 1997) and 65 FR 18903 (April 10, 2000). In addition, this action is consistent with the guidance that EPA issued in 1997 indicating its belief that voluntary programs could be approved in conjunction with enforceable state commitments to fill any resultant shortfall.[18] The individual SIP approval actions implementing the VMEP guidance constitute the notice-and-comment rulemaking required to effectuate action under the guidance. Thus, this SIP rulemaking satisfies both CAA and APA rulemaking requirements with respect to final interpretations of the Act consistent with the guidance. Further, NRDC alleges that EPA may not alter interpretations of the Administrator through SIP rulemaking signed by the Regional Administrator. However, the Administrator has properly delegated the authority for SIP rulemakings to the Regional Administrators under Delegation 7–10 dated May 6, 1997, and section 301(a)(1) of the Act. Thus, the Regional Administrators are authorized to act for the Administrator with respect to all matters pertaining to SIP approvals, including interpretations of the Act relevant to a given SIP approval.

Comment: A commenter questions the 3% limit on voluntary measures, arguing that this limit itself implicitly acknowledges that such measures are not approvable.

Response: EPA did not impose the 3% limit because it believed the measures to be suspect, but rather, as noted in the VMEP guidance, based on the innovative nature of the measures and the agency's lack of experience both

[16] See, *Trustees for Alaska* v. *Fink,* 17 F. 3d 1209 (9th Cir. 1994); *Coalition Against Columbus Center* v. *City of New York,* 967 F. 2d 764 (2d. Cir. 1992); *Citizens for a Better Environment* v. *Deukmejian,* 731 F. Supp. 1448, reconsideration granted in part, 746 F. Supp. 976 (N.D. Cal. 1990); *American Lung Ass'n of New Jersey* v. *Keane,* 871 F.2d 319 (3d Cir. 1989); *NRDC* v. *New York State Department of Environmental Conservation,* 668 F. Supp. 848 (S.D.N.Y. 1987); *Council of Commuter Organizations* v. *Gorsuch,* 683 F.2d 648 (2d Cir. 1982) and *Friends of the Earth* v. *EPA,* 499 F.2d. 1118 (2d. Cir. 1974).

[17] The Act does require that enhanced I/M programs include state enforcement through denial of vehicle registration without proof of compliance with inspection requirements. However, the enforceable SIP requirement is to develop a program that includes registration denial, and any enforcement would be against the state for failing to deny registration. The Act does not contemplate enforcement actions against individual vehicle owners attempting to register their vehicles.

[18] Guidance on Incorporating Voluntary Mobile Source Emission Reduction programs in State Implementation Plans (SIPs), October 24, 1997.

with implementation and calculating appropriate credit for such measures. Therefore, EPA created the 3% limit as a policy matter, indicating in the guidance that it did not think it would be appropriate to approve a greater percentage while the agency begins to implement the program. EPA further indicated that it would reassess the limit after several years of experience with the program. Since all VMEP measures would be approved only with enforceable state commitments to fill any resultant shortfall, EPA felt confident that including voluntary programs up to 3% of required emissions reductions in SIPs would not jeopardize attainment and maintenance goals during initial implementation under the policy. Further, EPA did not indicate that 3% of required emissions reductions could be considered *de minimis,* as the commenter implies. EPA agrees with the commenter that it should not conclude in advance that any given percentage of emissions reduction could be considered *per se de minimis* for all areas and types of SIPs. Any conclusion about the *de minimis* nature of required emission reductions should be made in light of the specific circumstances of the areas and CAA requirements at issue. Therefore, all of the commenter's arguments relating to the availability of a *de minimis* exemption and the need for notice-and-comment rulemaking to effectuate it are not relevant to EPA's approval of the voluntary measures in the HG area SIP.

Comment: The record is insufficient to support TNRCC's credit claims.

Response: EPA reviewed the documentation submitted for each measure of the VMEP. We found that for each measure the documentation was acceptable to demonstrate that the criteria for approval were met for each measure. For each measure the State was able to show that the measure plus the State commitment was quantifiable, surplus, enforceable, permanent, and adequately supported.

Comment: One commenter pointed out that delays may result from identifying and rectifying emissions shortfalls.

Response: EPA acknowledges that reductions will be somewhat delayed where states must first monitor and assess implementation and subsequently implement corrections. For this reason EPA indicated in the VMEP guidance that states should fill any shortfalls in a timely fashion. EPA recently issued a companion voluntary measures policy for stationary sources. See, ''Incorporating Voluntary Stationary Source Emission Reduction Programs Into State Implementation Plans—FINAL POLICY,'' memorandum and attachment dated website January 19, 2001, from John Seitz, Director of the Office of Air Quality Planning and Standards. In that policy EPA indicated that where voluntary measures were included in attainment or rate of progress SIPs, any shortfalls would have to be filled prior to the relevant attainment or progress milestone date. EPA believes this is an appropriate interpretation of the requirement to fill shortfalls in a timely fashion under the VMEP policy.

Comment: EPA put forth different, conflicting explanations for why VMEP measures purportedly will meet the enforceability requirements of section 110(a)(2) of the Act. In the DFW proposed approval we say that the measures will be enforced by the State, whereas in the HGA proposed approval we say that the voluntary measures will be enforceable against the State.

Response: As discussed above, courts have upheld the legal authority to enforce state SIP commitments. The language in the DFW notice was intended to indicate that Texas was to monitor and assess reductions attributable to VMEP and, in case of a shortfall, implement measures to offset that shortfall. What is enforceable is the commitment to see that reductions in an amount equal to what is proposed in the VMEP are achieved. Such enforcement is also available against the State, but not against the individual entities that are implementing the voluntary measures. Texas has made similar commitments with respect to both Dallas/Fort Worth and the HG area.

Comment: EPA improperly redefined the subject of the enforceability requirements of section 110(a)(2); that what is enforceable against the State is the commitment to monitor, assess, and timely remedy a shortfall from implementation of the measures.

Response: We agree that what is enforceable against the State is the commitment to monitor, assess and timely remedy any shortfall to ensure the claimed VMEP reductions are met. We do not agree that this is improper under the Act and have already cited case law in support of this position.

Comment: One commenter appreciated EPA's approval of the VMEP and asked for the State's and EPA's continued support.

Response: We appreciate the commenters support. EPA will continue to support the State's VMEP activities as long as they are developed and implemented in accordance with EPA's October 24, 1997, Guidance on Incorporating Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (SIPs) and the responses to comments in this rulemaking.

3. Comments on TCMs

Comment: The commenters stated that the TCMs are inadequate and do not satisfy the requirements of section 182(d)(1)(A) of the Act.

Response: Section 182(d)(1)(A) directs the State to submit a SIP revision that identifies and adopts specific enforceable transportation control strategies and TCMs to offset any growth in emissions from growth in vehicle miles traveled or number of vehicle trips in severe nonattainment areas, and to attain reduction in motor vehicle emissions as necessary to meet reasonable further progress and attainment requirements of the Act. The State submitted SIP revisions to the EPA on August 25, 1997 and May 17, 2000 to address the VMT Offset provision, the first required element under section 182(d)(1)(A). The EPA proposed approval of these SIP revisions on July 10, 2001 (66 FR 35920, *see also* 66 FR 35903), and subsequently received public comments. The EPA's final approval action on this SIP, the VMT Offset Plan, has been taken in a separate concurrent Federal Register action that discusses the emissions growth offset element in detail.

That action also explains that EPA believes it is appropriate to allow States to separate the VMT Offset SIP into three elements, each to be submitted at different times: (1) The initial requirement to submit TCMs that offset growth in emissions; (2) the requirement to comply within the 15 percent periodic reduction requirement of the Act; and (3) the requirement to comply with the post-1996 periodic reduction and attainment requirements of the Act. Please see the concurrent VMT Offset action referenced above for the first element.

Today's action here satisfies the second and third elements of section 182(d)(1)(A). EPA believes this SIP action, including its TCMs, demonstrates that the HG area will achieve the required ROP and attainment of the ozone NAAQS for the reasons discussed in more detail throughout this final action, and that the SIP therefore satisfies the last two elements.

D. Response to Comments on Post 1999 Rate of Progress Plans

Comment: Texas provided a comment on EPA's December 1999 proposal indicating the April 2000 SIP revision will contain a commitment by the state

to submit a full Post-99 ROP analysis by 12/31/00.

Response: Texas has fulfilled this commitment. EPA is approving this Post-99 ROP plan in this action.

Comment: The TNRCC ROP plan should be revised to be consistent with the budget. The required NO_X reduction for 2005–2007 should be more than the 6% (3%/year for the 2 year period) figure included in Chapter 5.

Response: The EPA acknowledges that the TNRCC has included a 2007 MVEB, which in conjunction with the other measures in the plan will result in more than 6% emission reduction. The Rate of Progress requirement is to achieve at a minimum 6% emission reduction for the time period 2006–2007 as called for by section 182(b)(2) of the Act. The requirement should remain 6%, setting the MVEB lower will only result in more reductions than needed to achieve the required ROP levels.

Comment: One commenter on the December 1999 proposed approval/proposed disapproval claims that the plans fail to demonstrate emission reductions of 3% per year over each 3-year period between November 1999 and November 2002; and November 2002 and November 2005; and the 2-year period between November 2005 and November 2007, as required by 42 U.S.C. section 7511a(c)(2)(B). The states have not even attempted to demonstrate compliance with these requirements, and EPA has not proposed to find that they have been met. The EPA has absolutely no authority to waive the statutory mandate for 3% annual reductions. The statute does not allow EPA to use the NO_X SIP call or 126 orders as an excuse for waiving rate-of-progress (ROP) deadlines. The statutory ROP requirement is for emission reductions—not ambient reductions. Emission reductions in upwind states do not waive the statutory requirement for 3% annual emission reductions within the downwind nonattainment area.

Response: Under no condition is EPA waiving the statutory requirement for 3% annual emission reductions. In today's action we are approving Texas Post-99 ROP plan as submitted December 2000 and revised and submitted in October 2001. As provided in this EPA's final action on the ROP plan Texas is relying on reductions of NO_X and VOC within the nonattainment area for meeting the ROP requirement.

E. Response to Comments on Administrative Record

Comment: A commenter could not find support in the administrative record for the following propositions:

The Shortfall

Proposition: Identified potential measures can achieve an additional 56 tons/day NO_X emissions reduction without requiring additional limits on highway construction.

Support: In Chapter 7, Texas projected that the measures being considered for adoption would address the 56 tpd short fall. Examination of these measures reveals that their implementation would not result in additional limitations on highway construction. Further, the State has provided a commitment that future measures will not rely on limits on highway construction.

Proposition: The State's cited ranges of potential reductions from measures being considered to address the shortfall provide a ''reasonable assurance'' that the State can meet its commitment to submit adopted measures to fill the shortfall; the State has identified sufficient innovative programs and new technologies such that it is reasonable to believe that, in the aggregate, the projected emission reductions from these new programs and technologies can be achieved and will fill the shortfall and the measures to be considered for adoption at the mid-course review can achieve the NO_X emissions reductions indicated on pp. 23–24 of the Technical Support Document.

Support: Chapter 7 of the Texas SIP discusses each of the measures and the State's projected range of emission reductions. The TSD in Section IV.F. has further discussion of each of the potential measures and information that exists to support the projected emission reductions.

SB5 and Incentive Programs

Proposition: Texas Emission Reduction Plan (TERP) will provide 130 million dollars per year for incentive programs to reduce emissions.

Support: This estimate was based on fiscal estimates provided by the State regarding the revenue that will be available from the fees associated with this bill. Chapter 7 of the adopted SIP cites an estimate of 133 million dollars.

Proposition: Incentive programs in SB5 can achieve more reductions than the reductions that were projected to be achieved by the accelerated purchase of Tier II/III non-road diesel equipment and the Heavy-duty Diesel Equipment Operating Restrictions measure and can contribute to reducing the shortfall.

Support: This is discussed at Section IV.F. of the TSD.

Proposition: It can safely be assumed that at least 45% of the SB5 funding for clean up of diesel engines will go to the HG area and TERP can reasonably be expected to provide 40 million dollars/year to the HG area for reducing emissions from existing diesel equipment.

Support: These assumptions were first developed based on early discussions with TNRCC. We understand as pointed out by the commenter that only $24.7 million/year are currently being planned for the HG area. As discussed in our response to comment on this issue, we believe this will still provide sufficient funds to replace the emission reductions from the morning construction ban and Accelerated Tier II/III. clearly, the priority of TNRCC and the legislation is to preserve the HG and Dallas/Fort Worth SIPs. to that end as discussed in the comments on this control strategy in section III.B.3, Texas has the discretion to provide more money, even more than 40 million, to the HG area if necessary.

Proposition: Incentive programs in SB5 can obtain emissions reductions from existing diesel equipment at an average cost on the order of $3,000–5,000/ton.

Support: As stated in the TSD, this is based on experience with California programs. The actual experience of the Carl Moyer Program is a cost effectiveness of better than $3000/ton as stated in ''The Carl Moyer Memorial Air Quality Standards Attainment Program (The Carl Moyer Program) Guidelines-Approved Revision 2000, November 16, 2000 California Environmental Protection Agency Air Resources Board.''

Proposition: The TERP program for reducing emissions from diesel equipment can achieve between 32 and 40 tons/day of emissions reductions in the HG area.

Support: This is discussed in IV.F of the TSD. It is also discussed in Chapter 7 of the adopted version of the Texas SIP and in the responses to comments in this action.

Proposition: The TERP's projected emissions reductions that will be substituted for the Tier II/III non-road diesel equipment measure will achieve 12.2 tons/day. It is also discussed in Chapter 7 of the adopted version of the Texas SIP submitted in a letter dated October 4, 2001.

Support: This is discussed in Section IV.F of the TSD.

Growth Rates

Proposition: Projected growth rates and emissions reductions from the sources subject to the Tier 2 Vehicle Emission Standards and Federal Low Sulfur Gasoline, National Low Emitting

Vehicle Standards, and Heavy-duty Diesel Standards were calculated correctly by the State.

Support: The procedures for calculating the emissions from on-road vehicles are documented in Chapter 3 of the SIP. As discussed in Chapter 3, these emissions are based on a report that was included in Appendix G of the November 1999 SIP revision. Chapter 3 discusses several refinements and revisions to what was provided in the November 1999 SIP. These were discussed in Appendix A of the TSD Section I.F.

Proposition: Growth rates and emission reductions were correctly projected by the State for sources subject to the Federal Measures, including on-road and off-road mobile source measures and the Act Statutory Requirements.

Support: On-road measures were discussed in the previous proposition. Off-road measures are also discussed in I.F. of Appendix A of the TSD.

Proposition: The State has correctly factored growth in emissions due to population and economic growth.

Support: These are discussed in Section I.G.4 of Appendix A of the TSD.

Settlement

Proposition: Additional controls at uncontrolled grandfathered facilities in East Texas, which are called for by recent legislation, will offset the increased emissions from utilities pursuant to the settlement agreement.

Support: This issue is discussed in Chapter 6 of the Texas SIP. EPA's review is discussed in the TSD in Section III.K of the TSD. The issue is also discussed in the response to comments regarding model inputs.

Proposition: Substitution of a portion of the emissions reductions from the new TERP measures for the modeled Heavy-duty Diesel Equipment Operating Restrictions along with the change in the NO_X point source measures are not expected to increase the modeled ozone reductions. Changes in the Heavy-duty Diesel Equipment Operating Restrictions and rules for utilities will not ''adversely affect the modeling results'' or ''affect modeling results in a way to increase ozone.''

Support: These issues were discussed in III. I. of the TSD and in Chapter 7 of the adopted SIP revision.

Speed Limit Reductions

Proposition: Reductions in the speed limit to 55 mph in the HG area will result in the reductions calculated by TTI. The percentage of motorists that TTI projected to exceed the newly proposed speed limits is reasonable.

Support: The reduction in speed limit is discussed in detail in TNRCC's SIP and in particular in the State's response to comments in the December 2000 SIP. EPA reviewed and evaluated these documents to draw these conclusions. Also, se the Chapter 3 of the December 2000 SIP and Appendix A of the TSD.

RACM

Proposition: Texas has established that all reasonable measures that could accelerate the attainment date have been adopted, or will be adopted.

Support: Chapter 7 of the SIP and Appendix B of the TSD extensively discuss this issue.

VOCs

Proposition: The modeling and list of control measures demonstrate that additional VOC controls are not cost-effective in reducing ozone in the HG area and would not advance the attainment deadline.

Support: This issue is extensively discussed in Appendix B. of the TSD and Chapter 7 of the SIP. This issue is discussed further in our response to comments on this action.

Proposition: RACT is in place for all major sources of VOC in the HG area.

Support: As part of our action approving VOC requirements, we found that the State had adopted RACT for all major sources, in the HG area except those that were to be covered by post-enactment Control Technique Guidelines (CTG's)(60 FR 12437, March 7, 1995). Since that time many expected CTGs were issued as Alternative Control Technique documents—ACTs. Of the expected CTGs and ACTs, the HG area had major sources in the following categories; batch processing, industrial wastewater, reactors and distillation, and wood furniture. We have approved measures for all of these categories as meeting RACT.

Batch Processing—July 16, 2001 66 FR 36913

Industrial Wastewater—December 10, 2000 65 FR 79745

Reactors and Distillation—January 26, 1999, 64 FR 3841

Wood Furniture—October 30, 1996, 61 FR 55894

State's Estimated NO_X Reductions

Proposition: The State control measures and local initiatives will provide the NO_X reductions indicated in Table 4 of the TSD. The State's projection of expected emissions reductions from Regional and Local Measures is correct (this includes the adequacy of the equivalent NO_X reductions credited to the commercial lawn care shift). The NO_X reductions for the 2007 attainment year resulting from the State control measures and local initiatives predicted in Table 4 on pg. 18 of the TSD are accurate.

Support: First, each of the control measures have been approved in separate actions or in this action as listed in Section II of this action. These **Federal Register** actions announce our belief that these are permanent, enforceable measures that will achieve emission reductions toward attainment. Regarding the projected emission reductions from each measure:

Point Source Control reductions are well documented in a table in the State's preamble to NO_X rules submitted in December 2000. We reviewed this table in concluding the SIP will achieve the projected reductions from point sources. Also see the EPA's TSDs for its actions on the point source rule and this action.

The record for reductions for on-road emissions reductions from I/M, low emissions diesel fuel, speed limit reductions, and vehicle idling are discussed in previous propositions. They are principally discussed in the record in Chapter 3 of the SIP and in Appendix A of the TSD.

Off-road measures; Heavy duty diesel operating restriction and Accelerated Tier II/III have been replaced by the TERP and the potential emission reductions from the TERP are discussed in section IV.F. of the TSD. The emissions shifted by small spark operating restrictions are discussed in the State's preamble to the rule and in Chapter 6. Airport GSE emissions are discussed in Appendix A of the TNRCC December 2000 SIP submission, Heavy equipment gas engines emission reductions are discussed in the State's preamble to the rules submitted in December 2000.

Gas-fired water heaters—EPA reviewed the discussion provided in the State's preamble to the water heater and small boiler rule.

VMEP measures and the projected emission reductions are extensively discussed in Appendix K of the December 2000 State submission and in section IV of the TSD.

Energy Efficiency projections are discussed in Chapter 6 of the SIP.

Transportation Control Measure are documented in Appendix I of the SIP and discussed in section IV of the TSD.

IV. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not

subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 14, 2002. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Attainment, Hydrocarbons, Nitrogen oxides, Ozone, Incorporation by reference, Reporting and recordkeeping requirements.

Dated: October 15, 2001

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270, entries in the ''EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP'' table in paragraph (e) are added to the end of the table to read as follows:

§ 52.2270 Identification of plan.

* * * * *

(e) * * *

EPA APPROVED NONREGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE TEXAS SIP

Name of SIP provision	Applicable geographic or nonattainment area	State submittal/effective date	EPA approval date	Comments
* *	* *	*	*	*
Attainment Demonstration for the 1-hour Ozone NAAQS.	Houston/Galveston, TX	[1] 12/09/00	[Insert 11/14/01 Federal Register cite].	
Speed Limit Reduction	Houston/Galveston, TX	12/09/00	[Insert 11/14/01 Federal Register cite].	Section 6.3.12
Voluntary Mobile Emission Program	Houston/Galveston, TX	12/09/00	[Insert 11/14/01 Federal Register cite].	
Texas Senate Bill 5	Houston/Galveston, TX	9/26/00	[Insert 11/14/01 Federal Register cite].	
Transportation Control Measures Appendix I	Houston/Galveston, TX	12/09/00	[Insert 11/14/01 Federal Register cite].	
Commitment to Mid-course review	Houston/Galveston, TX	4/19/01	[Insert 11/14/01 Federal Register cite].	

EPA APPROVED NONREGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE TEXAS SIP—Continued

Name of SIP provision	Applicable geographic or nonattainment area	State submittal/effective date	EPA approval date	Comments
Table 7.1–1 Enforceable Commitments	Houston/Galveston, TX	9/26/01	[Insert 11/14/01 Federal Register cite].	
Post 1999 Rate of Progress Plans and associated contingency measures.	Houston/Galveston, TX	9/26/01	[Insert 11/14/01 Federal Register cite].	
15% Rate of Progress Plan	Houston/Galveston, TX	12/09/00	[Insert 11/14/01 Federal Register cite].	
Revisions to the 1990 Base Year Inventory ..	Houston/Galveston, TX	12/09/00	[Insert 11/14/01 Federal Register cite].	
Reasonably Available Control Measure Analysis.	Houston/Galveston, TX	9/26/01	[Insert 11/14/01 Federal Register cite].	

[1] As revised 9/26/01.

* * * * *

[FR Doc. 01–27580 Filed 11–13–01; 8:45 am]

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–134–5–7509; FRL–7091–5]

Approval and Promulgation of Air Quality State Implementation Plans (SIP); Texas: Low Emission Diesel Fuel

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving a State Implementation Plan (SIP) revision submitted by the State of Texas establishing a Low Emission Diesel (LED) fuel program for distribution in 110 counties in the eastern and central parts of Texas. Texas developed this fuel requirement to reduce ozone as part of the State's strategy to achieve the National Ambient Air Quality Standard (NAAQS) in the Houston-Galveston Area (HGA) nonattainment area. We are approving Texas' fuel requirement into the SIP because we found that the fuel requirement is in accordance with the requirements of the Clean Air Act (the Act) as amended in 1990 and is necessary for the nonattainment area to achieve the ozone NAAQS.

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment with the appropriate office at least 24 hours before the visiting day.

Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733. Texas Natural Resource Conservation Commission, 12100 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Ms. Sandra G. Rennie, Air Planning Section (6PD–L), EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–7367.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

II. What Action Is EPA Taking Today?

We are granting final approval into the Texas SIP of Texas' LED fuel requirement for distribution in 110 counties in the eastern and central parts of Texas. The State's LED program will apply in the designated nonattainment counties in the Houston-Galveston (HGA), Dallas-Fort Worth (DFW), and Beaumont-Port Arthur (BPA) ozone nonattainment areas, and the attainment counties listed in this action.

III. What Are the Clean Air Act Requirements?

Section 172 of the Act provides the general requirements for nonattainment plans. Section 172(c)(6) and section 110 require SIPs to include enforceable emission limitations, and such other control measures, means or techniques as well as schedules and timetables for compliance, as may be necessary to provide for attainment by the applicable attainment date. Today's SIP revision involves approval of one of a collection of controls adopted by the State to achieve the ozone standard in the HGA nonattainment area as required under section 172. EPA approval of this SIP revision is governed by section 110 of the Act.

In addition to these general requirements, section 211(c)(4)(C) provides that a state fuel control, otherwise preempted under section 211(c)(4)(A), may be approved into a SIP if EPA finds the fuel control is ''necessary'' to achieve a NAAQS. Today's approval of the State's fuel control also meets the requirements of section 211(c)(4)(C) because we have found that the control is ''necessary'' to achieve the NAAQS in the HGA ozone nonattainment area.

IV. Why Is EPA Taking This Action?

We are taking this action because the State submitted an adequate demonstration to show the necessity for this fuel requirement to achieve the NAAQS in the HGA ozone nonattainment areas.

V. What Does the State's LED Regulation Include?

The State's LED regulation requires that diesel fuel sold within the 110 counties listed in the regulations have a maximum sulfur content of 500 ppm, have no more than 10 percent aromatic hydrocarbons by volume, and have a cetane number of 48 or greater. The regulations apply to diesel fuel sold for highway and nonroad use beginning April 1, 2005.

The nonattainment counties affected are Collin, Denton, Dallas, Tarrant, Harris, Galveston, Brazoria, Montgomery, Chambers, Liberty, Waller, Fort Bend, Jefferson, Hardin, and Orange.

The 95 central and eastern Texas counties affected by these rules are Anderson, Angelina, Aransas, Atascosa, Austin, Bastrop, Bee, Bell, Bexar, Bosque, Bowie, Brazos, Burleson, Caldwell, Calhoun, Camp, Cass, Cherokee, Colorado, Comal, Cooke, Coryell, De Witt, Delta, Ellis, Falls, Fannin, Fayette, Franklin, Freestone, Goliad, Gonzales, Grayson, Gregg, Grimes, Guadalupe, Harrison, Hays, Henderson, Hill, Hood, Hopkins, Houston, Hunt, Jackson, Jasper, Johnson, Karnes, Kaufman, Lamar, Lavaca, Lee, Leon, Limestone, Live Oak, Madison, Marion, Matagorda, McLennan, Milam, Morris, Nacogdoches, Navarro, Newton, Nueces, Panola, Parker, Polk, Rains, Red River, Refugio, Robertson, Rockwall, Rusk, Sabine, San Jacinto, San Patricio, San Augustine, Shelby, Smith, Somervell, Titus, Travis, Trinity, Tyler, Upshur, Van Zandt, Victoria, Walker, Washington, Wharton, Williamson, Wilson, Wise, and Wood Counties.

Beginning June 1, 2006, the sulfur content requirement will change to 15 ppm in all the above-named counties.

VI. What Did the State Submit?

The State submitted SIP revisions on December 20, 2000 for 30 Texas Administrative Code (TAC) 114 on December 6, 2000. The submittal contained data and analyses to support a finding under section 211(c)(4)(C) that the State's LED fuel requirement is necessary for the HGA nonattainment area to achieve the ozone NAAQS. For further discussion of the submittals, see the proposed approval, 66 FR 36542 (July 12, 2001) and accompanying Technical Support Document.

The State also requested parallel processing of 30 TAC 114 rules that were proposed on June 15, 2001. The proposed rules were adopted without changes on September 26, 2001, and submitted under a letter from the Governor dated October 4, 2001.

VII. What Comments Did EPA Receive in Response to the July 12, 2001, Proposed Rules?

Relevant comments on the proposed rulemaking to approve the Texas Low Emission Diesel (LED) rule into the Houston-Galveston (HGA) Ozone Non-Attainment area were received from the Association of American Railroads (AAR), the American Trucking Association (ATA), Baker and Botts on behalf of the Business Coalition for Clean Air (BCCA), Environmental Defense (ED), National Petrochemical & Refiners Association (NPRA), and Texas Motor Transport Association (TMTA). Reliant Energy (REI) also referenced this rulemaking in a comment letter on other related rulemaking actions, but made no substantive comments about the LED fuel program except to endorse comments made by BCCA; therefore, all comments mentioned below as having been made by BCCA are also made by REI. Responses to the comments follow.

Issue 1: Cost and Feasibility of the LED Fuel Rule and Program

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (see, Union Electric Co., v. EPA, 427 U.S. 246 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. Even though EPA's role is not to second guess the state's choices in this regard, EPA has done its own review of specific comments noted below on the potential cost and feasibility of the LED fuel rule and program.

1.1 State LED requirements will lead to significantly higher production costs

BCCA asserts that the production cost of LED will be greater than Texas has estimated. In particular, the first phase will cost 9 cents per gallon to produce, or about twice what Texas estimated. The second phase will be comparable to the cost of producing ultra-low sulfur diesel (ULSD) fuel for the federal rule, or about 10 cents per gallon. Overall the combined cost for producing LED fuel is estimated to be over two times higher than the Texas estimate of 8 cents per gallon.

Response: EPA believes that the State's estimates of increased production costs are generally consistent with that which has been observed for wholesale prices for diesel fuel in California. (Using California as

an indicator is appropriate because the California diesel requirements are very similar to those in the LED rule). According to a California Air Resources Board (CARB) publication entitled California Diesel Fuel Factsheet (1997), a gallon of California diesel costs one to four cents per gallon more to produce than diesel fuel in other states. More recently, CARB analyzed wholesale diesel prices in California and neighboring States (Arizona, Oregon and Nevada) during the period 1997 to 2001 and found that California wholesale diesel prices ranged from 1.3 cents per gallon lower to 6.0 cents per gallon higher (averaged 0.8 to 4.5 cents/gallon more) than diesel in Arizona, Oregon and Nevada (September 13, 2001 letter from CARB to ''World Fuels Today'', a copy of which is in the docket for this rulemaking). With respect to the second phase of LED fuel, *i.e.,* the 15 ppm sulfur requirement, we note that refiners who make highway diesel fuel will be subject to ULSD requirements at the same level under the federal rule in the same timeframe, so the production cost for phase 2 LED would be comparable to ULSD. According to data from Energy Information Administration (EIA),[1] ULSD production cost for PADDIII (which includes Texas, and is defined below in response to Issue 1.3) range from 4.5 to 7.0 cents per gallon higher than current diesel costs, so the Texas estimate of four cents per gallon for phase 2 LED is consistent with this range.

1.2 State LED requirements could cause supply disruptions

BCCA and NPRA argue that there is a higher market risk of the LED rules; specifically, it will reduce regional diesel fuel supplies, reduce incentives for refineries to invest in low sulfur diesel facilities, and limit refiner's ability to build new facilities. NPRA argues that any requirement for a unique diesel fuel will affect supply balance.

Response: As discussed in detail in the response to issue 1.6, we estimate that approximately 60 percent of diesel supplied to Texas is in the 110 county area affected by the LED rule. At a minimum, therefore, we expect that LED would make up 60 percent of the diesel used in Texas. The Texas comptroller's office reports that 3.1 billion gallons of diesel were sold in Texas during the fiscal year ending August 30, 2001.[2] Thus 1.8 billion gallons of LED would be required to replace the existing grades being sold. Diesel consumption in Texas is approximately 8 percent of the U.S. total consumption (see issue 1.6).

Approximately 18 to 20 percent of U.S. refineries producing diesel are located in Texas. This is comparable to California in which approximately 15 percent of U.S. refineries producing diesel are located in California. Because California refineries for the most part supply the special diesel required in that state, the situation in Texas is similar. In addition, considering refineries located in the neighboring States of Louisiana, Oklahoma, Arkansas, and New Mexico, the number of refineries in or in proximity to Texas rises to 34 to 38 percent of the U.S. total.

Based on this information, EPA concludes that refineries in Texas and neighboring states currently supplying the covered area with diesel now are highly likely to supply the LED fuel. EPA believes because of the size of the covered area and its proximity to widespread fuel production and distribution systems, the area will be less prone to many of the problems associated with small isolated areas that have unique fuel requirements.

1.3 State LED requirements could cause price spikes

ATA asserts that boutique fuels are contrary to sound public policy objectives because departures from the national diesel fuel standard will disrupt interstate and local trucking industries. The parties assert this is mainly because Texas LED requirements would create a boutique fuel and lead to unpredictable price spikes.

Response: The 110 county area in Texas in which the LED fuel will be consumed is very large and in close proximity to widespread fuel production and distribution systems. Thus, the fuel will be less prone to many of the problems associated with unique fuel requirements in small isolated areas. (See 1.2 above). We conclude that the frequency of price spikes in Texas would not be expected to be greater than the frequency of spikes in other areas. Therefore we examined diesel prices in Petroleum Administration for Defense Districts (PADD) PADD III and PADD IV[3] and analyzed those prices relative to prices of diesel in California—a state which currently has a large diesel program. Retail diesel prices were obtained for the period July 1995 through September 2001 from the Energy Information Administration (*http://www.eia.doe.gov/oil_gas/petroleum/info_glance/distillate.html*). The price of diesel in California was positively correlated to the prices of diesel in PADD III and PADD IV (correlation coefficients of 0.93 and 0.94, respectively), indicating the frequency of spikes was not unique to—nor were spikes more frequent in—California.

1.4 Retail price increases may not be reasonable

NPRA argues that the potential cost volatility of Texas low emission diesel does not meet the CAA requirement that the state fuel regulation be both reasonable and practicable. The TNRCC has estimated the production cost of LED to be four cents per gallon more than current specifications. Parties suggest that Energy Information Administration (EIA) data indicate the retail price of diesel in California is much more than four cents per gallon higher than the price of diesel in PADD III (11 to 41 cents per gallon).

Response: Comparing State of Texas estimates for production cost to California retail prices and PADD III retail prices is misleading because retail prices do not reflect the production cost alone. Other factors in retail pricing include differences in supply and demand, dealer mark up, and proximity of supply. The State of Texas has determined that 4 cents per gallon (production costs) for Phase I is an acceptable difference since LED provides an environmental benefit. As discussed in issue 1.1, California recently validated similar production cost estimates for their analogous diesel fuel via a comparison of wholesale prices in California to prices in neighboring states. Based on this, we believe that State of Texas' estimate is reasonably accurate. See also our response to issue 3.8 for discussion of NPRA's comment about the CAA requirement.

1.5 State LED requirements will injure small businesses

BCCA asserts that the LED rule will have an adverse effect on small businesses and disagrees with Texas' characterization that the impact will be small. Commenters argue that retailers located in the covered area near the boundary areas will suffer because facilities outside the area can sell non-LED fuel which would be lower in price.

Response: The commenter does not quantify the extent of the impact, nor do

[1] ''The Transition to Ultra-Low Sulfur Diesel Fuel: Effects on Prices and Supply,'' May, 2001, EIA, Chapter 7, page 68. It is posted at *http://www.eia.doe.gov/oiaf/servicerpt/ulsd/pdf/ulsd.pdf.*

[2] Personal communication between EPA and Texas comptroller's office; October 1, 2001.

[3] A PADD is a designation used to delineate regions of petroleum production. Texas is in PADD III (Gulf Coast) which also comprises New Mexico, Louisiana, Arkansas, Mississippi and Alabama. PADD IV comprises the States of Montana, Idaho, Wyoming, Utah, and Colorado.

they provide any evidence that this will happen. Specifically, we do not know with certainty what the price differential between LED and non-LED fuel will be. The commenter also does not provide the relationship between price differential and outside-the-boundary purchases. Presumably at lower differences in price, impacts will be small to negligible. Finally, the commenter does not provide the percentage of retail facilities located near the boundary of the covered area that are owned by small businesses as opposed to larger companies.

1.6 State LED requirements will injure the trucking industry

ATA and TMTA argue that the rule represents a departure from the national diesel fuel standard and that there will accordingly be a sudden price increase or spike in diesel fuel in Texas. They base the argument on price behavior of ''boutique fuels'' thus asserting that the LED will be a boutique fuel and have similar impacts. They state that the price increases will be disruptive and will force many small truckers into bankruptcy. They argue that an RIA to assess the economic impacts of the rule has not been prepared as required under Texas law.

Response: While there will be some increase in price due to increased production costs, we do not believe that they will be excessive as discussed previously in our responses to issues 1.1 through 1.4. We also believe that characterizing the LED as a fuel that will cause problems in distribution and supply because of the nature of its specifications is misleading. Unique fuel requirements, particularly in isolated or small markets, are those that have caused the greatest concern. This would not be the case with LED.

The LED will be required to be sold in a 110 county area. The total lane-miles in the covered area represents approximately 60 percent of the lane-miles for the entire state of Texas.[4] Diesel use is generally directly proportional to lane miles; thus, the 60 percent figure suggests that there will be a large market for the LED; i.e., approximately 60 percent of the diesel sold in Texas will be LED. The amount of diesel fuel currently used in Texas makes up approximately 8 percent of the total national demand.[5] Given the large market for diesel that Texas currently represents—and that the LED fuel will also represent—it is highly likely that the refiners that currently make and supply diesel for Texas will make the LED. The large market for LED provides some degree of assurance that LED will not function as a specialty fuel that only a few refiners will make. When that happens, there are difficulties if the refinery that supplies the fuel is unable to operate which cause prices to increase or spike. Because of the large source of supply of LED, the LED rule will not reduce the fungibility of diesel supply; thus, we do not envision the same issues of supply disruptions that sometimes occur with other types of unique fuels.

The issue of the RIA is addressed under Issue 7.

1.7 State LED requirements will injure the railroad industry

AAR states that the costs of LED will be significant to the railroad industry even if only 4 cents/gallon as TNRCC estimates. This is significant to the railroad industry which purchases more than 4.1 billion gallons of diesel fuel annually.

Response: The commenter's argument about cost being a significant factor because of the large volume of diesel fuel purchased by the railroads is based on national diesel consumption. The LED will be sold only in a 110 county area in Texas. Based on year 2000 data from the Energy Information Agency's (EIA) ''Fuel Oil and Kerosene Sales 2000'' report, the amount of diesel used by railroads on a national basis is 3,290,507,000 gallons of which Texas railroads consume 504,360,000 gallons or approximately 15 percent. While there will be an increase in cost to the railroads, we estimate such increase to be 15 percent or less of their projected cost.

1.8 State LED requirements will impair future controls on railroads

AAR commented that implementing the LED rule for locomotives would significantly increase costs without offsetting environmental benefits. They cite a document entitled ''Statement of Principles: Houston/Galveston Ozone Nonattainment Area Railroad Program'' signed by USEPA, TNRCC, Burlington Northern & Santa Fe Railway Company, and Union Pacific Railroad Company. They claim they are committed to implementing measures to achieve greater emission reductions than those required under EPA's locomotive emissions regulations.

Response: We have addressed cost in our responses to Issues 1.1 through 1.6. We do not believe that the increase in cost of fuel will be prohibitive, nor do we believe that they will adversely affect business.

We agree with the commenter that locomotives are more fuel efficient than trucks, and so would have lower emissions on a ton/mile basis. Fuel efficiency is only one means to reduce emissions; however, having greater fuel efficiency does not mean that there is no room for improvement. If emissions are lower using LED, then locomotives would stand to have even greater emission reductions.

We also agree that approving the LED program in Texas does limit the measures available for the companies to meet the reduction targets agreed upon for the Statement of Principles in that this type of fuel will now be required. Sufficient alternatives still exist, however, that allow the companies to meet their emission reduction goals

1.9 State LED requirements will impair implementation of Federal low-sulfur diesel

ATA and BCCA commented that boutique fuels are contrary to sound public policy objectives because boutique fuels will jeopardize EPA's efforts to introduce ULSD in 2006. The ULSD requirement, in conjunction with tighter emission standards, will result in much greater emission reductions than the LED rule, especially when considering the negative impact of the LED rule on the refining industry's effort to comply with the ULSD rule. The refining industry's need to make substantial capital investments to produce ULSD fuel will be diverted to comply with the LED rule. BCCA supports efforts to align the Texas rule with EPA's national rulemaking.

BCCA commented that the existing distribution infrastructure for diesel fuel is not adequate to supply both LED fuel within Texas and EPA-specified fuels throughout the rest of the country. (Focused especially on low sulfur phase of LED rule.)

NPRA commented that the sulfur standard of LED program which takes effect in 2006 (15 ppm) is inconsistent with EPA's ultra low sulfur diesel (ULSD) program, also taking effect in 2006 but at a different date (9/1/06 for

[4] ''Lane miles'' are the product of miles and the number of lanes in a given area. Thus, a one-mile segment of six lane highway is equivalent to 6 lane miles. Lacking diesel fuel sales or use on a county-wide level, we felt that lane miles would serve as a relatively accurate surrogate for diesel use. We had considered using vehicle miles traveled (VMT) as a surrogate. VMT in the 110 county area makes up 95percent of total VMT in Texas, according to Texas Department of Transportation (TXDOT) statistics. The TXDOT statistics, however, include both diesel and gasoline vehicles on given lengths of road. Because ''lane miles'' do not include vehicle use, they serve as a better indicator.

[5] The figure of 8 percent was derived from EIA: ''Fuel Oil and Kerosene Sales 2000'' information compiled by the Federal Highway Administration, using the annual VMT for trucks in Texas and nationwide.

EPA, compared to 6/1/06 for LED) and with transitional flexibilities that permit the sale of some 500 ppm sulfur cap highway diesel fuel until the end of May, 2010 (which LED does not have.) Additionally, the EPA program includes a credit trading feature which would exclude LED fuel, thus resulting in the unintended consequence of creating an obstacle to the accomplishment of the transitional objectives of EPA's program. This could jeopardize the supplies of ULSD, which could in turn cause increased product price volatility, price spikes, and product outages. (Cites EIA report, The Transition to Ultra-Low Sulfur Diesel Fuel: Effects on Prices and Supply, May, 2001, especially chapter 5.)

Response: The commenter points out that the low sulfur standard of the LED program takes effect at a different date than the ULSD rule. There is only a three month difference, however. We do not believe this poses logistical difficulties. Also, the low sulfur requirement of the LED rule was established to harmonize with EPA's ULSD rule so that there would not be a significant difference in sulfur requirements.

The commenter also argues that producing LED will be difficult because of the efforts needed to meet EPA's ULSD rule in that this rule excludes LED fuel from the credit trading provision. The ULSD rule contains a provision that if a state requires more than 80 percent of its fuel to meet a sulfur limit of 15 ppm or lower, then it would be excluded from the credit transfer area, a region that generally follows the boundaries of the Petroleum Administration for Defense Districts (PADDs). Since the major concern in the ULSD rule was ensuring availability of 15 ppm fuel nationwide, credit transfers were limited to these areas.

Under this provision Texas would in effect become its own PADD, separate from PADD III. Because much of the refining capacity in PADD III is in Texas, the commenter is correct that the LED rule will limit the flexibility offered under the ULSD rule for refiners in Texas. The LED rule, however, will also result in more production of 15 ppm fuel in PADD III, and thus more availability of 15 ppm fuel. The market for LED fuel is certain, allowing refiners a reasonably accurate estimate for payback of the investments required to make this fuel. Finally, a state that obtains a waiver of preemption for fuels under section 211(c)(4)(C) of the Clean Air Act, (which we are granting to the State of Texas for the LED rule, as it applies to highway diesel fuel,) can adopt fuel controls that are non-identical to and that may be more stringent than federal requirements.

As indicated in the response to issue 1.6, because of the large area in which LED area would be required, we do not believe that supply and fungibility problems that are typical to fuels with unique specifications in small isolated areas will affect LED. The LED fuel will replace the diesel fuel currently used in the 110 county area. Since this area represents an estimated 60 percent of the diesel use in Texas, the area represents a dedicated market that refiners are currently servicing, and in close proximity to numerous refineries as noted in our response to issue 1.2. Those refiners who choose to make the LED fuel will have complied with the ULSD sulfur limits which would therefore not jeopardize EPA's efforts to introduce ULSD in 2006.

Issue 2: Benefits of the LED Rule and Program

2.1 The environmental benefit of the LED rule is uncertain or overstated because the analysis of the NO_X reduction benefit is flawed

ATA commented that Texas failed to establish baseline fuel parameters representative of local parameters, instead relying on national averages. Furthermore, Texas failed to establish whether the single prototype engine used by Heavy-Duty Engine Working Group (HDEWG) is representative of the 1990 and later model year engines that will be operating in the nonattainment area in 2005.

BCCA commented that Texas has overestimated the NO_X reduction benefit of LED fuel because EPA stated in the preamble to ULSD NPRM that the emission effects of regulating aspects of diesel fuel other than sulfur are ''rather small, and points out the limited test data on which ERG relied in making its 7/26/00 estimate . ATA agrees stating that Texas' estimate for older engines is suspect because it relied on CARB data, which is ''thin,'' and Texas mistakenly applied the wrong estimate from CARB. ATA further states that CARB claims only a 5.6 percent reduction for its diesel fuel rather than 7 percent as Texas uses for pre-1990 highway engines. (Cites CARB's EMFAC 2000 TSD, Section 10.9, 5/15/00, and say CARB mistakenly bases its estimate on 10 percent aromatic fuel. This is not used in California but ''equivalent'' formulas are used if they demonstrate equivalency using a 1991 Detroit Diesel engine. ATA says the appropriateness of using this engine to demonstrate fuel equivalency is the ''subject of great debate.'' They note that in 2005 the pre-1990 trucks will be 15 years old and will comprise only a very small percentage of the trucking fleet.)

ATA states that the emissions impact of altering gasoline fuel components is well understood, with several peer-reviewed studies, but the same scientific rigor has not been applied to estimating the emissions impact of altering diesel fuel components. (Cites Sierra Research, Inc. report, 3/20/98, and MathPro, Inc. and Energy & Environmental Analysis, Inc. report, 2/16/98.)

Furthermore, ATA states EPA has itself questioned the benefits of altering diesel fuel components, and has not yet completed its analysis. ATA said EPA will host a public workshop (which was held on 8/28/01) to ''receive comment on its preliminary evaluation of the emission reductions from LED fuel.'' ATA's preliminary analysis of EPA's model reveals significant statistical errors, rendering its predictive capabilities inadequate. It is impossible to make the Section 211 necessity determination without first accurately quantifying the emissions impact of using this fuel.

ATA states that there is bipartisan commitment to study the impacts of boutique fuels, in the form of a bill recently passed by the U.S. House of Representatives to require a joint DOE/EPA report by 12/31/01. Making a decision on the LED fuel before this report is produced is unwise and unnecessary.

BCCA encourages Texas to adopt the EPA diesel formulation without cetane and aromatics controls. AAR states that although TNRCC says there are additional emission reductions when low sulfur fuel is coupled with low aromatic content fuel, regardless of engine technology, the cost to achieve any such additional reductions, when compared to the emissions benefit, would be enormous. The direct effect on emissions of LED would be small. (Cites EPA's discussion of effects of fuel parameters on emissions, 64 FR 26142, 26147, 5/13/99.)

Response: In the preamble to our recent proposed rulemaking on the emission standards for heavy duty engines and the sulfur level of highway diesel fuel, EPA considered whether parameters of highway diesel fuel other than sulfur should be regulated. EPA's focus in that proposal was to enable diesel engines to meet much more stringent emission standards which EPA was also proposing. We believed that diesel engines could meet those standards with the use of advanced exhaust emission control systems, but the performance of these systems is dramatically reduced by sulfur. Other

fuel properties such as cetane levels and aromatics content did not appear to have the same impact as sulfur on the advanced emission control systems, although they could achieve immediate emission reductions by affecting the combustion process directly rather than by enabling the advanced emission control system. We noted, however, that those emission reductions effects are ''rather small,'' especially in comparison to the emission benefits projected to occur as a result of the more stringent emission standards and sulfur levels in highway diesel fuel that EPA was then proposing, and subsequently adopted. (See preamble to proposed rule, 65 FR 35430, 6/2/00, at 35519–35520. For final rule, described in the Issue 1 discussion as the ''ULSD rule'', see 66 FR 5002, 1/18/01.)

Although Texas, just as other states, will see the NO_X reduction benefits of this federal rule when the engine emission standards and the fuel sulfur controls are implemented, beginning in 2006–2007, it will not see significant NO_X reductions by 2007, the attainment date for the Houston area to achieve the 1-hour ozone standard. The full benefit of the federal rule will not be seen until significant fleet turnover occurs, when the newer engines meeting the more stringent emission standards are a bigger portion of the highway diesel fleet. Texas chose to impose restrictions on the cetane and aromatics levels of diesel fuel for both highway vehicles and nonroad equipment, realizing that the NO_X emission reductions would be immediate, even if the emission reductions would not be as large as those which will result from the Federal rule.

When we learned that Texas was claiming NO_X reductions from the cetane and aromatics controls in its low emission diesel rule, we were concerned about the size of the estimated benefits and the analysis upon which the estimate was based. In November, 2000, we initiated a project to analyze existing test data, rather than conduct new emissions testing, and developed a regression model approach to analyze the results and to develop a quantitative relationship between fuel parameters and emissions changes. In July, 2001, we made public a Staff Discussion Document [6] with the preliminary results of this analysis.

As part of our process in conducting this analysis, we had notified stakeholders of our project and asked for relevant data. As we prepared our preliminary conclusions, we met with numerous stakeholders to review these conclusions, beginning in May, 2001, and in response to requests from stakeholders, held a public workshop on August 28, 2001, to hear comments on the Staff Discussion Document. Although the comment period on the Staff Discussion Document remains open to October 30, 2001, we have analyzed the comments made at the workshop which have the most direct bearing on our NO_X benefit estimates for the LED rule, and believe it is appropriate to use the estimates from EPA's draft NO_X model in lieu of the estimates Texas originally claimed. More detail on EPA's review of these comments and our use of the draft NO_X model in estimating the NO_X benefits of the LED rule are in the memorandum dated September 27, 2001, from Robert Larson, Acting Director, Transportation and Regional Programs Division, EPA Office of Transportation and Air Quality, to Carl Edlund, Director, Multimedia Planning and Permitting Division, EPA Region VI. (See memo in docket for this rulemaking.)

As noted in Section I of the Staff Discussion Document, Texas claimed that use of LED fuel in the attainment year (2007) reduced NO_X emissions by 7 percent for older highway diesel engines (pre-1990 model year) and for nonroad engines, and by 5.7 percent for newer highway diesel engines (1990 and later model years). EPA's estimate is similar, but is given with respect to different engine categories, *i.e.*, we estimate that the use of LED fuel in 2007 will reduce NO_X emissions by 6.2 percent for highway or large nonroad diesel engines without EGR technology, and by 4.8 percent for highway or large nonroad diesel engines with EGR technology.

For this estimate, we are defining ''large'' nonroad engines as those engines with greater than 50 horsepower. ''EGR'' technology is ''exhaust gas recirculation'' technology, which we expect will play a significant role in new engines designed to meet EPA's 2004 heavy duty highway engine emission standards. We expect many of the new engines with EGR technology will be produced as early as 2002. Many nonroad diesel engines may also be produced with EGR technology in order to meet EPA's Tier 3 standards beginning with model year 2005. For small nonroad engines (less than 50 horsepower) which constitute a very small fraction of the nonroad engine emissions inventory, we have determined that we cannot assign a NO_X benefit on the basis of data considered by EPA.

This estimate is based on comparing the LED-like fuel to a baseline fuel with the same diesel fuel properties as those reported by the Alliance of Automobile Manufacturers (AAM) for nationwide average diesel fuel properties (excluding California). AAM data is based on surveys of fuel properties in various cities around the country, including San Antonio, but no other cities in Texas; we could not find any other source of data for Houston. The average fuel properties for San Antonio are very similar to the nationwide average fuel properties, but since we could not be certain that the San Antonio average fuel was a better representation of Houston fuel than the nationwide average, given the small differences between the two, we used the nationwide average fuel properties to represent the baseline fuel. (*See* issue 6 in the September 27, 2001 memo from Larson to Edlund.)

As to the use of estimates for newer engines based on results of the Heavy Duty Engine Workgroup (HDEWG), the use of California data for older engines, and the concern over a limited database, we refer to the discussion in both the Staff Discussion Document and the September 27, 2001, memo from Larson to Edlund (particularly issues 3, 4, and 5) regarding the size of the database, the names and dates of the 35 studies which EPA used in building its draft NO_X model, and the appropriateness of making estimates for newer model engines with more limited data points. One of EPA's concerns about Texas's original estimate was the reliance on California data, most of which was collected under the VE–1 program administered by the Coordinating Research Council and used by California in preparation for its October, 1988, report on the projected benefit of its proposed diesel fuel regulation, which was eventually adopted and implemented in 1993. We knew that many more studies relevant to this subject had been completed since 1988, and we have been able to use those studies in our project. With respect to the estimate in section 10.9 of California's EMFAC 2000 Technical Support Document of 5.6 percent for NO_X reductions for pre-1991 engines (as well as its estimate of 12.4 percent for NO_X reductions for 1991 and later engines) these are not the estimates EPA is using and approving today.

The discussion of issue 4 in the September 27, 2001, memo addresses the appropriateness of using data from the HDEWG program for newer engines. Although ATA expressed concern that

[6] ''Strategies and Issues in Correlating Diesel Fuel Properties with Emissions,'' Staff Discussion Document, EPA report number EPA420-P–01–001, July 2001. This document is in the docket for this rulemaking and is posted on EPA website at: *http://www.epa.gov/otaq/models/analysis.htm*

the estimate for 1990 and later model engines was based on the single prototype engine used by HDEWG, we note that EPA's estimate is based on data from more this single post-1990 engine, although we acknowledge that 1997 and newer model engines are not well represented in the database. In discussing Issue 4, we explain the reasons we think this does not affect the validity of the estimate, and we incorporate that discussion by reference here.

ATA commented that, although the emissions impact of altering gasoline fuel components is well understood, with several peer-reviewed studies, the same scientific rigor has not been applied to estimating the emissions impact of altering diesel fuel components. As we note in discussing issue 2 in the September 27, 2001, memo, most of the studies in our database have gone through some level of peer review, including 28 studies (out of 35) for which this was a requirement since they were published under the auspices of the Society of Automotive Engineers. We note other levels of review applicable to three more of the studies conducted through the Coordinating Research Council as well as EPA's own review of the quality of the studies before deciding to use the emissions data for our database. This level of review ensures there is scientific rigor to our process.

ATA also comments that a bill recently passed by the U.S. House of Representatives would require EPA and the U.S. Department of Energy to conduct a joint study of the impact of boutique fuels, and that EPA's approval of the LED rule in advance of this study is unwise and unnecessary. We note that, although ATA did not identify the bill, we believe they are referring to Section 603 of HR 4 which is pending action in the U.S. Senate but has not yet become law as of today. EPA is required to take final action on the SIP submittal for Houston by October 15, 2001, under a consent decree, and cannot base any aspect of its decision on this or any other Congressional bill which has not yet become law. Additionally, we have addressed concerns raised by this commenter and others regarding cost and feasibility of the LED rule in the responses to several comments related to issue 1 of the LED rule.

In summary, we believe the NO_X reduction benefits of the LED rule are estimated with reasonable certainty, and are not overstated. EPA carefully reviewed the available test data relevant to analyzing emissions impacts of LED fuel, subjected its analysis to public scrutiny, evaluated comments at a public workshop, and has concluded that its draft model is an appropriate predictor of NO_X emission impacts of the LED rule, as described above and in the September 27, 2001, memo from Larson to Edlund.

2.2 The environmental benefit of the LED rule is not properly accounted for or is insignificant because its reliance on low sulfur levels will not have impact until newer engines enter the fleet after 2007, or because low sulfur levels will not have impact on locomotives since they do not use engines which benefit from low sulfur fuel.

BCCA asserts that the emissions benefit for the LED rule is not properly accounted for since the program will not be mature in the attainment year (2007) and will not get the estimated benefit until the fleet turns over and there are more vehicles with exhaust treatment systems that can efficiently make use of the low sulfur LED fuel. TX should ''work with EPA and all the other areas in this predicament to develop a method for crediting these prospective reductions.''

AAR commented that there has been no showing that LED would have a significant impact on emissions, especially lower sulfur. AAR also noted in comments to TNRCC in its rulemaking process that EPA has refrained from requiring railroads to use low sulfur fuel because there would not be any meaningful environmental benefit. Sulfur levels in diesel fuel are controlled to enable the use of aftertreatment devices, but neither the railroad industry nor EPA expects such devices suitable for locomotives to be available in the foreseeable future. (In 1997, EPA noted that exhaust gas recirculation (EGR) systems would probably not be used by locomotive manufacturers due to technical problems, and that catalysts on locomotives are problematic. Cites OMS document, ''Locomotive Emission Standards: Regulatory Support Document'' p 87, 12/97.) TNRCC said, in response to AAR's objections, that control of non-road diesel fuel is necessary in terms of retrofit technology, but neither EPA nor the railroads expect that retrofit technology dependent on LED will be used on locomotives in the foreseeable future. (Cites TNRCC Rule Log 2000–011D–114–AI, p 44.)

Response: Texas is not relying on low sulfur levels in calculating estimated benefits of the LED rule, but relies only on the changes in cetane and aromatics levels, which will have an immediate impact on the current fleet. (*See* page 6–17 of the HGA Attainment Demonstration SIP.) As noted in the TSD, sulfur has no direct effect on NO_X reductions by itself. If low sulfur fuel is used with engines that have either been retrofitted or originally designed with aftertreatment devices or other methods of taking advantage of the low sulfur fuel, the combined effect is reductions in NO_X emissions.

2.3 The Environmental Benefit of Using LED Fuel Is Overstated Because Texas Has Failed To Account for Consumers Who Will Re-fuel Outside the Covered Area

ATA and TMTA assert that Texas has overestimated the benefit of using LED fuel because it did not account for refueling by consumers outside the covered area. ATA cites the Arizona report for the statistic that six times as many trucks refuel outside California as within California. As a result, the LED rule would likely result in more vehicle miles traveled with a corresponding increase in vehicle emissions. Additionally, long-haul trucks will fuel up before entering the covered area and eliminate any benefit assumed to derive from their use of LED fuel. Approving the waiver request in the absence of an accurate estimate of emissions reductions is arbitrary and capricious.

TMTA notes two reasons for refueling outside the covered area, as follows:

(1) The use of ''federal fuel'' has not been accounted for. Except for diesel vehicles which operate solely within the covered area, all other diesel vehicles traveling within the covered area have an incentive to purchase cheaper federal fuel outside the covered area. TMTA refers to California and Arizona statements (regarding the percentage of diesel vehicle miles or activity attributable to out-of-state vehicles or vehicles purchasing diesel fuel outside a covered area) as examples supporting a statement that the LED rule will not be able to affect the significant level of federal fuel use, and questions Texas' failure to anticipate an environmental difference between application of the LED rule statewide (as currently adopted) and application in only 110 counties (as currently proposed.) TMTA says the failure to account for the use of federal fuel in its estimates of potential emission reductions is contrary to law and must be remedied.

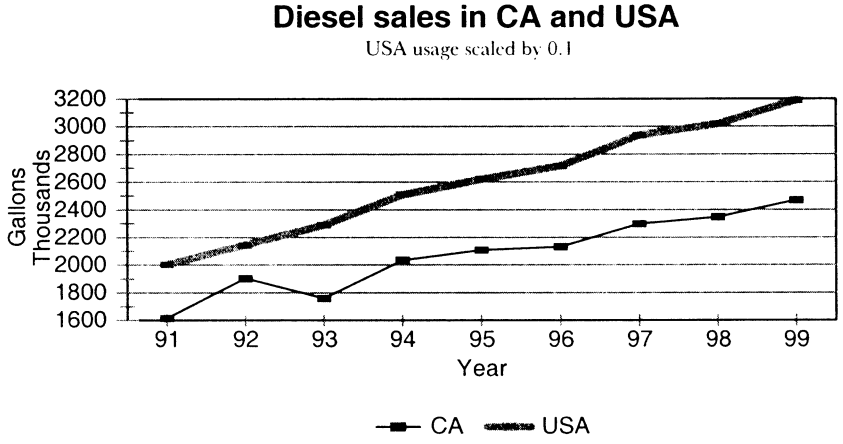
TMTA cites CARB EMFAC 2001 Workshop, 5/29/01, for the statement that according to California's emissions inventory model, 33 percent of the state's HD diesel vehicle activity is attributed to out-of-state vehicles. They also cite Arizona Department of Environmental Quality Deputy Director

Ira Domsky's report to the On-Road Mobile Sources Subcommittee, 11/00, CARB diesel evaluation-amount of locally purchased diesel fuel, for the statement that in the Phoenix metropolitan area, more than 70 percent of diesel vehicle miles are attributed to vehicles operating on diesel fuel purchased outside the area. (2) The cheaper ''federal fuel'' will be available across county and state lines, within 50 miles of the HGA and DFW nonattainment areas and adjacent to the BPA nonattainment area, so trucking companies will begin serving the covered area from primary or satellite operations based in Arkansas, Oklahoma, Louisiana, western Texas, and beyond. The real impact will be an increase in vehicle miles traveled, as trucks drive beyond the covered area to purchase cheaper fuel but presumably return to serve the covered area.

AAR argues that because locomotive fuel tanks have a capacity of several thousand gallons, locomotives travel for as much as 1,000 miles without refueling. Locomotives entering a state are fueled out-of-state, and much of the fuel they burn is out-of-state fuel. They argue that the converse is also true; *i.e.*, that locomotives fueled in-state burn a significant amount of that fuel out-of-state, so that the LED requirement would mostly benefit states other than Texas since most of the LED purchased in Texas would be burned in other states.

Response: Regarding the commenters' arguments that trucks will seek to refuel outside the covered area, we do not believe that this will be the case based on the usage pattern of diesel in California. Based on annual diesel fuel usage numbers compiled by the Federal Highway Administration (FHWA) from 1991 through 1999, we compared the slope of increase in diesel fuel use between California and nationwide. The diesel usage pattern for California and USA (derived from statistics compiled by FHWA[7]) shown in Figure 1 below however, does not indicate an abrupt change in refueling patterns in California.[8] Figure 1 indicates that in 1993 (the year in which California's diesel rule took effect) there is a slight decrease in use from the previous year. In all subsequent years, however, the increase follows a similar rate of increase as the nationwide rate.

Figure 1:



We also investigated the statement that the commenter attributes to the Arizona Department of Environmental Quality (ADEQ) that six times as many trucks refuel outside California as within California. On page 7 of ADEQ's April, 1999 report titled ''Explanation for Choosing not to Require CARB Diesel or Other 'Cleaner' Diesel Fuels in Maricopa County'' ADEQ states: ''ADEQ has been advised that, in California, six times as many long-distance trucks refuel outside California before entering the state than refuel in California before leaving.'' The referenced report, a copy of which is in the docket for this rulemaking, does not cite any source or other supporting data for this statement. As such, we believe that it may be anecdotal and is not supported by the California diesel usage shown in Figure 1. Alternatively, if it is true, it may be the case that this pattern existed even before California's diesel rule went into effect. The commenter has provided no data to support the conjecture that refueling patterns will change other than the apparently anecdotal evidence from Arizona, and statements that higher costs will cause trucks to refuel outside the covered area.

Taking California as an indicator, therefore, we do not believe that the trucking industry will reroute trucks in order to refuel outside the covered area. With respect to the statement that long haul trucks will seek to refuel out of state or outside the covered area, we note that according to the 1997 Vehicle Inventory and Use Survey, compiled by the U.S. Census, the majority of truck traffic in Texas remains in-state. Specifically, less than 25 percent of the miles traveled by the majority of truck traffic in Texas (70 percent) is outside of Texas. Also, the average range of operation or length of trip for approximately 76 percent of the truck traffic in Texas is less than 200 miles. Border-to-border travel distances for the 110 county covered area range from 153 to 454 miles. Based on these figures, we believe that the majority of environmental effects from use of LED by trucks comes from the in-state traffic, not from through traffic. We do not believe that the small amount of long-

[7] Available at: *http://www.fhwa.dot.gov/ohim/ohimstat.htm*

[8] National usage has been scaled by multiplying values by 0.1 for purposes of comparing rate of increase with California usage. FHWA usage figures are based on state motor fuel tax records. Motor fuel usage was split between gasoline and ''special fuel'' which includes diesel, liquid petroleum gas (LPG), and propane. Given that LPG and propane usage are relatively small compared to diesel, we believe that the special fuel usage numbers are adequate indicators of diesel usage.

haul traffic will change their refueling patterns significantly.

Regarding the argument that the benefit of the LED rule will be realized mostly out of state because of the size of the locomotive fuel tanks, the commenter fails to quantify how much of the fuel purchased out of state is burned in the Houston non-attainment area, or how much of the fuel purchased in the covered area is burned in this area. Even though some fuel purchased in Texas will be burned out of State, there will still be some amount of LED fuel purchased and burned within the Houston nonattainment area which would result in some emission reduction there. As we noted in the response to Issue 1.7, 15 percent of national railroad purchases of diesel fuel are in Texas. So we expect the emission reduction would still be significant.

2.4 The Environmental Benefit of the LED Rule Is Uncertain or Overstated Because Texas Has Failed To Determine How Alternative Formulations Will Be Tested To Determine if They Achieve Equivalent Emission Reductions

ATA asserts that Texas has failed to determine how alternative formulations will be tested to determine they achieve equivalent emissions reductions. The proposed rule has no explanation of the baseline fuel to be used for comparison with the alternative formulation; there is no mention of which engines are tested for equivalency; and there is no mention of what operating conditions are simulated.

Response: Both the proposed and final versions of the LED rule for the Houston SIP, as submitted to EPA in December, 2000, include provisions for determining how alternative formulations will be tested to see if they achieve equivalent emission reductions. No changes have been made to these sections in the revisions requested for parallel processing by the Governor on June 15, 2001, or in the final version of the LED rule adopted September 26, 2001, submitted to EPA on October 4, 2001, and approved by EPA in today's rulemaking. (*See* rule revisions on TNRCC website at *http://www.tnrcc.state.tx.us/oprd/sips/houston.html#revisions,* and in Rule Log 2001–007d–114–AI.) These provisions, as specified in section 114.312(g), are in section 114.315(c) of the LED rule, and are modeled on the procedures used by California in determining equivalent emission reductions of alternative formulations of California diesel fuel. (*See* Title 13, California Code of Regulations, 2282(a)(1)(C) and (g).)

Although the LED rule provisions for this purpose are not identical to those of California, they are very similar. The LED rule provides for testing the ''candidate'' fuel, *i.e.,* the alternative formulation, against a ''reference'' fuel, *i.e.,* the baseline fuel, which must have cetane, aromatics and sulfur levels meeting the standards for ''conventional'' LED fuel. The two fuels must be tested for exhaust emissions using a Detroit Diesel Corporation Series-60 engine or an engine specified by the applicant and approved by the executive director of TNRCC to be equally representative of the post-1990 model year heavy duty diesel engine fleet. A minimum of five exhaust emission tests must be conducted in accordance with Federal Test Procedures for Control of Emissions from New and in-Use Highway Vehicles and Engines: Emissions Regulations for New Otto-Cycle and Diesel Heavy Duty Engines—Gaseous and Particulate Exhaust Test Procedures, dated 1998. (40 CFR part 86, subpart N.) These procedures are for transient cycle testing, which is intended to represent actual in-use driving conditions.

Alternative formulations can only be approved by the executive director of TNRCC if the director finds that the candidate fuel has been properly tested in accordance with these provisions and makes the determinations specified in section 114.315(c)(5) regarding the average individual emissions of the candidate fuel compared to those of the reference fuel.

2.5 A Process Is Needed To Protect Consumer Interests During the Development of Alternative Emission Reduction Plans

TMTA stated that a process is needed to protect consumer interests during the development and approval of alternative emission reduction (AER) plans under proposed section 114.318, which allows producers to submit plans for substitute fuel strategies that are determined to achieve an equivalent level of reductions as the LED fuel which is regulated specifically. TMTA acknowledges that TNRCC's executive director and EPA must approve such AER plans, but notes the lack of details and the potential for market manipulation that may result if each proposal is not given proper scrutiny by affected entities. TMTA requests that a process be instituted to enable diesel fuel users to evaluate and comment on any proposed AER plan submitted to TNRCC.

Response: EPA made comments to TNRCC on July 2, 2001, regarding section 114.318 and the ability of producers to submit AER plans. (See letter dated July 2, 2001, from Thomas Diggs to Herbert Williams in the docket for this rulemaking.) We expressed similar concerns about the implementation of this section and the ''market share'' approach it seems to allow for estimating equivalency of emission reductions. Since EPA's approval of such plans is required, in addition to approval of TNRCC's executive director, we will be working with TNRCC on the implementation of this section, and will consider the request made by this commenter as the procedures are developed, by providing for public notice and comment.

Issue 3: Federal Preemption and the Necessity Showing Under CAA Section 211(c)(4)(C)

3.1 General Preemption Comments

ATA and BCCA argue that the federal Clean Air Act preempts the LED rule under 211(c)(1), and Texas has failed to meet the statutory test for a waiver of preemption under CAA 211(c)(4)(C) and object to EPA's finding.

ATA and BCCA support adopting federal diesel rules for Texas. EPA should use this opportunity to move the overall national regulatory strategy for diesel fuel away from the patchwork quilt of boutique fuels towards a single national fuel standard, as Congress originally intended. In regulating mobile sources under the Clean Air Act, Congress intended to avoid subjecting mobile sources to a patchwork quilt of separate state controls, recognizing that allowing each state to go its own way could be difficult for manufacturers and users. ATA cites Senate report No. 192, 89th Congress, 1st Session. 5–6 (1965).

Response: The statutory preemption in CAA section 211(c)(4)(A) and the corresponding standard in section 211(c)(4)(C) for a ''waiver'' of this statutory preemption are central to many of the issues raised by commenters. To the extent that a waiver of preemption is required, EPA believes that Texas has met the statutory criteria for justifying EPA's approval of the LED measure into the HGA SIP, thus waiving federal preemption of the state's fuel measure for highway diesel fuel.

As we explained in the preamble to the Notice of Proposed Rulemaking and in the Technical Support Document, section 211(c)(4)(A) generally prohibits the state from prescribing or attempting to enforce controls respecting motor vehicle fuel characteristics or components that EPA has controlled under section 211(c)(1), unless the state control is identical to the federal control. This statutory preemption does

not apply to the state's control of fuel content for nonroad engines, since this fuel is not used in ''motor vehicles'' as that term is used in the CAA. Thus, the Texas LED rule, which applies to diesel fuel for both highway and nonroad use, is not preempted under this statutory provision to the extent it applies to diesel fuel for nonroad use.

For a state fuel control which is subject to the section 211(c)(4)(A) preemption, the CAA does provide an exception in section 211(c)(4)(C). Under this section, EPA may approve a non-identical state fuel control as a SIP provision, if the state demonstrates that the measure is necessary to achieve a NAAQS. EPA may approve an otherwise preempted state fuel measure as necessary if no other measures would bring about timely attainment, or if other measures exist and are technically possible to implement but are unreasonable or impracticable. EPA may make a finding of necessity even if the plan for the area does not contain an approved demonstration of timely attainment.

EPA has reviewed numerous state fuel controls for approval into SIPs under section 211(c)(4)(C). In 1997, EPA issued guidance for EPA regions and States on the use of fuel options in ozone SIPs. (See ''Guidance on Use of Opt-in to RFG and Low RVP Requirements in Ozone SIPs,'' August, 1997, U.S. Environmental Protection Agency, Office of Mobile Sources, at: *http://www.epa.gov/otaq/fuels.htm#rvp.*) This guidance was directed primarily at state requirements for low Reid Vapor Pressure (RVP) of gasoline, since that was the principal type of fuel control which states had adopted to date. It sets forth guidelines for application of the statutory test in section 211(c)(4)(C), explaining the following demonstrations which a state should make in showing that its fuel measure is ''necessary,'' and justifying its request for a waiver of preemption:

(1) Identification of the quantity of reductions needed to reach attainment;

(2) Identification of other possible control measures and the quantity of reductions each would achieve;

(3) Explanation for rejecting alternative control measures as unreasonable or impracticable; and

(4) Demonstration that reductions are needed even after implementation of reasonable and practicable alternatives, and that the fuel measure will provide some or all of the needed reductions.

Texas followed these guidelines in making its request to EPA for approval of the LED measure into the Houston SIP. EPA agrees that Texas has demonstrated the need for the LED measure pursuant to the statutory test in section 211(c)(4)(C), as explained in detail in the TSD. We address specific comments on the details of this necessity showing in responses to Issues 3.2 through 3.9 below.

We acknowledge, as ATA notes, that Congressional intent in regulating mobile sources of air pollution was to avoid a ''patchwork quilt'' of separate state controls in an effort to prevent difficulties for manufacturers of vehicles and fuels, and that this is consistent with the statutory preemption of state fuel controls in section 211(c)(4)(A). Congress specifically provided an exception to preemption, however, in section 211(c)(4)(C) for state fuel controls that are necessary for achievement of a NAAQS. This exception is consistent with Congressional intent for state flexibility in choosing control measures in meeting federal CAA requirements. This statutory scheme balances the need for national uniformity against the state's flexibility to choose the most appropriate control measures for each state.

EPA recognizes the concerns associated with the potential disruption caused by numerous state (or ''boutique'') fuels. In most situations, EPA believes that a uniform national program is the best way to protect public health and minimize disruption to the country's efficient fuel distribution network. As the number of state fuels increases, so do the potential problems associated with a disruption of the fuel distribution network. Therefore, EPA's general expectation is that states will limit state fuel programs that differ from Federal standards to situations where local or unique circumstances warrant control. Texas has demonstrated that the Houston area's attainment of the 1 hour ozone NAAQS in 2007 can only be achieved with a combination of all reasonable control measures, including the LED measure, that are being adopted now, together with an enforceable commitment to adopt control measures in the future to fill the emissions shortfall which remains after adopting the current control measures.

3.2: Explanation of Why Other Control Measures Are Unreasonable or Impracticable

ATA states that under the statutory test for waiver of preemption, Texas has failed to analyze whether other control measures could be implemented to achieve the ozone NAAQS.

ATA further argues that in analyzing whether other control measures are ''unreasonable'' or ''impracticable,'' EPA must independently determine whether the state has met a very heavy burden in showing that all other ozone control measures are either incapable of being performed or not reasonable because their implementation might result in exorbitant costs or be viewed as an irrational choice for pollution abatement. To merely find that a boutique fuel will reduce air emissions or is less costly or easier to implement than an alternative control measure is an insufficient basis for approving a fuel preemption waiver, and would render Section 211 meaningless.

Response: Section 211(c)(4)(C) currently provides, ''The Administrator may find that a State control or prohibition is necessary to achieve that standard if no other measures that would bring about timely attainment exist, or if other measures exist and are technically possible to implement, but are unreasonable or impracticable.'' ATA argues that whether an alternative control measure is reasonable or practicable must be determined in absolute terms, without comparison to the fuel measure being considered. EPA does not agree that this type of determination is compelled by the Act. To the contrary, the current language of section 211(c)(4)(C) represents Congress' ratification of EPA's long held interpretation that States may justify a fuel control as necessary when the alternatives by comparison would be more drastic, unpopular, costly or slower to implement.

The ''reasonable and practicable'' language in section 211(c)(4)(C) that ATA points to derives from EPA's interpretation of the pre-1990 language of 211(c)(4)(C). *See* 53 FR 30224, 30228–29 (Aug. 10, 1988) (Maricopa County SIP Approval). Before the 1990 Clean Air Amendments, the Act allowed SIP approval of otherwise preempted state fuel controls if such controls were ''necessary'' for timely attainment, but the Act was silent on the criteria for determining what was ''necessary.'' In amending the Clean Air Act in 1990, Congress adopted EPA's interpretation of ''necessary'' directly into the statutory language.

Because Congress effectively ratified EPA's pre-1990 interpretation of ''necessary,'' it is valuable to review EPA's approach in making the necessity determination in SIP approvals prior to the 1990 Amendments. In those rulemakings, EPA repeatedly made clear that the determination of whether there were other reasonable or practicable alternatives involved some comparison with the proposed State fuel control. *See* 54 FR 19173, 19174 (May 4, 1989) (''EPA need look at other measures

before RVP control, only if it has clear evidence that RVP control would have greater adverse impacts than those alternatives. EPA has no such evidence here. Therefore, EPA can defer to Massachusetts' apparent view that RVP control is the next less costly (or is itself reasonable) measure. Thus, EPA concludes that Massachusetts' RVP regulations are 'necessary' to achieve the NAAQS.''); 54 FR 23650, 23651 (June 2, 1989) (finding same in approving Connecticut and Rhode Island RVP programs); 54 FR 37479, 37481 (Sept. 11, 1989) (stating in approval of Maine RVP, ''In addition, none of the available control strategies which could achieve the same magnitude of reductions as limiting the RVP of gasoline can be as quickly implemented'').

ATA's argument is not new. In comments on both the New York and New Jersey RVP SIP approvals, commenters claimed that, ''EPA's method for determining what is necessary is too vague because it would allow EPA to approve state fuel controls 'simply because alternative measures are more inconvenient, unpopular, or costly.' '' 54 FR 25572, 25574 (June 16, 1989); *see* also 54 FR 26030 (June 21, 1989). In responding to these comments, EPA explained:

> This judgment concerning what is too drastic is a complicated policy determination requiring the Administrator to weigh precisely those factors which the commenter would exclude from [the Administrator's] consideration—whether the remaining alternatives are costly or unpopular. * * * EPA's and New Jersey's analysis of reasonably available controls is based on a factual record supported by the best analytical tools the agencies had available to them at the time. EPA's judgment that State fuel regulation is a less drastic course than gas rationing and other unpopular controls so far not implemented in any SIP is clearly a matter on the frontier of air pollution control planning, and therefore cannot (and need not) be supported by the same technical record as, for example, EPA's determination of [the emissions reductions needed] to attain the standard.

54 FR at 25574; *see also* 54 FR at 26033. In both the New Jersey and New York approvals, EPA reiterated the comparative nature of the analysis of alternatives:

> To be sure, if there were sufficient evidence for EPA to conclude that the state's RVP controls would result in significantly more severe impacts than other measures that neither EPA nor the state has yet identified as ''reasonable'' for the state to implement, then it might well be appropriate for the Agency to account for the emission reductions that those other measures would achieve before determining the shortfall against which to judge the RVP controls. The Agency does not believe, however, that the State's RVP control would produce significantly more severe effects than such alternatives (e.g., than a trip reduction ordinance of the type that Arizona found reasonable for application in Phoenix and Tucson).

54 FR at 26034–35; *see also* 54 FR at 25576.

EPA's current interpretation is consistent with the pre-1990 interpretation implicitly adopted by Congress. EPA's August 1997 *Guidance on Use of Opt-in to RFG and Low RVP Requirements* (''1997 Guidance'') explains:

> In determining whether other ozone control measures are unreasonable or impracticable, reasonableness and practicability should be determined in comparison to the [fuel] measure that the state is petitioning to adopt. This is not an abstract consideration of whether the other measures are reasonable or practicable, but rather a consideration of whether it would be reasonable or practicable to require such other measures in light of the potential availability of the preempted state fuel control. Some measures may be reasonable and practicable for certain areas of the country, but given the advantages of a [fuel] requirement under the specific circumstances of the particular area, the other measures may be comparatively unreasonable or impracticable. Finding another measure unreasonable or impracticable under this criteria would not necessarily imply that the measure would be unreasonable or impracticable for other areas, or even the same area, under different circumstances.

1997 Guidance at 6.

The Guidance also reviews factors which may be used in comparing control measures, as follows:

> While the basis for finding unreasonableness or impracticability is in part comparative, the state still must provide solid reasons why the other measures are unreasonable or impracticable and must demonstrate these reasons with adequate factual support. Reasons why a measure might be unreasonable or impracticable for a particular area include, but are not limited to, the following: length of time to implement the measure; length of time to achieve ozone reduction benefits; degree of disruption entailed by implementation; other implementation concerns, such as supply issues; costs to industry, consumers and/or the state; cost-effectiveness; or reliance on commercially unavailable technology. A strong justification for finding a measure unreasonable or impracticable may depend upon the combination of several of these reasons. Regions should consider as many of these factors as may apply in evaluating each measure that a state rejects as unreasonable or impracticable. Also, small differences in overall costs or cost-effectiveness are generally not sufficient to make a measure unreasonable, and states should not attempt to justify fuel requirements on that basis alone. Cost is one component of an overall assessment of comparative reasonableness and practicability.
>
> For example, two programs may achieve comparable emission reductions, but implementation of the measure other than the state fuel measure may involve substantially more disruption by requiring development and imposition of a new state regulatory program, together with significant capital investment in necessary technology. In addition, these hurdles to implementation may mean that there would be a substantial comparative delay in emissions reductions. Under such circumstances, the other measure may well be unreasonable in comparison to a fuel requirement.

1997 Guidance at 6.

EPA believes this interpretation reasonably preserves a State's ability to address its air quality problems in an efficient and timely manner. It also reflects the reality that the reasonableness and practicability of control measures is dependent on the circumstances faced in a particular area and the suite of options available to address the particular problems. EPA also believes, contrary to ATA's claim, that Texas has analyzed whether other control measures could be implemented. EPA reviewed that analysis in the TSD, and responds to specific comments on that analysis in responses to Issues 3.4, 3.5, and 3.6 below.

3.3: Explanation of Why Other Control Measures Are Unreasonable or Impracticable-Premature To Assess This Now When Texas Must Still Identify Future Control Measures To Fill the Emissions Shortfall, and the LED Rule Will Not Be Implemented Until 2005

ATA and TMTA commented that because the Texas SIP contains only enough control measures to achieve the NAAQS in part, and leaves a NO_X emissions shortfall for which Texas makes an ''enforceable commitment'' to fill in the future, it is premature to determine whether the State has met the statutory test of necessity when it is impossible to analyze other possible control measures. EPA must review the additional control measures Texas will adopt in the future before making a Section 211(c)(4)(C) determination on the LED measure, which will not take effect until 2005.

ATA further states that by delaying implementation of the LED rule until 2005, Texas has made it premature for EPA to grant a fuel waiver since Texas must determine by 2004 what other measures will be used to meet attainment. One stated purpose of the delay to 2005 is to allow for alternative emission reduction plans, but despite this purpose, Texas is asking EPA to grant a preemption waiver for a fuel that

will not be used for four years. It is impossible to predict what mix of control measures will be needed in 2005 to reach attainment in 2005 and beyond. EPA should conduct a public workshop and publish a formal request for information to identify all potential NO_X control measures, obviating the need for boutique fuel formulations.

Response: EPA disagrees with commenters' claims that necessity cannot be determined until all of the control measures necessary for demonstrating attainment have been identified. The interpretation offered by ATA and TMTA would be in direct conflict with the language of 211(c)(4)(C) and has been repeatedly rejected by EPA.

ATA and TMTA argue that because the SIP identifies a shortfall in the needed emissions reductions and commits the State to implement control measures in the future, it is premature to find the fuel measure necessary because other measures will need to be adopted and may be more reasonable. Under this interpretation, no state fuel controls could be approved into a SIP unless the SIP provided a final demonstration of attainment. For all other SIP revisions, where a shortfall of emissions reductions is identified, a fuel control could not be found to be necessary because other alternative controls would eventually need to be adopted and those other measures may be more reasonable than the fuel measure or provide sufficient benefits to offset the need for the fuel control.

This result is expressly rejected by section 211(c)(4)(C), which provides ''The Administrator may make a finding of necessity under this subparagraph even if the plan for the area does not contain an approved demonstration of timely attainment.'' In other words, Congress expressly allows approvals of fuel controls into a SIP before a final demonstration of attainment is made.

The language in 211(c)(4)(C), added as part of the 1990 Amendments, again represents a ratification of EPA's pre-1990 interpretation that necessity under 211(c)(4)(C) can be demonstrated even though the SIP approval acknowledges an emissions reduction shortfall and implicitly anticipates the need for additional future controls. *See, e.g.,* 54 FR at 37481 (proposing approval of a Maine State fuel control); 54 FR at 19174 (approving a Massachusetts State fuel control); and 54 FR at 23652 (approving State fuel controls for Connecticut and Rhode Island). In the 1989 approvals of the New York and New Jersey low RVP control programs, EPA explained that it does not interpret section 211(c)(4)(C) to require a complete demonstration of attainment in order to approve a fuel control measure:

> Forcing a state to demonstrate attainment before allowing it to adopt stricter fuel controls would yield perverse results. Areas with the worst ozone nonattainment problems, which have the most difficulty assembling a demonstration of attainment, would be disabled for perhaps several years from adopting clearly necessary controls. * * * Several commenters noted that New Jersey so far has not been able to identify any combination of control measures which would bring the State into attainment. It is precisely in areas like New Jersey, with an especially difficult nonattainment problem, where the expeditious implementation of new controls, and hence the finding of necessity under section 211(c)(4)(C), is most appropriate.

54 FR at 25573–74; *see also* 54 FR at 26032 (finding same for New York).

ATA also suggests that because additional controls must be identified in 2004, before the LED implementation date in 2005, EPA cannot determine that reasonable and practicable alternatives will not be available. TMTA argues further, that the finding of necessity is inconsistent with EPA's presumption that such reasonable or practicable controls will be available by 2004.

At the outset, TMTA's assertion that EPA has presumed reasonable and practicable measures will be available in the future is unfounded. Texas developed a list of measures that it is able to implement but could still not provide enough NO_X reductions to meet the attainment goal. As a result, the State must look to the future for emerging technologies and other newly available measures to fill its enforceable commitments. EPA's approval of the SIP with enforceable commitments, however, is not dependent on any assumption as to the reasonableness or practicability of these future controls. In all likelihood, the State will need to explore more and more drastic control measures to fulfill the enforceable commitments made in this SIP.

EPA and the State have canvassed an extensive array of control measures and adopted or counted the emissions reductions of a number of measures that have not been implemented as part of any other SIP. These options reflect the combined efforts of multiple agencies and stakeholders and represent the set of controls that these groups believed were worthy for State consideration. This list will certainly change over time, as will the assessment of the reasonableness and practicability of these controls. It is not reasonable, however, to prevent the State from moving forward with fuel controls based on the inherently changing nature of the list of alternatives. Based on the information before the State and EPA at this time, it is reasonable to conclude that the LED program is necessary under 211(c)(4)(C) because the alternatives known to the agencies are not considered reasonable and practicable at this time. Whether new controls are identified in the future or currently identified controls become more reasonable at a later date, does not affect the rational basis supporting EPA's action today.

ATA's claim that necessity cannot be demonstrated until later because the State has provided lead time for implementing the LED control that extends beyond the 2004 date for identifying additional controls, further ignores the reality of the situation being faced by the State. The State concluded that significant lead time will be required for refineries to implement the LED program. Notwithstanding the extended time needed for implementation, the State and EPA have still concluded that the control is necessary because no other reasonable or practicable alternatives are available that would achieve timely attainment. If the State were forced to wait until 2004 to finally adopt the LED program into the SIP, it could be 2009 before the program could be reasonably implemented. Alternatively, if the State maintained the LED program as an adopted program but waited for SIP approval around 2004, refiners would be put in the difficult position of trying to decide whether to make the necessary investments to comply with the State rule should it be approved. Neither outcome is a reasonable approach to implementing the Clean Air Act and neither is consistent with section 110(a)(2) of the Act which requires attainment ''as expeditiously as practicable.''

3.4 Explanation of Why Other Control Measures Are Unreasonable or Impracticable—Measures for Which There Is No Explanation of Justification

ATA shows there are 21 control measures listed in Appendix L of the HGA SIP for which Texas claims it had insufficient information to evaluate for possible adoption. This list of measures contains no explanation why they meet the statutory standard of being ''unreasonable or impracticable'' to adopt.

TMTA also argues that Texas failed to explain why other more cost-effective measures are unreasonable or impracticable. Some of the measures in Appendix L, the ''initial list of brainstorming ideas,'' were transformed

into proposed rules while others were not. For those measures not incorporated into the SIP, Texas has not justified why these measures were deemed ''unreasonable or impracticable.'' A more thorough review is necessary.

Response: Appendix L consists of the list of more than 200 brainstorming ideas that was generated by TNRCC (State of Texas), EPA Region 6, California contacts, and stakeholders. The process of brainstorming involves listing all ideas suggested without making any judgment on them, and without necessarily knowing what each idea entails. The list was later categorized by the State to reflect its evaluation of the merits of each option as known at that time. When the list was developed during the SIP development process, not much was known about some of the options. Many that fell into that category turned up on ATA's list of measures for which it claims a more thorough review is necessary. At the time the SIP was adopted, the State continued to lack sufficient information for most of these measures to make an informed decision about credit values that could be assigned to them as well as effective implementation strategies. Other criteria that were used to determine if options were reasonable or practicable are whether legislative authority would be necessary and the difficulty (hence the effectiveness) of enforcement to bring about real reductions. Most of these measures have not been adopted into ozone SIPs anywhere in the country. A few of these measures may be re-considered for future attainment plans to fill the emissions shortfall, or have been incorporated into HGA's programs for Voluntary Mobile Emissions Programs (VMEP) and/or Transportation Control Measures (TCM) for very limited, if any, credit in current or future attainment plans, but are so small that they could not begin to fill the 56 tpd NO_X emissions shortfall.

Control option	What we know/what we don't know
Require purchase of emission reduction credits to offset upset emissions of NO_X.	The State is uncertain about what this idea entails. There is already a provision in the current Mass Cap and Trade rules covering exceptional circumstances.
Expanded I/M Light-duty diesel & Expanded I/M Heavy-duty Diesel.	EPA has not certified a technology for diesel inspection and maintenance that addresses NO_X reductions; this is still an emerging technology. The State has listed Diesel I/M as a possible future control strategy on p. 7–40 and 43 of the HGA SIP attainment demonstration.
Remove speed bumps & Traffic calming (reduce fast starts/stops).	These Transportation Control Measures appear to do the same thing by eliminating starts and stops. Preliminary studies have shown the benefit to this TCM to be in pounds per day rather than tons per day.
Restrict private traffic control officials on Regional Computerized Traffic Signal System streets (RCTSS).	This measure would prohibit businesses from placing cops-for-hire at exits to employee parking lots at close of business. This type of traffic control activity conflicts with automated signalization on the RCTSS streets. The benefit is dubious based on the amount of idling that would result in the employee parking lot while motorists waited to dart into moving traffic. No known studies on this.
Consider merging all regional mass transit into 8-county mass transit authority to better coordinate programs.	Implementing this measure would require a legislative change as well as local voter approval. The benefit, if any, for this measure is unknown, and would depend on the success of such a merger in increasing use of mass transit and decreasing VMT. This could take many years to establish.
New technology (Guided bus)	No one knows enough about this new technology to know if implementing this technology would produce a benefit or be cost-effective.
TRANSTAR expansion & TRANSTAR: Incident detection system (covers 20 miles of freeway corridor).	TRANSTAR expansion appears in the VMEP but is assigned zero credit for implementation.
Air conditioner use assumptions in emissions model plus reduction options.	These are not control measures, therefore cannot be considered as a reasonable or practicable measure. When MOBILE6 is released for use, these factors will be included in future modeling. They are not included in MOBILE5 modeling which is required for use in this attainment demonstration.
Adjustments to Modeling assumptions: Emissions model deterioration rate.	
Adjustments to Modeling assumptions: Speed controls by type of vehicle.	The State is uncertain which type of vehicles would be speed controlled and in what manner.
2005 Registration fee for diesel engines. To be waived for CNG engines.	Texas Senate Bill 5, signed by the Governor on June 14, 2001, imposes a surcharge on the registration of a truck-tractor or commercial motor vehicle in an amount equal to 10 percent of the total fees due for the registration of the truck-tractor or commercial motor vehicle. This was effective September 1, 2001. There would be little if any NO_X benefit to convert to CNG because CNG is directed more toward non-methane hydrocarbon, CO2, mass of particulate matter, and air toxic emissions.
Combustion control (Off-road mobile sources)	Senate Bill 5 (TERP) also addresses this control option. See response to issue 3.5 for description of TERP, and issue 3.6 for explanation of how TERP emission reduction credits in excess of credits from repealed rules can help fill the emissions shortfall.
Fertilizer substitutions	Fertilizer is a part of the NO_X emissions inventory under biogenics (18 tpd). Reducing the biogenic portion of the inventory has not been studied enough to provide any certainty on effective control measures.
Airplane ground operations—taxiing; scheduling	Although planning of airline operations during rush hours to reduce idling on runways to reduce emissions may have merit, the State does not have the authority to impose regulations on airlines to require this planning. The Federal Aviation Administration has jurisdiction over airline operations once the aircraft leaves the gate. The State executed agreed Orders with the major airlines and the City of Houston to achieve emission reductions from Ground Support Equipment (GSE) at airports in the HGA area, which does not apply to planes.
Contract incentives (construction industry)	This measure is being implemented in the HGA VMEP as one part of the Local Government Emission Reduction Program. Credits generated from the Texas Emission Reduction Plan (TERP) can be used in this measure once they become available.

Control option	What we know/what we don't know
Regulate speed and course in Texas water of Gulf of Mexico	The Houston-Galveston Area Council investigated this control measure as part of the VMEP. It was not considered feasible for the HGA area. Two reasons were cited. Ships already operate at reduced speed during their time in the Houston Ship Channel so only small speed reductions are possible. Second, even small reductions in speed raise safety concerns by the Harbor Pilots because of potential loss of steerage.
Emission controls (offshore sources) & Restriction on use of off-shore equipment at certain times of day/week/season.	EPA, along with the U.S. Department of Interior—Minerals Management Service conducted a modeling evaluation of the impacts from emissions of offshore sources on ozone nonattainment areas in Texas and Louisiana. A field study was conducted in 1993, and the final report was completed in 1995. Based on the modeling completed, the overall impact from these offshore sources was deemed to be small. Texas has limited ability to regulate offshore sources, being confined to those sources within State waters (within 10 miles of the coast). Section 209(e) prohibits State controls of non-road engines unless the measure is identical to one approved by EPA for California. See Engine Manufacturers Ass'n v. EPA, 88 F. 3d 1075 (D.C. Cir. 1996).

3.5: Explanation of Why Other Control Measures Are Unreasonable or Impracticable-Measures for Which There is Inadequate Explanation of Justification

ATA comments that there are eight categories of control measures rejected by Texas which cannot be summarily dismissed as unreasonable or impracticable. EPA failed to conduct an independent analysis of these rejected measures, and failed to analyze whether each rejected measure is, by itself, unreasonable or impracticable but only compared each measure to the LED rule. Finally, the list of 200 measures which Texas relied on in its planning process is dated 2/99, more than two years ago, and is outdated, especially considering the 2005 implementation date of the LED rule. The eight categories are:

(A) Expanding control measures beyond the HGA non-attainment area (focus is on Major Point Source NO_X reduction controls, *i.e.*, power plants)

(B) Expanding vehicle I/M requirements.

(C) Expanding speed limit reductions.

(D) Expanding vehicle idling restrictions.

(E) Three variations of driving restrictions.

(F) Four control measures identified in App L as ''economically infeasible,'' including LED fuel. The others are an emission-based registration fee; a clean-fueled shuttle; and a gas tax increase.

(G) Accelerated purchase of low NO_X engines (Tier 2 and Tier 3 diesel equipment) and early (pre-2004) introduction of lower emission HD trucks and buses through market-based incentives.

(H) Construction shift.

Response: ATA claims the list of 200 measures used in the Texas planning process is outdated, especially considering the 2005 implementation date of the LED rule. Although the list is outdated in some respects with more than two years of hindsight, we disagree with the implication that it was not reasonable for Texas to proceed from that list to choose measures such as the LED rule which will be implemented several years in the future. As noted above in our response to issue 3.4, the Texas planning process for this 2001 attainment demonstration deadline involved numerous stakeholders and a time-consuming review of measures which originated with brainstorming and progressed to an evaluation of the then-known advantages and disadvantages of the 202 measures listed in Appendix L. The planning process led to choices for the State's rulemaking effort, another time-consuming process which is required in order to provide public notice and comment on the State's proposed controls and to meet the CAA standards for SIP measures. Following adoption is the time required to implement the measures, which in some cases may take several years.

The process beginning in 1999 or earlier is necessary to meet the 2001 deadline and the eventual 2007 attainment date. The CAA specifically requires interim deadlines or milestones for states with attainment dates many years in the future in order to prevent a state from waiting until the last minute to find ways to achieve attainment, in recognition of the time required to identify, evaluate, propose, adopt, and implement controls. Some of the rejected measures in Appendix L will be re-considered by the State to fill the emissions shortfall from this attainment demonstration, but Texas made reasonable decisions in choosing from measures identified in 1999 from which it has proceeded to adopt the measures we are approving today.

The first four measures listed above are measures which ATA claims could be adopted in the areas beyond the HGA non-attainment area and have not been analyzed sufficiently to reject them as reasonable alternatives to the LED rule. We disagree. In addition to considering and adopting control measures within the three ozone non-attainment areas in Texas (HGA, DFW, and BPA) to meet their respective attainment obligations, Texas considered adopting many of the same measures for the 95 attainment counties of eastern and central Texas. As discussed in the response to issue 3.7, both ozone and its precursor NO_X and VOC emissions can be transported from the attainment areas into the non-attainment areas. The transport influence of ozone and NO_X emissions into the HGA non-attainment area is strongest within the attainment areas that are up to 50 and 200 kilometers of the HGA area, respectively.

Texas adopted a regional SIP strategy for the 95 counties after considering the expected benefit for the non-attainment areas as well as the costs to be imposed on the residents of the 95 attainment counties. Some of the 95 counties are more populated than others but the population density of the 95 counties is much less than in the HGA non-attainment area, as noted below. The strategy included two measures for VOC reductions (Stage I vapor recovery control and low RVP gasoline control), approved into the Texas SIPs on December 20, 2000, (at 65 FR 79745), and April 26, 2001 (66 FR 20927), respectively, and one measure for stationary source NO_X controls, approved into the Texas SIPs on March 16, 2001 (at 66 FR 15195). Additionally, Texas adopted speed limit reductions and vehicle I/M requirements as part of the DFW SIP in five of the 95 attainment counties, those nearest DFW, where population size and VMT is large enough to show a significant benefit. More detail on the NO_X control measures is provided below for the first three measures listed, but we believe Texas has made reasonable choices in assessing the possible control measures

to be adopted in the 95 counties after considering their likely benefit for the non-attainment areas and the size of the population that would bear the cost of the control.

We also note that for the following alternative measures, even if the measures were considered reasonable and practicable, they would have to provide enough emission reductions to fill the 56 tpd NO_X emissions shortfall completely in order to displace the need for the LED rule. Many of these measures would yield small reductions, as noted in discussion of such measures.

Expanding Control Measures Beyond the HGA Non-Attainment Area—(Focus Is on Stationary Source NO_X Controls)

Texas rules for stationary sources in attainment areas are already more stringent than Federal rules for attainment areas. For stationary source NO_X controls in the attainment area, the State rules require all grandfathered sources to reduce their emissions by 30 percent, all grandfathered utilities to reduce emissions by 50 percent, and cement kilns to reduce by 30 percent. New sources in the attainment areas must meet Federal Prevention of Significant Deterioration requirements which may require controls be put in place depending on emission levels.

The 30 percent control for cement kilns is consistent with EPA's Alternative Control Techniques (ACT) for Cement Plants. See EPA–453/R–94–004. There are no requirements for cement kilns in HGA, DFW, and BPA because there are no cement kilns there. Technology to reduce NO_X emissions beyond 30 percent for cement kilns is not cost-effective, although some cement kilns in the attainment area near DFW were able to reduce emissions by as much as 50 percent. All kilns cannot be controlled in the same way or to the same degree due to technology differences in the kiln type, design, and operation. The 50 percent reduction requirement for utilities was determined by examining the most cost-effective controls. Because most of these facilities are grandfathered they had few controls, if any, to start with. Combustion control was determined to be the most cost-effective control for these facilities. The annualized cost to install and operate combustion controls on utilities is estimated at $4,000 per ton of emissions reduced. Thirteen of the utilities affected by this rule are municipal or electric cooperatives. The coal-fired utility in San Miguel will spend more ($5,288/ton) for 4,768 tons of reductions, while the municipality-owned stationary gas turbines will be less than $4,000/ton. Small business emission reduction controls are also expected to average about $4,000/ton. Small increments of additional NO_X reductions for utilities were expected to run $10,000/ton. For this reason, the cost/benefit ratio goes up dramatically past 50 percent for utilities.

In the nonattainment areas of HGA, DFW, and BPA, Selective Catalytic Reduction was determined to be the most cost-effective means of control because combustion controls had already been applied to sources in those areas and further NO_X reductions were still needed in these more populated areas. In response to a comment from TXU (Texas Utilities) on the State's NO_X point source rulemaking, the State responded that regarding cost for increasing reductions from 70 percent to 88 percent, it was determined that an average cost to do so could be as high as $7,500/ton depending on the type of unit being retrofitted. For grandfathered utilities this cost would be on top of the initial costs for combustion controls plus other measures, which we have not discussed, to increase reductions from 50 to 70 percent. Therefore, not even accounting for all costs, the estimated cost per ton for these small sources is well over $10,000/ton. For this reason, the cost/benefit ratio goes up dramatically past 50 percent for utilities. We agree this is unreasonable in attainment areas where a smaller population would bear the larger cost.

Expanding Speed Limit Reductions Beyond the HGA Non-Attainment Area

Speed limit reductions have been implemented in five attainment counties that adjoin the DFW nonattainment area. These counties have a significant amount of vehicle miles traveled (VMT) and ample fleet size to justify expanding this measure beyond the 4-county area, and the resulting emission reduction is reflected in the DFW SIP for its attainment of the 1 hour ozone NAAQS.

Population density in the remaining attainment counties is about 83 persons per square mile.[9] In the HGA nonattainment area (including 3 mostly rural counties whose total population is 116,000,) the population density is 502 persons per square mile. This measure would have a very small benefit due to the low VMT in the counties nearest to HGA. Considering the high degree of cost and disruption involved in implementing and enforcing speed limit reductions in areas with such low population density and VMT, the measure would be unreasonable and impracticable.

For example, Montgomery County is part of the HGA nonattainment area, not considered rural, but much less urbanized than Harris County, which is the core county in the HGA. Montgomery County has a daily VMT of slightly over 5.8 million miles. Lowering speed limits in Montgomery County contributes only 1.44 tpd or 0.14 percent of needed NO_X emissions reductions. Of eight attainment counties adjoining the nonattainment counties, the average population is under 38,000 per county, and the average daily VMT is about 1.1 million miles (or less than 1/5 that of Montgomery County). This data regarding relatively low population, as well as Texas Department of Transportation (TXDOT) data,[10] support our statement that there is not a significant amount of vehicles miles traveled or ample fleet size to justify expanding this measure. The TXDOT Districts are made up of a number of counties each.

TxDOT district	Vehicles registered	VMT/day	Sq. miles
Houston District—Brazoria, Fort Bend, Galveston, Harris, Montgomery, Waller	3,675,485	67,549,266	6,732
Lufkin District—north of Houston—Angelina, Houston, Nacogdoches, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity	264,061	8,087,867	7,538

[9] Data from the Texas Almanac, 2000–2001 edition, 1999. Dallas Morning News, Dallas, TX. pp. 131–284.

[10] Data from the Texas Department of Transportation website, at: http://www.dot.state.tx.us.txdot.htm.

TxDOT district	Vehicles registered	VMT/day	Sq. miles
Beaumont District—northeast of Houston—Chambers+, Hardin*, Jasper, Jefferson*, Liberty+, Newton, Orange*, Tyler	484,998	14,286,703	2,846 2,045+ 2,388*
			7,279 total
+Part of HGA nonattainment			+HGA
*Nonattainment counties in the Beaumont-Port Arthur nonattainment area.			*BPA
Bryan District—west of Houston—Brazos, Burleson, Freestone, Grimes, Leon, Madison, Milam, Robertson, Walker, Washington	294,645	11,114,870	8,845
Yoakum District—south of Houston—Austin, Calhoun, Colorado, DeWitt, Fayette, Gonzales, Jackson, Lavaca, Matagorda, Victoria, Wharton	310,694	10,719,104	11,025
East of Houston—There are no counties, just the Gulf of Mexico			

Expanding I/M Beyond the HGA Non-Attainment Area

Vehicle I/M is being expanded into five attainment counties in the DFW area which have opted to establish this program. These counties have sufficient population, percent of commuters, and potential growth rates to warrant implementing I/M to obtain meaningful reductions in NO_X emissions which would benefit the DFW non-attainment area, and the resulting emission reduction is reflected in the DFW SIP for attainment of the 1 hour ozone NAAQS.

With respect to the remaining attainment counties, none has opted to establish such a program, and cannot be required to do so under current state law or Federal I/M rules. Although we agree with the commenter that the fact that a legislative change is required to implement a program is not a sufficient reason to reject a control measure, we reiterate that it is the length of time that would be required to seek such changes and implement them that make the success of such a measure unpredictable and impracticable. Opposition to vehicle I/M programs in Texas historically has been strong, resulting in the legislative decision in 1997 to allow such programs in attainment counties only if those counties voluntarily decide to adopt them. It is very unpredictable whether such opposition could be overcome, even with the delay in implementation of the LED rule from 2002 to 2005.

We also consider the amount of emission reductions expected versus the cost to implement an I/M program. In the three mostly rural counties of the HGA nonattainment area, the average NO_X emission reductions from I/M is about one ton per day. The cost for one I/M testing station equipped with ASM–2 (the type of testing equipment required in the non-attainment area) is about $40,000, which means the cost per ton of NO_X reduction is at least $40,000 per ton. More than one station in a county might be required, increasing the cost per ton of NO_X reductions even more. Although this cost can be recovered when the number of vehicles is large, it is not reasonable or practicable in less populated areas with fewer vehicles, such as the 36 counties nearest HGA (as indicated in the chart above) where emissions would have the strongest influence on HGA.

Expanding Vehicle Idling Restrictions Beyond the HGA Non-Attainment Area

Idling restrictions in the nonattainment area which is congested and includes eight counties yields less than 0.5 tpd of NO_X emission reductions. Emission reductions from idling restrictions in less populated areas, especially the 36 counties closest to HGA where emissions would have the strongest influence on HGA (as noted in the chart above) would be considerably less. The cost to implement and enforce such restrictions in less populated areas where the benefit would be very small makes this an impracticable measure.

Measures Rejected Due to Technical Infeasibility

The three types of driving restrictions mentioned by the commenter are (1) restrictions on use of ''drive-through'' services, such as fast food restaurants and banks; (2) restrictions on driving by time of day or by alternate days; and (3) restrictions on driving by geographic area. No jurisdiction in the country has adopted such restrictions for ozone SIPs, with the exception of use of ''drive-through'' restrictions on a voluntary basis on ozone action days. Such voluntary measures would be subject to EPA's limit on their use in SIPs, which Texas has already met.

The impact of such driving restrictions on consumers as well as businesses, big and small, would be substantial, forcing a major examination of alternate transportation methods and drivers' access to such methods. Such restrictions would have to be examined in light of the equity of forcing drivers who have limited economic means or limited access to alternate transportation methods to find other ways to get to their places of work. Enforcement of driving restrictions is difficult, and such restrictions would likely be very unpopular. EPA agrees with the State that these measures are unreasonable and impracticable.

Measures Rejected Due to Economic Infeasibility

The State originally adopted a statewide LED program for on-highway diesel fuel, considering wider coverage to be more economically feasible than the half-state program for 110 counties, and submitted this rule for the HGA SIP. More recently, the State reconsidered the half-state program, consistent with the Texas Clean Air Strategy,[11] and asked EPA to parallel process a change to the rules for geographic coverage as well as implementation date. The State concluded that the reduction in coverage area would reduce the cost burden upon areas of the State that would not benefit as much from the use of LED as the currently covered counties, but would also continue to ensure that there was sufficient supply to the areas that need it the most. See also our response to issues 1.2 and 1.6 regarding supply and coverage in the 110 county covered area, and our response to issue 3.7 regarding the necessity showing for LED fuel in the attainment areas.

Emission-based registration fees and a gas tax increase would require legislative action. Legislative action not

[11] The Texas Clean Air Strategy is a group of measures adopted by the State on April 19, 2000, to reduce background ozone concentrations in 95 attainment counties in east and central Texas. These include Stage I vapor recovery, Low RVP gasoline, and permitting of grandfathered stationary sources. EPA approved these measures into the SIP as cited above in this response.

only takes time (because the Texas Legislature is in session only in odd-numbered years for a few months each time), but the success of such action is unpredictable and opposition to such measures is strong. The impact of such economic requirements has the most severe impact on the poorest people who tend to own older, dirtier cars and would therefore pay the highest emission based fees, and for gas taxes would be paying a higher percentage of their income, since gas taxes are not progressive, for what is a virtual necessity in terms of access to places of work. It is not clear what the identifiable benefit of these programs would be, and we agree with Texas that they would be unreasonable or impracticable at this time.

Mandates to purchase new clean fuel airport shuttles or convert existing airport shuttles to clean-fuels were rejected as unreasonable because this would be a clear economic hardship on a very small group of vehicles typically owned by small businesses. Should this measure be considered in the future, some financial incentives may be available under the TERP (as described below) or through the Department of Energy's Clean Cities program.

Accelerated Purchase of Low-NO_X Engines and Early (pre-2004) Introduction of Lower Emission HD Trucks and Buses Through Market-Based Incentives

Senate Bill 5, adopted by the 77th Legislature in June of this year, required repeal of State rules requiring the accelerated purchase of low-NO_X engines but, in their place, adopted a plan to achieve equivalent reductions through the use of economic incentives. Senate Bill 5, which includes the Texas Emission Reduction Program (TERP), is an economic incentive program to accomplish exactly what the rule mandated—to accelerate the purchase of new engines or rebuilt or retrofitted existing engines to achieve the same low-NO_X emission levels. Although most of the funds will be directed toward the nonattainment areas, funds are not restricted to the nonattainment areas. Therefore, this measure is being implemented, and has been submitted as part of the SIP which is being approved today.

The TERP is similar to California's Carl Moyer Program that provides grants to cover the incremental cost of cleaner on-road, off-road, marine, locomotive and stationary agricultural pump engines, as well as forklifts and airport ground support equipment. The TERP is also a state-funded program to provide grants, rebates, and other incentives for improving air quality throughout the State. The grant program will pay the incremental costs of repowering, rebuilding, or retrofitting on-highway vehicles and non-road equipment. A rebate program offers incentives for the purchase or lease of cleaner new on-road, heavy-duty diesel vehicles.

The Construction Shift

Pursuant to Senate Bill 5, referenced above, the Legislature revoked TNRCC's authority to implement the construction shift rule with the understanding that the incentives provided by the TERP will achieve equivalent reductions. The construction shift rule allowed operation during the morning hours only if a company presented a plan that showed how they would achieve reduced NO_X emissions. A plan using low-NO_X engines, whether new, rebuilt, or retrofitted, would have been acceptable to meet that requirement. Therefore, the TERP achieves the same goal, and the measure is being implemented. The equivalent emission reductions from the TERP were substituted for the reductions that would have resulted from the construction shift rule in the SIP we are approving today.

3.6 Explanation of why other control measures are unreasonable or impracticable-measures which Texas and EPA failed to consider at all, or which Texas has recently adopted and has failed to account for in the SIP

ATA commented that there are at least six measures which Texas did not adopt which Texas should have considered and EPA should have independently analyzed as to whether they are unreasonable or impracticable.

(A) Emissions banking and trading program (mentions new SCAQMD program)

(B) Accelerated retirement of HD vehicles

(C) Natural gas buses

(D) Phoenix voluntary early ozone plan

(E) Energy efficiencies (Building codes)

(F) Federal clean fuel fleet program

Texas failed to consider existing programs with demonstrated cost-effective emission reductions. TMTA argues that Texas is obligated to look beyond its borders to investigate control measures used in other jurisdictions before obtaining a fuel preemption waiver. A non-exhaustive list includes the following seven measures. The last two of these measures which were recently adopted in Texas need to be accounted for in the SIP analysis; since attainment was demonstrated without them, it is likely attainment can now be demonstrated by substituting these programs for the LED rule.

(A) Emissions banking and trading program

(B) Phoenix voluntary early ozone plan

(C) Accelerated retirement of HD vehicles

(D) Early introduction of low-NO_X engines

(E) Carl Moyer Memorial air quality standards attainment program

(F) Texas emissions reduction program (Senate Bill 5)

(G) Texas House Bill 2912

TMTA also commented that two non-fuel measures have been adopted by Texas since TNRCC submitted its attainment demonstration SIP to EPA, and these non-fuel measures will provide emission reductions that will make the LED rule emissions benefits unnecessary: (1) is the Texas Emissions Reductions Plan Fund, modeled on California's Carl Moyer program. If it is as successful as its prototype, the 52 [sic] tpd additional NO_X reductions required in the Houston SIP can be achieved in less than three years; (2) is a requirement that unregulated facilities in eastern Texas be permitted by 2007 and that oil and gas pipeline facilities in eastern Texas reduce emissions from internal combustion engines by as much as 50 percent.

Response: Most of the measures discussed below have already been adopted by Texas for inclusion in the SIP, whether previously approved (such as the Clean Fuel Fleet program) and therefore reflected in the baseline emissions inventory or as part of today's attainment demonstration or as plans for future attainment demonstrations to fill the 56 tpd NO_X emissions shortfall. Unless they would provide enough emission reductions to fill the 56 tpd NO_X emissions shortfall completely, they do not displace the need for the LED rule. Many of these measures would yield small reductions, as noted in discussion of such measures.

Emissions Banking and Trading Program

The comment pertained to South Coast Air Quality Management District expanding the emissions trading program by permitting stationary sources of air pollution to purchase NO_X credits from mobile sources. ATA commented that programs like these rely on the free market to produce NO_X reductions in the most cost effective manner. The TNRCC Mass Emissions Cap and Trade (MECT) EIP program for the HGA nonattainment area provides for this free market trading approach.

EPA proposed approval into the Houston SIP of the TNRCC MECT program on July 23, 2001 (66 FR 38231), to provide flexibility in achieving the 595 tpd NO_X reductions from stationary sources. EPA is finalizing that approval today in a separate action. For more information on the emissions banking and trading program, see our action published elsewhere in the **Federal Register**.

Accelerated Retirement of Heavy Duty Vehicles

The Texas Emission Reduction Program (TERP), described above in the response to issue 3.5, offers incentives to replace engines in older vehicles with the cleanest engines available. This program did not exist when the SIP was developed and adopted but was recently adopted by the Legislature. Emission reductions from the TERP replace the reductions that would have resulted from two rules for which the Legislature required repeal, i.e., the accelerated purchase of low NO_X engines and the construction shift. Any emission reductions from this voluntary program which exceed the reductions that would have resulted from the repealed rules will go toward filling the emissions shortfall in the attainment demonstration we are approving today.

(*See* a description of the TERP and how it compares to the Carl Moyer program under the discussion in our response to issue 3.5 for accelerated purchase of Tier II/Tier III (low-NO_X) engines.)

Natural Gas Buses

Natural gas buses, as one type of Low Emission Vehicle, are already mandated by the State for purchase by mass transit authorities in 30 TAC 114.150. The low emission vehicle fleet rules meet Federal Clean Fuel Fleet requirements for this program. EPA approved this program into the HGA SIP on February 7, 2001, (66 FR 9203) so the NO_X emission reductions achieved through this measure are already accounted for in the baseline emissions inventory for this attainment demonstration and SIP revision.

Phoenix Voluntary Ozone Plan

Houston has adopted most of the measures included in the Phoenix Voluntary Ozone Plan, as described below, but such measures are limited in terms of NO_X benefits and would not fill the 56 tpd NO_X emissions shortfall in the attainment demonstration. Some of these measures are already in the attainment demonstration being approved today, and some will be adopted for inclusion in future attainment plans to help fill the emissions shortfall.

Tax incentives similar to those in the Phoenix Voluntary Ozone Plan are included in future attainment plans as part of the State's enforceable commitments to adopt measures to fill the emissions shortfall in the attainment demonstration being approved today. Fireplaces are not used regularly in HGA, and definitely not during the ozone season. So, this measure is more likely to address carbon monoxide or particulate matter pollution that may be issues in Phoenix but not in HGA.

Traffic light synchronization is also being implemented in HGA, partially under Transportation Control Measures(TCMs) and partially under the VMEP. The Computerized Traffic Management System, the Arterial Traffic Management System and Intersection Improvements are TCMs that include some signalization projects.

Trip reduction programs are part of the HGA Voluntary Mobile Emission Reduction Program (VMEP) in the Commute Solutions program. Texas has addressed the use of alternate energy sources at construction sites by providing incentives through the TERP (described above). The Regional Computerized Traffic Signal System is part of the VMEP that includes signalization timing projects for roadways designated as local streets, either intrazonal or central connectors. The VMEP credits are limited to 3 percent of the total emission reductions needed for the SIP. Therefore additional credits for traffic signalization cannot be taken under the VMEP.

Signalization under the VMEP is estimated to generate an estimated 0.0–0.5 tpd NO_X reductions in the 8-county area. The three TCM projects are projected to generate 0.36 tpd. This includes other activities within these categories besides the signalization projects. Details of the VMEP are found in Appendix K, while details of the TCMs are found in Appendix I of the HGA SIP.

Energy Efficiency (Building Codes)

This is included as a measure to fulfill an enforceable commitment in future attainment plans which will address the emissions shortfall in the attainment demonstration being approved today. (See pages 7–44 through 7–52 of the HGA attainment demonstration SIP.) Senate Bill 5, enacted in June 2001, includes incentives for purchase of energy efficient appliances and sets building energy performance standards. Rules on the energy efficiency program will be submitted as part of the future attainment plans.

Federal Clean Fuel Fleet Program

ATA points to the following EPA statement in its approval of the Texas Clean Fuel Fleet substitute plan as support for its claim that the Texas substitute program would not produce the same NO_X reductions when compared to the Federal Clean Fuel Fleet program:

> It is similar to the Federal CFF program, but with a number of significant differences that, but for the supplemental controls, result in an emissions reduction shortfall as compared to the Federal CFF program. (Emphasis added.)

66 FR 9203 (2/7/01), at 9203. The italicized phrase is the important qualification to the sentence which ATA ignored in making its claim. EPA's statement refers to only one component of the Texas substitute plan, a State fleet program—the Texas Clean Fleet (TCF) program. Texas has supplemented this state fleet program with additional controls, as allowed under the CAA.

The Federal CFF program requirements are contained in part C, entitled, ''Clean Fuel Vehicles,'' of Title II of the CAA, as amended in 1990. Part C was added to the CAA to establish two programs: a clean-fuel vehicle pilot program in the State of California (the California Pilot Test Program) and the Federal CFF program in certain ozone and carbon monoxide (CO) non-attainment areas. Section 182(c)(4) of the CAA, 42 U.S.C. 7511a, allows States to opt-out of the Federal CFF program by submitting, for EPA approval, a SIP revision consisting of a substitute program resulting in as much or greater long term emissions reductions in ozone producing and toxic air emissions as the Federal CFF program.

Texas submitted a SIP revision to Chapter 114 and the State's plan for implementing a substitute program to opt out of the Federal CFF program on August 27, 1998. The revision was adopted after public notice and hearing as required by sections 110(a)(2) and 110(l) of the CAA and 40 CFR 51.102(f). Texas' CFF substitute plan relies on a State fleet program—the Texas Clean Fleet (TCF) program—supplemented with additional VOC and NO_X emission controls.

The State has met the requirements of the CAA and has successfully demonstrated that its CFF substitute plan will achieve long term reductions in emissions of ozone producing and toxic air pollutants in excess of those that would have been achieved by the Federal CFF program. EPA published its direct final rule on the State's substitute program on February 7, 2001, (66 FR 9203) and no adverse comments were

received. Credit for the NO_X reductions attributable to Texas' CFF substitute plan are reflected in the Texas SIP baselines for ozone.

Early Introduction of Low-NO_X Engines

See our response to issue 3.5 regarding Accelerated Purchase of low NO_X engines.

Carl Moyer Memorial Air Quality Standards Attainment Program

See our previous responses that discuss the Texas Emission Reduction Program (TERP) in issue 3.5 regarding Accelerated Purchase of low NO_X engines and in this issue 3.6 regarding Accelerated Retirement of HD vehicles.

Texas Emissions Reduction Program (Senate Bill 5)

When the HGA SIP was developed and adopted, the 77th Texas Legislature had not yet come into session. Senate Bill (SB) 5, which created the Texas Emission Reduction Program (TERP), was introduced during that session that ran from January to June 2001. Therefore, emission reductions from the TERP could not be included in the adopted SIP submitted in December 2000. At the same time, SB5 also directed the State to repeal the rules for the construction shift and the accelerated purchase of Tier II/Tier III (low NO_X) engines. The Governor requested parallel processing of SB5 on June 15, 2001. We are parallel processing SB5 with the HGA attainment demonstration. Credits generated by the TERP are intended to replace the credits lost by repeal of the rules. It is expected that excess credits from the TERP will contribute to closing the 56 tpd NO_X emissions shortfall, but it is not expected to fill the shortfall. In addition, EPA believes the three year timeframe referenced in the comment is extremely optimistic.

See also our previous responses that discuss the Texas Emission Reduction Program (TERP) in issue 3.5 regarding Accelerated Purchase of low NO_X engines and in this issue 3.6 regarding Accelerated Retirement of HD vehicles.

Texas House Bill 2912

EPA acknowledges the comment that this Bill requires grandfathered facilities to obtain permits by 2007. It is anticipated that Texas will submit the reductions from these measures in future SIP revisions to help fill the remaining NO_X shortfall of 56 tpd. The 50 percent NO_X reduction expected from the newly permitted oil and gas pipeline facilities in eastern Texas partially offsets the increase in NO_X emission reduction levels mandated for utilities resulting from the State lowering utility emission reduction requirements from 93 percent to 90 percent. The State believed the higher levels to be unreasonable due to extraordinary costs to obtain the additional 3 percent reductions. Therefore, this legislative action does not provide additional credits to be used in place of the LED fuel program.

3.7 Failure To Show Necessity for the LED Fuel Measure in Attainment Areas

BCCA asserts that LED fuel is not needed in attainment areas of Texas outside the HGA area. These areas are already meeting national air quality standards and do not need the LED fuel for air quality reasons.

TMTA commented that Texas does not have the authority to require LED fuel in the attainment areas, because it has not shown the LED fuel is necessary in those areas, and is acting arbitrarily to require LED fuel in those areas. Attainment areas do not need to submit control measures to meet CAA standards because they already attain the standards. Further, scientific studies have not shown a nexus between NO_X emissions in the state's eastern and central attainment areas and ozone violations in the state's nonattainment areas.

Response: In both the TSD (at pp 11–12) and the proposed rule (66 FR 36542, at 36545), EPA explained the reasons Texas has shown as to why requiring LED fuel in the covered area benefits the Houston non-attainment area. There are three reasons. First, requiring LED fuel in the covered area will reduce emissions of NO_X in the non-attainment area by helping to ensure that the fuel used by intrastate and long-haul trucks that transit the non-attainment area but purchase fuel in Texas outside the nonattainment area but within the covered area meets the required fuel characteristics for lowering NO_X emissions. (See also our discussion in response to Issue 2.3 as to why this requirement for a covered area as large as 110 counties is important in maintaining the benefit of the LED program.)

Second, the LED fuel program will reduce possible transport of ozone from the surrounding covered areas to the non-attainment area. EPA described the meteorological on-shore/ off-shore phenomenon called ''flow reversal'' which, according to the Coastal Oxidant Assessment for Southeast Texas (COAST) study, exacerbates the Houston ozone problem. Ozone formed over land moves out over the Gulf in the early morning, and then blows back over the land in the early afternoon of the same day. This flow reversal influences ozone concentrations inland at least 50 kilometers, easily reaching into the attainment area immediately surrounding the HGA non-attainment area. Another study (Nielsen-Gammon) claims this phenomenon may reach as far inland as 400 kilometers.

Third, the LED fuel program will reduce the transport of NO_X from the surrounding covered areas to the nonattainment area. EPA policy recognizes that ozone precursors such as NO_X emitted in attainment areas may be transported to non-attainment areas and contribute to ozone problems therein. Specifically, EPA's 1997 guidance for implementing the 1 hour ozone NAAQS, cited in the TSD and the proposed rule, recognizes that NO_X emissions outside non-attainment areas at 200 kilometers could influence the non-attainment areas.

We disagree with TMTA's statement that scientific studies have not shown a nexus between NO_X emissions in the eastern and central attainment areas of Texas and ozone violations in the non-attainment areas. TMTA has not disputed any of EPA's statements regarding the COAST study or the Nielsen-Gammon study, nor has it provided any other data to contradict the conclusions from these studies. We reiterate the three reasons mentioned above which show that requiring LED fuel in the covered area benefits the Houston non-attainment area, thus contributing to the necessity demonstration Texas has made.

3.8 Failure To Meet CAA Requirement That the State Fuel Measure Is Reasonable and Practicable, Due to the LED Fuel Measure's Consumer Cost Volatility

NPRA stated it is not clear that the potential consumer cost volatility of Texas LED meets the CAA requirement that the state fuel regulation be both reasonable and practicable. TNRCC has estimated the production cost of LED to be four cents per gallon more than current specifications. Parties suggest that EIA data indicate the retail price of diesel in California is much more than four cents per gallon higher than the price of diesel in PADD III (eleven cents to forty-one cents per gallon).

Response: NPRA's comment misstates the applicable CAA requirement. The CAA does not require that the state fuel regulation must be reasonable and practicable, but it does require that the state fuel program be shown to be more reasonable and practicable than the existing alternatives. Texas has made a comparative analysis of many possible alternatives to the LED fuel requirement,

and as demonstrated in the TSD and in the responses to comments in this final rule, considered the costs, benefits, implementation time, public acceptance and other factors for evaluating reasonableness and practicability. EPA has reviewed these findings and made its own assessment of these controls as well as the additional alternatives identified by commenters. In particular, as discussed in issue 1.4, comparing Texas estimates for production cost to California retail prices and PADD III retail prices is misleading because retail prices do not reflect the production cost alone. Other factors in retail pricing include differences in supply and demand, dealer mark up, and proximity of supply. The State of Texas has determined that four cents per gallon (production costs) for Phase I is an acceptable difference since LED provides an environmental benefit. California recently validated similar production cost estimates for their analogous diesel fuel via a comparison of wholesale prices in California to prices in neighboring states. Based on this, we believe that State of Texas' estimate is reasonably accurate.

3.9 Failure To Show Necessity Because the Environmental Benefits of the LED Rule Are Overstated or Inaccurately Quantified

ATA and TMTA commented that it is impossible to make the section 211 necessity determination without first accurately quantifying the emissions impact of using the LED fuel. The necessity of LED, as required under section 211(c)(4)(C) of the CAA, has not been demonstrated, because (among other reasons) the environmental benefits are overstated, due to the assumed 100 percent effectiveness in the nonattainment area and the failure to account for significant use of the cheaper ''federal fuel'' as described above.

Response: EPA has made its own analysis of the NO_X reduction benefit expected from use of LED fuel, confirming the emission reduction at levels slightly different from those estimated by Texas but still significant in helping achieve ozone attainment. (*See* discussion in our response to issue 2.1.) We have also analyzed the potential overstatement of the benefit due to re-fueling outside the non-attainment area, and have concluded there is a reasonable basis to agree with the State of Texas that re-fueling outside the non-attainment area will not significantly affect the benefit of the LED rule. (*See* discussion in our response to issue 2.3.) Thus, we have demonstrated that the LED rule will provide some or all of the emission reductions needed to achieve the ozone NAAQS.

3.10 Preemption Under the Supremacy Clause of the U.S. Constitution

ATA commented that in addition to the explicit statutory preemption under CAA 211(c)(4), the Supremacy Clause of the U.S. Constitution implicitly preempts the LED rule since it stands as an obstacle to accomplishing the Congressional objective of a single national fuel standard.

Response: Aside from the explicit preemption in Section 211(c)(4)(A), a court could also consider whether a state sulfur control is implicitly preempted under the Supremacy Clause of the U.S. Constitution. Courts have determined that a state law is preempted by federal law where the state requirement actually conflicts with federal law by preventing compliance with both federal and state requirements, or by standing as an obstacle to accomplishment of Congressional objectives. A court could thus consider whether a given state fuel control is preempted, notwithstanding waiver of preemption under 211(c)(4)(C), if it places such significant cost and investment burdens on refiners that refiners cannot meet both state and federal requirements in time, or if the state control would be preempted on some other legal basis.

Commenters have not raised specific problems that could reasonably give rise to a claim of conflict preemption. The State of Texas' program appears consistent with Congress' overall goal of achieving air quality standards as expeditiously as possible as expressed in section 110(a)(2), and is consistent with Congress' allowance of State fuel controls when necessary to achieve such standards. Nor does there appear to be any conflict between the State and federal standards that would prevent compliance with both provisions. It is practically and legally possible to produce diesel fuel that meets both the federal and State sulfur standards, as noted in our response to issue 1.9. The State of Texas has provided significant lead time for refiners to come into compliance and the State and federal standards are similar for on-highway diesel fuel. While refiners have raised concerns about the impact of the LED rule on the Federal ULSD rule, as we discussed in response to Issue 1.9, they did not say it would be impossible to comply with both rules, or that compliance with the LED rule prevents compliance with the Federal ULSD rule. Furthermore, ATA does not provide any support for the claim that compliance with the two standards is not possible. For these reasons, EPA does not believe there is a clear Constitutional problem that should lead EPA to deny approval of the State LED program.

Issue 4 Potential ''Backsliding'' With Proposed SIP Changes

ED commented that EPA must reject any effort to relax effective control measures on the books before the identified shortfall in emissions reductions is eliminated. In particular, the proposed change Texas will make to the LED rule is backsliding from the 12/00 SIP since it limits applicability for on-road use of LED fuel to East and Central Texas instead of statewide, and delays implementation of the LED rule until 2005. ED notes that no net loss is calculated.

Response: The proposed changes to the Texas regulations do not constitute ''backsliding'' as that term has come to be used in the context of the CAA. The Clean Water Act term ''backsliding'' (33 U.S.C. 1342(o)) is used in regard to the CAA to refer to weakening federally approved regulations in a manner which would interfere with the attainment or maintenance of one of the National Ambient Air Quality Standards (NAAQS). See, sections 101(b), 110(a)(2)(D), and 161 of the CAA. Section 110(1) prohibits EPA from approving a SIP revision if it would interfere with attainment, reasonable further progress, or any other applicable requirement of the Clean Air Act. The statute leaves with the State, however, the ability to formulate and revise the SIP in whole or in part so long as the plan provides for timely attainment of the NAAQS and meets other applicable CAA requirements. *See*, CAA section 110(k)(3) and *Train* v. *NRDC*, 421 U.S. 60, 79 (1975).

The revisions were proposed and submitted to EPA (along with a request for parallel processing) prior to approval so they do not represent changes to an approved SIP from which a state could be seen as ''backsliding''. These are changes to the State's choice as to how the ozone NAAQS will be achieved in the HG area. It is not EPA's role to disapprove the State's choice of control strategies if that strategy will result in attainment of the one-hour standard and meets all other applicable statutory requirements. *See Union Electric* v. *EPA*, 427 U.S. 246 (1976); *Train* v. *NRDC*, 421 U.S. 60 (1975).

Even if these changes represented changes in an approved SIP, we do not agree that it would be appropriate to reject this rule because it is unlikely the changes made to the LED rule since its original adoption by the State of Texas

in December, 2000, would significantly impair the emission reductions attributable to this measure. The change in implementation date from 2002 to 2005 does not affect the benefit of the LED rule, since the yearly emission reductions are not cumulative. It is the emission reductions in 2007, the attainment date, which is critical. The change in geographic scope of the LED rule (from statewide to 110 counties for highway diesel fuel) should not significantly affect the benefit of the LED rule since the 110 county covered area includes 95 percent of all vehicle miles traveled (VMT) in Texas and the most populated cities in the state.

A principal purpose of extending the coverage of the LED rule to the 102 counties outside the 8 county Houston non-attainment area is to ensure that intrastate and long-haul trucks traveling through the Houston area but re-fueling outside the Houston area are re-fueling with LED fuel. Because most of the VMT and most of the diesel fuel purchased for on-road travel in Texas is within the 110 county area (as noted in our response to issue 1.6), this change should not significantly affect the resulting benefits of the LED rule. Because this rule would not interfere with attainment of the NAAQS, we believe approval is proper. *See*, *United States Steel* v. *EPA*, 633 F.2d 671, 674 (3d cir. 1980). *See* response to issue 2.3 for discussion of the impact of re-fueling outside the covered area on the benefit of the LED rule.

Issue 5 Potential Changes at Mid-Course Correction Jeopardize Need for Certainty

BCCA needs to know that the LED rule, as finalized in 12/00, will not change at the mid-course correction in 2004, because its members need certainty in order to make plans for investment and construction to meet the fuel requirements. These plans carry long lead times.

Response: We agree this would be a problem but we assume Texas has made its final changes to the LED rule after significant negotiations between Texas and relevant stakeholders earlier this year led to the passage of legislation (HB 2912) delaying the implementation date and limiting the geographic scope of the LED rule. This legislation was signed by the Governor on May 29, 2001, and led to the most recent revisions to the LED rule, implementing the change in date and geographic scope, which EPA is approving today.

If Texas wants to make changes to the LED rule at the mid-course correction in 2004, Texas would have to go through its state rulemaking process, with public notice and comment, so that stakeholders such as the commenter would have an opportunity to explain the implications of such changes. Additionally, EPA would have to go through a rulemaking process with public notice and comment if Texas wanted to request that such changes be approved into the SIP.

In addition, EPA is approving the enforceable commitment to conduct this mid-course correction in the attainment demonstration approval being published elsewhere in today's **Federal Register**. Further discussion regarding the appropriateness of the mid-course correction can be found in the Response to Comments for that action.

Issue 6 Need for Energy Analysis Under E.O. Issued 5/22/01

ATA commented that EPA should perform an energy analysis in accordance with EO issued 5/22/01 concerning regulations that significantly affect energy supply, distribution, or use.

Response: On May 18, 2001, President George W. Bush signed Executive Order 13211, entitled ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (*See*, 66 FR 28355, May 22, 2001). This Executive Order (EO) requires Federal agencies to prepare, and submit to the Office of Management and Budget (OMB), a Statement of Energy Effects for matters identified as significant energy actions. ''Significant energy action'' is defined by the EO as:

> any action by an agency (normally published in the **Federal Register**) that promulgates or is expected to lead to the promulgation * * * (1)(i) that is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse impact on the supply, distribution or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant regulatory action.

SIP approvals are not ''significant regulatory actions'' subject to OMB review and are consequently excluded from the requirements of EO 13211.

Issue 7 Need for Regulatory Impact Analysis Under Texas Law

BCCA argues that the LED rule is not legally defensible because it is a ''major environmental rule'' requiring a RIA under Texas law because it (1) Exceeds standards set by Federal law, and (2) exceeds an express requirement of state law.

TMTA commented that the cost of purchasing LED and its impact on the Texas trucking industry has been understated. A Regulatory Impact Analysis to adequately assess the economic impacts of the rule has not been prepared, as required under Texas law. TMTA makes three main arguments: (1) The cost of purchasing cleaner diesel fuel has not been considered; (2) higher fuel costs cannot be passed on due to outside competition; and (3) a Regulatory Impact Analysis must be performed under Texas law when proposing certain ''major environmental rules'', and Texas has mistakenly failed to do so.

Response: As stated previously, EPA's role in reviewing SIP submittals is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (*see*, *Union Electric Co.*, v. *EPA*, 427 U.S. 246, 255–66 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption.

The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a State Court has determined otherwise.

Issue 8 Need for Regulatory Flexibility Act Analysis

ATA commented that EPA has mistakenly concluded that the Regulatory Flexibility Act does not apply to this rulemaking.

Response: This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law and hence does not have a significant economic impact on a substantial number of small entities, an analysis under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) is not required.

Issue 9 EPA's Action Is Arbitrary and Capricious

ATA states that approval of the LED fuel rule is arbitrary and capricious.

Response: ATA provides no independent support for its claim that EPA acted arbitrarily or capriciously. Thus, to the extent ATA relies on its previous comments to support this final conclusion, EPA has responded to this claim in responding to the specific issues raised by ATA and others.

EPA actions may be overturned if such action is found to be arbitrary,

capricious, an abuse of discretion or otherwise not in accordance with law; contrary to Constitutional right, power, privilege or immunity; in excess of statutory jurisdiction, authority, or limitations or without observance of procudure required by law. CAA Section 307(d)(9). *See also, Virginia* v. *Browner*, 80 F.3d 869, 876 (4th Cir. 1996) (applying the APA standard to the EPA's disapproval of a state implementation plan); *see also Sierra Club* v. *EPA*, 252 F.3d 943, 946–47 (8th Cir. 2001) (applying the APA standard to approval of a state implementation plan); *Ober* v. *Whitman*, 243 F.3d 1190, 1193 (9th Cir. 2001) (applying the APA standard to the EPA's exemption in a Federal implementation plan of certain *de minimis* sources of pollution).

The commenter has suggested that this action is arbitrary and capricious. That is not the case. When a Court reviews an agency action to see if it was arbitrary and capricious, the Court looks to see if the agency ''relied on factors that Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.'' *Hughes River Watershed Conservancy* v. *Johnson,* 165 F.3d 283, 288 (4th Cir. 1999)(citing *Motor Vehicle Mfrs. Ass'n* v. *State Farm Mut.,* 463 U.S. 29, 43 (1983)). The discussion in this Response to Comments Preamble and the Technical Support Document supporting the proposal for this action provide a reasonable basis for the decision reached, demonstrating that this approval is not arbitrary and capricious. *See, Natural Res. Def. Council, Inc.* v. *EPA,* 16 F.3d 1395, 1401 (4th Cir. 1993).

Section 211(c)(4)(C) provides for SIP approval of otherwise preempted state fuel controls if EPA finds the control is ''necessary'' to achieve a NAAQS because no other reasonable or practicable alternatives exist that would bring about timely attainment. We have demonstrated that the LED fuel measure is necessary to achieve attainment of the 1-hour ozone standard. First we quantified the emissions reductions needed to achieve the NAAQS and showed that even with implementation of the extraordinary controls being adopted by the State, additional reductions are needed. In order to address the difficult nonattainment problem in the Houston area, the State has adopted a long list of control measures, many of which have never been implemented by other states. Notwithstanding these aggressive controls, the State has identified a shortfall in the required emission reductions and has committed to pursue other necessary controls.

After demonstrating the air quality need, we showed that, at this time, there are no reasonable and practicable alternatives sufficient to achieve the NAAQS. In coming to adopt the LED control, the State reviewed an unprecedented list of alternatives, reviewing the costs, benefits, implementation time, public acceptance and other factors for evaluating reasonableness and practicability. EPA has reviewed these findings and has made its own assessment of these controls as well as the additional alternatives identified by commenters.

Finally, we demonstrated that the LED program will provide some of the needed NO_X reductions. While commenters dispute the quantity of reductions the LED program will provide, no commenter disputes that LED will provide some NO_X benefits. EPA has nonetheless addressed the specific arguments on the costs and benefits of the program and believes that given the costs and benefits of the program, the LED program remains a more desirable control option than the alternatives rejected by the State.

EPA, therefore, concludes the record provides a reasonable basis for approving the LED SIP revision in accordance with sections 110, 211(c)(4), and 307(d)(9) of the Clean Air Act.

VIII. EPA's Rulemaking Action

We are granting final approval pursuant to sections 110 and 211(c)(4)(C) because we find that the State has (1) identified the reduction in NO_X needed to achieve attainment of the ozone NAAQS; (2) identified all other reasonable and practicable control measures; (3) shown that even with the implementation of all reasonable and practicable control measures, the State would need additional emissions reductions for the HGA nonattainment area to meet the ozone NAAQS (124 ppb) on a timely basis; and (4) demonstrated that the LED fuel requirement would provide some of those additional reductions.

IX. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does

not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 14, 2002. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: October 15, 2001.

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270 the table in paragraph (c) is amended under Chapter 114 (Reg 4):

a. Under Subchapter A, by adding a new entry for Section 114.6 in numerical order;

b. Revising the heading ''Subchapter H—Low Emission Fuels; Division I: Gasoline Volatility'' to read ''Subchapter H—Low Emission Fuels';

c. Under the heading ''Subchapter H—Low Emission Fuels'' and before Section 114.301 by adding the heading ''Division 1: Gasoline Volatility';

d. Under Subchapter H immediately after Section 114.309 by adding a new heading ''Division 2: Low Emission Diesel'' followed by new individual entries for Sections 114.312, 114.313, 114.314, 114.315, 114.316, 114.317, 114.318, and 114.319.

The revisions and additions read as follows:

§ 52.2270 Identification of plan.

* * * * *

(c) * * *

EPA APPROVED REGULATIONS IN THE TEXAS SIP

State citation	Title/Subject	State approval Submittal date	EPA approval date	Explanation
*	* * * * *	*		*
Chapter 114 (Reg 4)—Control of Air Pollution from Motor Vehicles				
Subchapter A—Definitions				
*	* * * * *	*		*
Section 114.6	Low Emission Fuel Definitions	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
*	* * * * *	*		*
Subchapter H—Low Emission Fuels				
Division 1: Gasoline Volatility				
*	* * * * *	*		*
Division 2: Low Emission Diesel				
Section 114.312	Low Emission Diesel Standards	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.313	Designated Alternate Limits	12/06/2001	Insert 11/14/01 Federal Register Cite.]	

EPA APPROVED REGULATIONS IN THE TEXAS SIP—Continued

State citation	Title/Subject	State approval Submittal date	EPA approval date	Explanation
Section 114.314	Registration of Diesel Producers and Importers	09/26/2001	[Insert 11/14/01 Federal Register Cite.]	
Section 114.315	Approved Test Methods	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.316	Monitoring, Recordkeeping, Reporting and Requirements	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.317	Exemptions to Low Emission Diesel Requirements	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.318	Alternative Emission Reduction Plan	09/26/2001	[Insert 11/14/01 Federal Register Cite.]	
Section 114.319	Affected Counties and Compliance Dates	09/26/2001	[Insert 11/14/01 Federal Register Cite.]	
*	* * * * *	*		*

[FR Doc. 01–27581 Filed 11–13–01; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–134–4–7508; FRL–7093–1]

Approval and Promulgation of Air Quality State Implementation Plans (SIP); Texas: Administrative Orders Issued to Airport Operators and Airlines Regarding Control of Pollution From Ground Support Equipment (GSE) for the Houston/Galveston (HGA) Ozone Nonattainment Area and a Non-Road Large Spark-Ignition Engine Rule for the HGA and Dallas/Fort Worth (DFW) Ozone Nonattainment Areas

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving a State Implementation Plan (SIP) revision submitted by the State of Texas. This rule making covers two separate actions. The EPA is approving: Administrative Orders and Memoranda of Agreement (MOA) requiring owners and operators at major airports in the HGA area to implement reductions in oxides of nitrogen (NO_X) emissions for sources under their control, primarily GSE; and a rule requiring that non-road large spark-ignition engines of 25 horsepower (hp) or larger in all counties of the State of Texas conform to requirements identical to Title 13 of the California Code of Regulations, Chapter 9. This rule includes the HGA and DFW ozone nonattainment areas.

This new rule and the orders will contribute to attainment of the ozone standard in the HGA and DFW ozone nonattainment areas. The EPA is approving these revisions to the Texas SIP to regulate emissions of NO_X in accordance with the requirements of the Federal Clean Air Act (the Act).

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment with the appropriate office at least 24 hours before the visiting day. Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733. Texas Natural Resource Conservation Commission, 12100 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Herbert R. Sherrow, Jr., Air Planning Section (6PD–L), EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–7237.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

What Action Is EPA Taking Today?

We are granting final approval of Texas' administrative orders requiring owners and operators at major airports in the HGA area to implement reductions in NO_X emissions for sources under their control and a rule requiring that non-road large spark-ignition engines of 25 hp or larger in all counties of the State of Texas conform to requirements identical to Title 13 of the California Code of Regulations, Chapter 9. This rule includes the HGA and DFW ozone nonattainment areas. A proposed

approval of the large spark-ignition rules for the HGA ozone nonattainment area was published at 66 FR 36226 on July 11, 2001, and a proposed approval of the non-road large spark-ignition rules for the DFW nonattainment area was published at 66 FR 16432 on March 26, 2001. A proposed approval of the Administrative Orders and Memoranda of Agreement issued to airport owners and airlines regarding pollution controls on GSE for the HGA area was published at 66 FR 36226 on July 11, 2001.

What Are the Clean Air Act Requirements?

Section 172 of the Act provides the general requirements for nonattainment plans. Section 172(c)(6) and section 110 require SIPs to include enforceable emission limitations, and such other control measures, means or techniques as well as schedules and timetables for compliance, as may be necessary to provide for attainment by the applicable attainment date. Today's SIP revision involves approval of two of a collection of controls adopted by the State to achieve the ozone standard in the DFW and HGA ozone nonattainment areas as required under section 172. EPA approval of this SIP revision is governed by section 110 of the Act.

Why Is EPA Taking This Action?

We are taking this action because the State submitted these SIP revisions and they are necessary to achieve the National Ambient Air Quality Standards in the DFW and HGA ozone nonattainment areas.

What Is Included in the State's Non-Road Large Spark-Ignition Rule?

Texas developed a non-road large spark-ignition (LSI) engine strategy which establishes emission requirements for non-road, LSI engines 25 hp and larger for model year 2004 and subsequent model-year engines, and all equipment and vehicles that use such engines, by requiring non-road LSI engines in all counties in the State to meet emission limits equivalent to, and certified in, a manner identical to 13 California Code of Regulations, Chapter 9. Texas has met the statutory and regulatory requirements for adoption of the California LSI program. All counties in the State are affected by this rule, including counties in the HGA and DFW ozone nonattainment areas.

What Is Included in the State's Airport Ground Support Equipment Orders?

The State signed an Agreed Order with Continental Airlines for its operations at Houston's George Bush Intercontinental Airport on October 18, 2000, and signed a similar Agreed Order with Southwest Airlines for its operations at William Hobby Airport on December 6, 2000. The Orders make enforceable specific local emission reductions of NO_X from sources under the airlines' control. On October 18, 2000, Texas approved a Memorandum of Agreement with the City of Houston to bring about additional reductions from operations in the Houston Airport System. The sum of these reductions is equal to those reductions required in the HGA Attainment Demonstration SIP.

What Did the State Submit?

On April 30, 2000, the Governor of Texas submitted to us revisions to the 30 TAC, Chapter 114, ''Control of Air Pollution From Motor Vehicles,'' as a revision to the SIP for the DFW area. That submission included requirements that non-road large spark-ignition engines of 25 hp or larger conform to Title 13 of the California Code of Regulations, Chapter 9. For further discussion of the submittal, see the proposed approval, 66 FR 16432, March 26, 2001, and accompanying Technical Support Document.

On December 22, 2000, the Governor of Texas submitted to us revisions to the 30 TAC, Chapter 114, ''Control of Air Pollution From Motor Vehicles,'' as a revision to the SIP for the HGA area. That submission included requirements that non-road large spark-ignition engines of 25 horsepower (hp) or larger conform to Title 13 of the California Code of Regulations, Chapter 9; and NO_X reductions from airport Ground Support Equipment (GSE). For further discussion of the submittal, see the proposed approval, 66 FR 36226 (July 11, 2001) and accompanying Technical Support Document.

Also on December 22, 2000, the Texas Natural Resource Conservation Commission (TNRCC) submitted orders with airlines and airport operators in the HGA area for NO_X reductions. For further discussion of the submittal, see the proposed approval, 66 FR 36226 (July 11, 2001) and accompanying Technical Support Document.

What Comments Did EPA Receive in Response to the Proposed Approval of Agreed Orders for HGA Airport Ground Support Equipment?

EPA received comments from Environmental Defense. A summary of the comments received and EPA's response is presented below.

A. The Orders Do Not Require the Specific Levels of Emissions Reductions Claimed in the SIP

Comment: The agreements do not limit total emissions from airport GSE equipment. The Attainment Demonstration SIP assumes that total controlled emissions in 2007 will be 0.5 tpd, 90% below the 5.65 tpd that TNRCC projected from uncontrolled GSE NO_X emissions in the HGA nonattainment area in 2007. These agreements afford no certainty that the 0.5 tpd level of emissions will be achieved (even if one considers the flexibility provided to parties to seek reductions outside of the GSE fleet).

Response: The agreed orders require percentage reductions from a 1996 baseline which achieve the same purpose as an emissions limitation. The reductions specified in each order are enforceable against the owner/operator of the equipment, thus providing a degree of certainty that the reductions will take place.

B. The Orders Are Not Enforceable

Comment: The orders are not enforceable within EPA's national guidance for determining enforceability.

Response: The orders are enforceable through December 31, 2007. These are administrative orders that were adopted by the TNRCC under applicable State law and enforceable by TNRCC or citizens. These orders have been submitted by the Governor to EPA as a SIP revision and, upon the effective date of this action will be federally enforceable.

C. The Agreed Orders and MOAs Are Unlikely To Produce the Emissions Reductions for Which TNRCC Takes Credit in the Attainment Demonstration SIP

Comment: It is quite unlikely that the 0.5 tpd target assumed in the SIP will be achieved. The target will not be achieved if either of the following is true: (1) Growth exceeds the projected amount, such that the total uncontrolled GSE emissions in 2007 (from all airlines) are greater than 5.65 tpd; or (2) the actual reductions that will result from Southwest's and Continental's use of Reasonably Available Control Considering Cost and Best Available Technology on post-1996 equipment are less than anticipated. EPA must discount the emission reduction credit assigned to these agreements in the Attainment Demonstration SIP.

Response: The growth projections were developed using EPA approved methodology and are appropriate for planning purposes. The orders require a

phase-in of new GSE which should permit future emission inventories to monitor the progress of the reductions. The State has committed to a 2004 mid-course review of all measures and to make any necessary adjustments to ensure the reductions claimed are being achieved. Growth exceeding the projections would be identified during that review and would necessitate implementation of additional measures to offset such growth. Further, SIPs are planning tools and cannot guarantee future absolute certainty. However, the reductions approved are enforceable, ensuring a high degree of certainty. For the reasons stated, we believe there is no basis for discounting the emission reduction credit taken by the State at this time; but, as previously stated, additional reductions will be required at the mid-course correction if the reductions claimed are not achieved.

D. The Orders Expire in 2007

Comment: There needs to be ample time for EPA and the public to verify performance under the agreement before the agreements expire.

Response: The Orders are in effect through the attainment year. The State should be preparing a maintenance plan to take effect after the attainment year, which will provide opportunity for us and the public to verify performance under the Orders before they expire. In addition, the State has committed to a 2004 mid-course review of all measures and to make any necessary adjustments to ensure the reductions claimed are being achieved. This commitment includes the requirement to institute additional measures if necessary to account for any newly discovered shortfall in reductions.

What Comments Did EPA Receive in Response to the Proposed Rule for Non-Road Large Spark-Ignition Engines?

We did not receive any comments on the Non-Road Large Spark-Ignition Engine rule for either HGA or DFW.

EPA's Rulemaking Action

We are granting final approval of Texas' Agreed Orders with the major airlines operating at the major airports in the HGA area and the Memorandum of Agreement with the City of Houston. We are also granting final approval of Texas' Non-Road Large-Spark Engine rule for the HGA and DFW areas. We are approving these revisions to the Texas SIP to regulate emissions of NO_X pursuant to sections 110 and 172 of the Act.

Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing the rule in this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. section 804(2). In addition, Section 804 exempts from section 801 the following types of rules: (1) Rules of particular applicability; (2) rules relating to agency management or personnel; and (3) rules of agency organization, procedure, or practice that do not substantially affect the rights or obligations of non-agency parties. 5 U.S.C. section 804(3). EPA is not required to submit a rule report regarding the Orders contained in this action under section 801 because this is a rule of particular applicability.

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 14, 2002. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons,

Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements.

Dated: October 15, 2001.

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52 of chapter I, title 40, Code of Federal Regulations, is amended as follows:

Part 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. Section 52.2270 is amended:

a. In the table in paragraph (c) under Chapter 114 (Reg 4) following Section 114.309 by adding under the heading ''Subchapter I—Non-Road Engines'' the new heading ''Division 3—Non-Road Large Spark-Ignition Engines'' and individual entries for Sections 114.420, 114.421, 114.422, 114.427, and 114.429;

b. In the table in paragraph (d) entitled ''EPA Approved Texas Source-Specific Requirements'' by adding to the end of the table Agreed Order No. 2000–0826–SIP for Continental Airlines and Agreed Order No. 2000–0827–SIP for Southwest Airlines;

c. In the table in paragraph (e) entitled ''EPA Approved Texas Non-Regulatory Provisions and Quasi-Regulatory Measures in the Texas SIP by adding to the end of the table Houston Air Port System Memorandum of Agreement. The additions read as follows:

§ 52.2270 Identification of plan.

* * * * *

(c) * * *

EPA APPROVED REGULATIONS IN THE TEXAS SIP

State citation	Title/subject	State submittal/approval date	EPA approval date	Explanation
* * *	* * *	*	*	*
Chapter 114 (Reg 4)—Control of Air Pollution From Motor Vehicles				
* * *	* * *	*	*	*
Subchapter I—Non-Road Engines Division 3—Non-Road Large Spark-Ignition Engines				
Section 114.420	Definitions	04/19/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.421	Emission Specifications	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.422	Control Requirements	04/19/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.427	Exemptions	04/19/2000	[Insert 11/14/01 Federal Register Cite.]	
Section 114.429	Affected Counties and Compliance Schedules.	12/06/2000	[Insert 11/14/01 Federal Register Cite.]	
* * *	* * *	*	*	*

(d) * * *

EPA APPROVED TEXAS SOURCE-SPECIFIC REQUIREMENTS

Name of source	Permit or order number	State effective date	EPA approval date	Comment
* * *	* * *	*	*	*
Continental Airlines at George Bush Intercontinental Airport, Houston, Texas.	Agreed Order No. 2000–0826–SIP.	10/18/2000	[Insert 11/14/2001 Federal Register Cite.]	HGA, Texas 1-hour ozone standard attainment demonstrations.
Southwest Airlines at William Hobby Airport, Houston, Texas.	Agreed Order No. 2000–0827–SIP.	12/06/2000	[Insert 11/14/2001 Federal Register Cite.]	HGA, Texas 1-hour ozone standard attainment demonstrations.

(e) * * *

EPA APPROVED TEXAS NON-REGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE TEXAS SIP

Name of SIP provision	Applicable geographic or nonattainment area	State approval/submittal date	EPA approval date	Comment
* *	*	*	*	* *
Memorandum of Agreement between TNRCC and Houston Airport System.	Houston/Galveston Area Ozone Nonattainment Area.	10/18/2000	[Insert 11/14/2001 Federal Register Cite.]	HGA, Texas 1-hour ozone standard attainment demonstrations.

[FR Doc. 01–27582 Filed 11–13–01; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–133–1–7493; FRL–7092–8]

Approval and Promulgation of Implementation Plans; Texas; Lawn Service Equipment Operating Restrictions; and Requirements for Motor Vehicle Idling for the Houston/Galveston (HG) Ozone Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving revisions to the Texas State Implementation Plan. This approval covers two separate actions. We are approving: a rule that implements an operating-use restriction program requiring that the handheld and non-handheld spark-ignition engines, rated at 25 hp and below, be restricted from use by commercial operators between the hours of 6 a.m. and noon, April 1 through October 31, in the counties Brazoria, Fort Bend, Galveston, Harris, and Montgomery; and, a rule to implement idling limits for gasoline and diesel-powered engines in heavy-duty motor vehicles in the HG area counties of Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. The EPA is approving these revisions to the Texas SIP to regulate emissions of nitrogen oxides (NO_X) and volatile organic compounds (VOC) in accordance with the requirements of the Federal Clean Air Act (the Act). These new rules will contribute to attainment of the National Ambient Air Quality Standard (NAAQS) for ozone standard in the HG ozone nonattainment area. For details on the SIP submittals and the EPA analysis of the submittals, refer to the June 11, 2001 proposed rule, and the associated Technical Support Document (TSD).

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of documents relevant to this action are available for public inspection during normal business hours at the Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Dallas, Texas 75202–2733; and, the Texas Natural Resource Conservation Commission, Office of Air Quality, 12124 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Steven Pratt, Air Planning Section (6PD–L), 1445 Ross Avenue, Dallas, Texas 75202–2733. Telephone Number (214) 665–2140, e-Mail Address: *pratt.steven@epa.gov*.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' refers to EPA.

What Action Are We Taking Today?

On December 20, 2000, the Governor of Texas submitted to EPA these two rule revisions (an operating-use restriction program for handheld and non-handheld spark-ignition engines, rated at 25 hp and below, used by commercial operators; and, idling limits for gasoline and diesel-powered engines in heavy-duty motor vehicles) to the 30 TAC, Chapter 114, ''Control of Air Pollution From Motor Vehicles,'' as a revision to the SIP.

These new rules will contribute to attainment of the ozone standard in the HG area. The EPA is approving these revisions to the Texas SIP to regulate emissions of NO_X and VOCs in accordance with the requirements of the Federal Clean Air Act (the Act). For more information on the SIP revision, please refer to our TSD and the State's December 20, 2000 SIP revision.

What Are the Clean Air Act Requirements?

Section 172 of the Act provides the general requirements for nonattainment plans. Section 172(c)(6) and section 110 require SIPs to include enforceable emission limitations, and such other control measures, means or techniques as well as schedules and timetables for compliance, as may be necessary to provide for attainment by the applicable attainment date. Today's SIP revision involves approval of one of a collection of controls adopted by the State to achieve the ozone standard in the HG nonattainment area as required under section 172. EPA approval of this SIP revision is governed by section 110 of the Act.

Why Is EPA Taking This Action?

We are taking this action because the State submitted an adequate demonstration to show the necessity for these requirements to achieve the NAAQS in the HG ozone nonattainment area.

What Are the Requirements of the December 20, 2000, Texas SIP Revision for the Operation of Lawn Service Equipment That We Are Approving Today?

The purpose of this rule is to implement an operating-use restriction program requiring that the handheld and non-handheld spark-ignition engines, rated at 25 hp and below, be restricted from use by commercial operators between the hours of 6:00 a.m. and noon, April 1 through October 31. Spark-ignition lawn and garden service handheld equipment includes, but is not limited to, trimmers, edgers, chain saws, leaf blowers/vacuums, and shredders. Spark-ignition lawn and garden service non-handheld lawn and garden equipment covered by the rules includes such devices as walk-behind lawnmowers, lawn tractors, tillers, and small generators. The engines are both two cycle and four cycle engines, generally unable to use automotive technology, such as closed-loop engine control and three-way catalysts, to reduce emissions.

As a result of this restriction, production of ozone precursors will be stalled until later in the day when optimum ozone formation conditions no longer exist, ultimately reducing the peak level of ozone produced. It is estimated that this measure will achieve a minimum of 0.23 tons per day (tpd)

delay of NO_X until after noon. There will also be a 12.4 tpd delay in VOC emissions until after noon. Because the emission of NO_X and VOC, both precursors to the formation of ozone, will be delayed until after noon, this delay will lead to a reduction in ozone that is equivalent to that which would result from approximately 4.6 tpd of NO_X reduction.

The Texas regulation allows operators to submit an alternate emissions reduction plan by May 31, 2003. The alternate plan would allow operation during the restricted hours, provided the plan achieves reductions of NO_X and VOCs that would result in ozone benefits equivalent to the underlying regulation.

The regulation exempts from the restriction use at a domestic residence by the owner of, or a resident at, that domestic residence, use by a non-commercial operator, or any equipment used exclusively for emergency operations to protect human health and safety or the environment, including equipment being used in the repair of facilities, devices, systems, or infrastructure that have failed, or are in danger of failing, in order to prevent immediate harm to public health, safety, or the environment.

The affected area includes the following counties within the HG nonattainment area: Brazoria, Fort Bend, Galveston, Harris, and Montgomery. The restrictions applicable to this Texas regulation will take effect April 1, 2005.

What Are the Requirements of the December 20, 2000, Texas SIP Revision for Restricting Motor Vehicle Idling?

The purpose of this rule is to establish idling limits for gasoline and diesel-powered engines in heavy-duty motor vehicles in the HG area. The rule defines heavy-duty motor vehicles as those motor vehicles that have a gross vehicle weight rating (GVWR) of greater than 14,000 pounds. To comply with the motor vehicle idling regulations, no person in the affected counties may cause, suffer, allow, or permit the primary propulsion engine of a heavy-duty motor vehicle to idle for more than five consecutive minutes when the vehicle is not in motion during the time period April 1 through October 31.

These idling limits will lower NO_X emissions and other pollutants from fuel combustion. Because NO_X is a precursor to ground-level ozone formation, reduced emissions of NO_X will result in ground-level ozone reductions. It is estimated that this measure will achieve a minimum of 0.48 tpd of NO_X equivalent reductions.

The Texas regulation allows the following exemptions: covered vehicles that are forced to remain motionless because of traffic conditions over which the operator has no control; vehicles being used as an emergency or law enforcement motor vehicle; when the engine of a covered motor vehicle is being operated for maintenance or diagnostic purposes; when the engine of a covered motor vehicle is being operated solely to defrost a windshield; when the covered vehicle is being operated to provide a power source necessary for mechanical operation other than propulsion, passenger compartment heating, or air conditioning; where the primary propulsion engine of a covered vehicle is being operated to supply heat or air conditioning necessary for passenger comfort/safety in those vehicles intended for commercial passenger transportation or school buses, in which case idling up to a maximum of 30 minutes is allowed; where the primary propulsion engine of a covered vehicle is being used for transit operations, in which case idling up to a maximum of 30 minutes is allowed; and where the primary propulsion engine of a vehicle is being used in airport ground support equipment. The exemption for ground service equipment is intended to cover all equipment that is used to service aircraft during passenger and/or cargo loading and unloading, maintenance, and other ground-based operations.

The affected area includes the following counties within the HG nonattainment area: Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller. The restrictions applicable to this Texas regulation took effect April 1, 2001. This control strategy is a necessary measure to consider for contributing to a successful attainment demonstration with the NAAQS for ozone.

The TNRCC has proposed revisions to the idling restriction rule. The changes clarify that the operator of a rented or leased vehicle is responsible for compliance with the requirements in situations where the operator of a leased or rented vehicle is not employed by the owner of the vehicle. Our preliminary review indicates that the changes do not weaken the rule, but merely clarify enforcement provisions. Should a SIP revision be submitted incorporating these changes, the EPA may publish a revision to this rule.

What Comments Did EPA Receive in Response to the June 11, 2001, Proposed Approval of These Rules?

A. Comments Received in Response to the Lawn Service Operating Restrictions Rule

Five sets of comments were received on this portion of the June 11, 2001 (66 FR 31197), proposed approval. Comments were received from the Engine Manufacturer's Association (EMA), the Toro Company (Toro), the Business Coalition for Clean Air (BCCA), the Outdoor Power Equipment Institute (OPEI), and Jeri Yenne on behalf of Brazoria, Fort Bend and Montgomery counties in Texas (Counties). Each of these comments were in opposition to the operating-use restriction.

Comment 1: EMA, BCCA, OPEI and Toro each comment that the operating-use restriction is a requirement relating to the control of emissions from non-road engines and thus preempted under section 209(e) of the Clean Air Act. These commenters point to a recent holding from the U.S. District Court for the Western District which overturned a State use-restriction on heavy-duty engines *(Engine Manufacturers Association* v. *Huston,* No. 316–SS (June 13, 2001)).

Response 1: We disagree that the regulation is preempted under Section 209(e) of the Act. Section 209(e) addresses state regulation of nonroad equipment. Section 209(e)(1) prohibits states from promulgating standards relating to the control of emissions from new construction and farm equipment which are smaller than 175 horsepower and new locomotives. Section 209(e)(2) does not expressly prohibit state regulation, but instead provides in section 209(e)(2)(A) that EPA shall authorize California to adopt and enforce standards and other requirements relating to the control of emissions for any nonroad engines other than those preempted under section 209(e)(1). The criteria for providing such an authorization are similar to those in section 209(b). Section 209(e)(2)(B) allows any state other than California to adopt and enforce emissions standards for nonroad equipment, and to take such others actions as are referred to in section 209(e)(2)(A), if such standards, implementation, and enforcement are identical to California's standards and two years of lead time is provided. Neither California nor other states are authorized to adopt or enforce emissions standards or other requirements for the farm, construction, and locomotive categories of non-road

equipment specified in 209(e)(1). See, *Engine Manufacturers Ass'n* v. *EPA,* 88 F. 3d 1075 (D.C. Cir. 1996) (*EMA*).

EPA is expressly required to issue regulations to implement section 209(e).

An emission standard under section 209(a) and (e) is a quantitative limit on emissions of a pollutant from an engine, vehicle or piece of equipment. The means for achieving such control are typically through modifying or changing the engine or equipment itself, as compared to controlling or regulating how the equipment is operated in-use. This is the central distinction between emissions standards, which are prohibited under section 209(e), and state limitations on in-use operation, which are allowed under section 209(d).

Pursuant to its express authority, EPA promulgated regulations implementing section 209(e) on December 30, 1997 (62 FR 67733). See 40 CFR part 85 subpart Q and 40 CFR part 89, appendix A to subpart A. This rule revised earlier regulations promulgated on July 20, 1994 (59 FR 36969) and on June 17, 1994 (59 FR 31306). EPA's regulations include an interpretive rule stating, in part, that ''EPA believes that states are not precluded under section 209 from regulating the use and operation of nonroad engines, such as regulations on hours of use, daily mass emission limits or sulfur limits on fuel.'' The regulations promulgated on December 30, 1997 were not challenged and are binding Federal law. The initial regulations were challenged in the Court of Appeals for the District of Columbia Circuit. *Engine Manufacturers Ass'n* v. *EPA,* 88 F. 3d 1075 (D.C. Cir. 1996) (*EMA*). The basic issue before the court was the scope of preemption under section 209(e). While all parties agreed that Congress implicitly intended to preempt state action under section 209(e)(2), the scope of this preemption was in dispute. The court held that preemption under section 209(e)(2) extended to both new and non-new nonroad equipment. The court then went on to address ''what sorts of regulations the states are preempted from adopting.'' *See, EMA,* 88 F. 3d at 1093. The court agreed with EPA that ''standards'' prohibited under 209(e) were quantitative limits on emissions as discussed in *Motor & Equipment Manufacturers Ass'n, Inc.* v. *EPA,* 627 F.2d 1095 (D.C. Cir. 1979) (MEMA), cert. denied, 446 U.S. 952 (1980). It also agreed that EPA's interpretation of ''other requirements'' under section 209(e) was reasonable, limiting them to ''ancillary enforcement mechanisms such as certificates and inspections.'' Again, see *EMA,* 88 F. 3d at 1093. Finally, the Court agreed with EPA that states had the rights to impose the kind of use, operation or movement restrictions on nonroad equipment authorized under section 209(d).

We believe Congress explicitly excluded such use restrictions from the preemption of section 209 because, among other things, Congress believed states were best situated to regulate such use. ''It may be that, in some areas, certain conditions at certain times will require control of movement of vehicles. Other areas may require alternative methods of transportation * * * These are areas in which the States and local government can be most effective.'' S. Rep. No. 403, 90th Cong., 1st Sess. 34 (1967). Similar congressional intent was expressed when the nonroad provisions were adopted in 1990. *See EMA,* 88 F. 3d at 1094 n.58.

The EPA regulations on this issue are binding rules and have been upheld by the Court of Appeals for District of Columbia. We believe that the decision of the District Court in *EMA* v. *Huston,* in which EPA was not a party, was incorrect both in its failure to defer to the reasoned opinion of both EPA and the D.C. Court of Appeals and in its failure to dismiss the challenge to the Dallas use restriction as an inappropriate collateral attack on regulations that had already been upheld in an earlier appellate court case.

The hours-of-use restriction enacted by the state are exactly the type of restrictions on use permitted under section 209(d) and EPA regulations.

Comment 2: Toro and the Counties commented that the use restriction does not meet the enforceability requirements of section 110(a)(2)(C). They point out that no additional manpower is provided for in the submittal to EPA and assert that there are no provisions regarding the consequences for failure to comply with the restrictions.

Response 2: The submittal containing these measures included evidence of legal authority to enforce them. Section 382.039 of the Texas Health and Safety Code provides authority for the State to promulgate and implement regulations to demonstrate attainment. This authority to implement necessarily includes the authority to enforce.

The State has addressed in the SIP documents that they will enforce the requirements after the rule compliance date and take appropriate action for noncompliance situations. They have indicated that the rules will be enforced by both their staff in the commission's regional offices, as well as local air pollution control programs. In Texas, local governments have the same power and are subject to the same restrictions as the commission under TCAA, § 382.015, Power to Enter Property, to inspect the air and to enter public or private property in its territorial jurisdiction to determine if the level of air contaminants in an area in its territorial jurisdiction meet levels set by the commission. Thus, the local governments which also may sign cooperative agreements with the commission to enforce the rules under TCAA, § 382.115, Cooperative Agreements, have the authority to enforce these rules as well. The authority of local governments to enforce air pollution requirements is specified in detail in TCAA, §§ 382.111–382.115, and local governments can institute civil actions in the same manner as the TNRCC pursuant to Texas Water Code (TWC), § 7.351. The TNRCC states they will work with local officials to ensure enforcement of the SIP and SIP rules. The TNRCC has existing relationships with pollution control authorities in the City of Houston, Harris County, and Galveston County for enforcement of other commission rules. The agency details that they will continue enforcement relationships with these entities and develop relationships with other local officials as needed to create any additional enforcement mechanisms required for carrying out the SIP and related SIP rules. The TNRCC states they will enforce this rule with existing personnel and does not anticipate any increase in enforcement costs. The State indicates there would be no civil penalties issued to a commercial operator, however, fines may be assessed via an administrative penalty, with the monies being collected and retained by the state.

40 CFR part 51, Appendix V, details the criteria for determining completeness of plan submissions. With respect to enforceability requirements, the State has met the applicable criteria listed in Section 2.0 of Appendix V, including: adoption in State code; evidence of legal authority; submitting copies of the regulation; evidence that the proper state procedural requirements were followed; giving public notice consistent with EPA procedures; certification of the public hearings; and, compilation of public comments and the State's responses thereto.

If the State is unable to enforce the program adequately, we would be in a position to issue a ''SIP call'' and require additional efforts or additional emission control measures to make up for the reductions lost by a failure to enforce the approved program.

Comment 3: The Counties, Toro and BCCA all express concern that the use

restriction increases the danger of heat related injuries. They assert that because operators currently work from 7:00 a.m until noon and then stop until later in the afternoon, the restriction will cause workers to be out during the mid-day hours, typically the hottest part of the day. Further, Toro asserts that citizens would be inconvenienced by changes in maintenance schedules at parks and golf courses.

Response 3: We do not necessarily agree that all workers will have to be exposed to the early afternoon heat because of the morning restrictions. True, the restrictions apply during the hottest time of the year. However, this is also the time of the year when there is more daylight. If the owner/operator does not opt for alternatives to the morning operating restrictions (discussed later in this response), instead of working during the mid-afternoon, the work can be later in the evening, when temperatures have begun to moderate and there is more shade and less direct sunlight. Another alternative is to take measures to mitigate the affects of the heat. According to OSHA there are various methods of preventing heat stroke and other adverse health effects without eliminating work during hot hours of the day. Supervisors can schedule frequent breaks and provide adequate amounts of water. Operators of lawn equipment would be expected to take all necessary measures to protect their health and safety and educate themselves about potential risks as it is presumed they do currently.

While there are ways to work around the restrictions or mitigate the potential adverse impacts, the same may not be said of the known adverse health impacts of elevated ozone levels. These impacts are not limited to those in the field of commercial landscaping, but apply across the board to everyone. These health affects are even more pronounced in those particularly unable to avail themselves of potential mitigating measures, the elderly and very young. Likewise, the inconvenience for those wishing to play golf on a freshly manicured course or not be subject to the noise of the equipment while a park is being mowed is extremely trivial when compared to the benefits of reduced ground level ozone. As a result, we do not feel that these concerns justify disapproval of the submittal. The rule does not ban lawn maintenance activities altogether, but simply shifts the time period during which activities with certain types of equipment may be conducted.

Finally, the regulations offer alternatives to the restriction of operation during the morning hours. The owner/operator of commercial landscape equipment may opt to submit a plan which provides for reductions of VOC and NO_X equivalent to those that would result from compliance with the restrictions. Such plans are to be submitted by May 31, 2003, and the State commits to take action on the plans by May 31, 2004. To support the alternative compliance methods, the TNRCC has developed guidance to assist commercial operators in developing a plan to achieve equivalent emission reductions of NO_X and VOC. Commercial operators would be able to submit a plan that uses these pre-approved actions or changes instead of developing a plan that would require case-specific approval by the executive director and the EPA. Reliance on the pre-approved measures will simplify the plan submittal process for commercial operators and will assist the executive director in the review and approval of each submittal. Commercial operators retain the option of developing their own plan which will be subject to executive director and EPA approval.

The State considered the difficulties this rule may impose on businesses and individuals, and thus is adopting it with an extended compliance schedule so that lawn and maintenance businesses may supplement their equipment with electric or manual powered units, re-arrange their working schedules, or develop an emissions control plan. It should be noted that the compliance schedule fits well with the indicated equipment replacement cycle of 2 to 4 years common in the industry. This schedule facilitates the transition to cleaner, electric, or manual equipment.

Comment 4: Toro, OPEI, the Counties and BCCA commented that this regulation will have a significant economic impact on the landscape service industry and that this economic impact exceeds the actual benefits derived from the restrictions.

Response 4: Actions such as the approval of a SIP revision which merely approve state law as meeting federal requirements and impose no additional requirements beyond those imposed by state law are not subject to economic impact analysis under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Such consideration is up to the state under applicable state administrative procedure laws. Details on the State's assessments of financial impact can be found in the submitted SIP documents.

Comment 5: The Counties questioned how the individual enforcing the restriction will distinguish commercial from non commercial operators of the equipment. The Counties also stated that a ''kind gesture before noon would result in violation of the restriction'', and cited the following circumstances as causing a violation: The teenager who mows his neighbor's lawn; the church member who mows the church lawn or church property; the kind neighbor who trims his neighbor's trees, and the neighbor who tills the flower bed or garden spot for the someone next door.

Response 5: For this rule, a Commercial operator is defined as any person who receives payment or compensation in exchange for operating lawn and garden service equipment powered by spark-ignition engines of 25 hp or below where the payment or compensation is required to be reported as income by the United States Internal Revenue Code. Generally speaking, this is any person who earns more than $400 a year using the aforementioned equipment. The persons cited by the commenters as examples of those who would be violating the regulation do not fall under the category of a commercial operator, and as such would not be in violation of this rule.

The field methods to distinguish commercial from non commercial operators is the responsibility of the State and can be accomplished in a number of ways. The time period between now and the date of April 1, 2005, when the restrictions become effective, provides sufficient time for formulation of State procedures/requirements for such determination.

Comment 6: BCCA indicated that the commitment to implement innovative measures should be used in lieu of the restriction on hours of operation. BCCA contends that the ban could be eliminated and alternative measures could be pursued before or during the mid-course review to account for the NO_X reductions that the TNRCC currently allocates to the ban.

Response 6: We agree that the possibility exists that innovative measures may come about that would exceed the amounts needed to fill the gap. However, we do not agree that the State should withdraw reasonably available measures with the hope that sufficient reductions to offset these regulations will come to fruition. Lawn and garden equipment makes a significant contribution to the HG area ozone levels. This rule is significant in the HG area's plan to close the gap and demonstrate attainment. In addition, section 172(c)(1) of the Clean Air Act requires the SIP to provide for implementation of all reasonably available control measures (RACM) as expeditiously as practicable and for attainment of the NAAQS. This measure is reasonable, available, and will accelerate the attainment of the ozone

standard. Therefore, the restriction on hours of operation of commercial lawn equipment is required to remain a part of the attainment demonstration SIP.

Comment 7: Toro and the Counties questioned the validity of the modeling used to determine the benefits associated with the restriction on hours of operation. Toro believes that the emissions predicted by the State are purely speculative. OPEI commented that the emissions benefits in the submittal were greatly exaggerated and submitted a technical analysis from a technical consultant in support of their position. Further, OPEI commented that the baseline emissions inventory upon which the calculations were based was incorrect.

Response 7: In developing the SIP and related regulations the TNRCC worked extensively with the lawn and garden industry, consultants, and other affected industries in the HG area, in the development of emissions and equipment inventories reflecting accurate and HG area specific data. The latest version of the photochemical model recognized by the EPA for SIP modeling (the Comprehensive Air Model with Extensions (CAM_X)) was used for the modeling. The latest emissions inventories available, those provided with EPA's ''Non-Road Equipment and Vehicle Emission Study'' (NEVES, EPA–21A–2001, November 1991), were used by the State in developing the Lawn and Garden Equipment Operating Restriction rule. The TNRCC adjusted this inventory data for temporal factors on the basis of a local study performed in 1990 for the Houston Galveston area. For lawn and garden equipment this represents the best information available at the time. This inventory was then built up to the attainment year of 2007 by using urban planning data from the Houston/Galveston Area Council (HGAC—the area's urban planing organization), and the latest population database (1999) obtained from the State of Texas Comptroller of Public Accounts and the Texas State Data Center.

The draft EPA model known as the NONROAD model was not used for calculations of emissions, however limited use was made of the NONROAD model to develop the attainment-year inventory. Because NONROAD accounts for the several phases of federal requirements for small engines, TNRCC ran NONROAD for the base and attainment years, assuming zero growth in equipment population. The resulting emissions were then ratioed to provide reduction factors for each source category resulting from federal controls. Thus, the modeling performed by the State does include the Federal Phase II emission standards for small handheld and non-handheld engines recently adopted.

The use of urban planning projections from HGAC, the latest human population numbers as the basis for growth to the attainment year of 2007, and the inclusion of up to date engine emissions data, provides competent accuracy of emissions growth and the industries' contribution to ozone production.

The State simulated the shifting of commercial operators emissions to the afternoon while keeping the residential operators emissions in the morning hours to ensure proper accounting of the shift effect in the photochemical modeling. Commercial use profiles show full use occurring in the morning and afternoon hours, tapering off in the evening. However, residential use indicates a two peak profile with cutting peaks in the morning and the evening, with slow times occurring during mid-day. Because of these profiles, the modeled shift was more sensitive to commercial operators shifting of hours of operation, and an approximate 50% shift in emissions resulted.

Numerous emission control strategies were considered by the State in developing the modeling. Varying degrees of reductions from point sources, on-road and non-road mobile sources, and area sources were analyzed in multiple iterations of modeling, to test the effectiveness of different NO_X reductions. The attainment demonstration modeling and other analysis show that a significant amount of NO_X reductions is necessary from ozone control strategies in order for the HG nonattainment area to achieve the ozone NAAQS by 2007, including reductions from surrounding counties included in the HG consolidated metropolitan statistical area (CMSA). The State used state-of-the-art photochemical methodologies to develop this rule. However, the TNRCC and EPA continually seek to improve inventories and modeling, and while it may be true that there may be several methods of analysis and that better emissions inventories may yet be developed, it is also known that substantial reductions are necessary in the HG area. The reductions provided by this rule are significant and important in helping the HG area to attain by 2007. The State will be performing a mid-course review in May, 2004. At that time modifications to the SIP can be made, if applicable.

Comment 8: Toro commented that Texas should implement a voluntary emission reduction credit program in lieu of the operating restrictions. They point to the Texas Emission Reduction Program established by Texas Senate Bill 5.

Response 8: The ''Carl Moyer'' style program referred to by Toro was specifically authorized by Texas' 77th legislature. Senate Bill 5 not only provides statutory authority for emission reduction projects, but also provides a funding mechanism for such a program. However, that authority is limited and not available for the small combustion-ignition engines that are the subject of the operating restrictions, and, it is known that substantial reductions are necessary in the HG area to enable the HG area to attain by 2007. The reductions provided by this rule are significant and important in this respect. The State will be performing a mid-course review in May, 2004. At that time modifications to the SIP can be made, if applicable.

Comment 9: OPEI and BCCA contend that the restriction has a disproportionate impact on small and minority owned businesses.

Response 9: EPA disagrees with this contention. The rule will not have a disparate impact on persons based on income level, business size, race, color, or national origin. Any negative impacts of the rule are clearly borne equally by all commercial operators and their employees governed by the rule. Equally significant is the fact that the health benefits (including health related economic benefits) of this rule will be enjoyed by all, including those claimed to be adversely affected. Every citizen in the area, especially asthmatics, the very young, and the very old, are vulnerable to the effects of ground level ozone. The ultimate responsibility of this rule is to maintain and improve the air quality and public health in the HG area. This rule would do that by creating reductions in NO_X and VOC. These reductions are a necessary measure for successfully demonstrating attainment. The State was aware of the economic and other difficulties this rule will impose on businesses and individuals in the drafting of this rule. Consequently, the rule includes an extended compliance schedule so that lawn and maintenance businesses may supplement their equipment with electric or manual powered units or develop an emissions control plan.

B. Comments Received in Response to the Requirements for Motor Vehicle Idling Rule

Only one set of comments were received on this portion of the proposal. Those comments were submitted by Jeri Yenne on behalf of Brazoria, Fort Bend

and Montgomery counties in Texas (Counties).

Comment 1: The Counties assert that the exceptions provided effectively nullify the prohibition on idling and that because the exceptions are so broad there will be no emission reductions as a result of these requirements.

Response 1: We disagree with this comment. Under 30 TAC section 114.507 the restrictions clearly apply to all vehicles over 14,000 pounds, including long-haul trucks and buses, that operate in the counties specified. The exceptions are intended to account for reasonable circumstances, such as when the vehicle is not in motion due to traffic congestion. Those vehicles used for commercial passenger transportation and school buses may idle for the purpose of passenger comfort, but only up to thirty minutes. We do not believe extending the idling limitation from five minutes to 30 minutes or applying any of the other exemptions render the program a nullity.

Comment 2: The Counties commented that enforcement of these provisions was unlikely given the difficulty enforcing weight restrictions.

Response 2: We are unaware of any credible evidence indicating that the State would not be able to enforce the idling restrictions. The State has submitted information to demonstrate the legal authority to enforce this measure. If there is a failure to implement the program, EPA may issue a ''SIP call'' and require the State to either correct the program deficiencies or submit measures sufficient to offset all lost emission reductions.

The State is working on reaching agreements with the local governments for assistance in enforcing these regulations. The Texas Health and Safety Code provides for enforcement of State environmental regulations in sections 382.111 through 382.115. In addition, local governments may institute civil actions in the same manner as the TNRCC according to section 7.351 of the Texas Water Code.

Comment 3: The Counties assert that there is no scientific evidence to support the reductions claimed from idling restrictions.

Response 3: EPA disagrees with the comment. Statistics clearly indicate that vehicles over 14,000 GVMR are typically diesel. These vehicles have documented less stringent emission standard requirements than light duty vehicles. Studies indicate that these types of vehicles typically are allowed to idle for long periods of time. Targeting of these vehicles to restrict their idle time will reduce their emissions, including NO_X. Because NO_X is a precursor to ground-level ozone formation, reduced emissions of NO_X will result in ground-level ozone reductions. Texas used state-of-the-art photochemical methodologies to develop this rule. Emissions data for covered vehicles were adjusted for lower idle times in accordance with the restriction (estimated hours of operation that would be reduced due to the restrictions), and this data was used as modeling input. Modeling assessing the benefits of this NO_X emission reduction strategy demonstrated that emission reductions could be achieved by limiting the idling time of heavy-duty motor vehicles. The modeling showed that by the year 2007, the idling limits will reduce NO_X emissions in the affected area by 0.48 tons per day (tpd). The TNRCC further estimates a daily cost savings benefit of this rule at approximately $51,900 per ton of NO_X reduced. This figure was calculated from the estimated NO_X reductions from this strategy of 0.48 tpd, the estimated reduction in fuel consumption per hour, and the current price per gallon of fuel sold in the affected area.

Substantial reductions are necessary in the HG area. The reductions provided by this rule are significant and important in helping the HG area to attain by 2007. This rule is one element of an air pollution control strategy in the eight-counties HG ozone nonattainment area to reduce NO_X necessary for the counties to be able to demonstrate attainment with the ozone NAAQS. The State will be performing a mid-course review in May, 2004. At that time modifications to the SIP can be made, if applicable. Should the restrictions not provide the reductions anticipated, Texas will be required to submit additional measures to ensure attainment of the ozone NAAQS by 2007.

EPA Action

We are approving two rules: Lawn Service Equipment Operating Restrictions; and, Requirements for Motor Vehicle Idling for the HG Ozone Nonattainment Area.

Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 14, 2002. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Intergovernmental relations, Motor vehicle pollution, Volatile organic compounds, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements.

Dated: October 15, 2001.

Gregg A. Cooke,

Acting Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270, the table in paragraph (c) is amended by adding to the ending of the section ''Chapter 114 (Reg 4)—Control of Air Pollution From Motor Vehicles'' new headings with entries for ''Subchapter I—Non-Road Engines'' and ''Subchapter J—Operational Controls for Motor Vehicles'', to read as follows:

§ 52.2270 Identification of plan.

* * * * *

(c) * * *

EPA APPROVED REGULATIONS IN THE TEXAS SIP

State citation	Title/subject	State approval/submittal date	EPA approval date	Explanation
* *	*	*	* *	*
Chapter 114 (Reg 4)—Control of Air Pollution from Motor Vehicles				
* *	*	*	* *	*
Subchapter I—Non-Road Engines Division 6: Lawn Service Equipment Operating Restrictions				
Section 114.452	Control Requirements	12/20/00	[Insert 11–14–01 Federal Register cite]	
Section 114.459	Affected Counties and Compliance Dates.	12/20/00	[Insert 11–14–01 Federal Register cite]	
Subchapter J—Operational Controls for Motor Vehicles Division 1: Motor Vehicle Idling Limitations				
Section 114.500	Definitions	12/20/00	[Insert 11–14–01 Federal Register cite]	
Section 114.502	Control Requirements for Motor Vehicles.	12/20/00	[Insert 11–14–01 Federal Register cite]	
Section 114.507	Exemptions	12/20/00	[Insert 11–14–01 Federal Register cite]	
Section 114.509	Affected Counties and Compliance Dates.	12/20/00	[Insert 11–14–01 Federal Register cite]	

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[FR Doc. 01–27583 Filed 11–13–01; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–134–8–7532; FRL–7092–7]

Approval and Promulgation of Implementation Plans; Texas; Control of Emissions of Nitrogen Oxides From Stationary Sources in the Houston/ Galveston Ozone Nonattainment Area

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The EPA is approving revisions to the Texas State Implementation Plan (SIP). This rulemaking covers five separate actions. First, we are approving revisions to the Texas Nitrogen Oxides (NO_X) rules for point sources of NO_X in the Houston/ Galveston (H/GA) ozone nonattainment area of Texas as submitted to us by the State on December 22, 2000. These new limits for point sources of NO_X in the H/GA will contribute to attainment of the 1-hour ozone National Ambient Air Quality Standard (NAAQS) in the H/GA 1-hour ozone nonattainment area. Second, we are approving an exclusion, from the federally-approved SIP, of carbon monoxide (CO) and ammonia emission limits ancillary to the NO_X standards for post combustion controls found in Title 30 of the Texas Administrative Code (TAC), Chapter 117. Third, we are approving, by parallel processing, revisions to the Texas NO_X rules for stationary diesel engines or stationary dual-fuel engines in the H/GA 1-hour ozone nonattainment area. Fourth, we are approving, through parallel processing, revisions made to the Texas SIP concerning compliance schedules for utility electric generation and Industrial, Commercial, and Institutional (ICI) sources in the H/GA area. Fifth, we are approving, through parallel processing, revisions made to the Texas SIP concerning lean-burn and rich-burn engines. The EPA is approving the SIP revisions described as actions number one, two, three, four, and five to regulate emissions of NO_X as meeting the requirements of the Federal Clean Air Act (the Act).

DATES: This rule will be effective on December 14, 2001.

ADDRESSES: Copies of the documents about this action including the Technical Support Document, are available for public inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment with the appropriate office at least 24 hours before the visiting day.

Environmental Protection Agency, Region 6, 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733.

Texas Natural Resource Conservation Commission, Office of Air Quality, 12124 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Mr. Alan Shar, Air Planning Section (6PD–L), EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–6691, and Shar.Alan@epa.gov.

SUPPLEMENTARY INFORMATION:

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Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

1. What Actions Are We Taking in This Document?

On December 22, 2000, George W. Bush, then Governor of Texas, submitted rule revisions to 30 TAC, Chapter 117, ''Control of Air Pollution From Nitrogen Compounds,'' as a revision to the SIP for point sources in the H/GA. The December 22, 2000, submittal required an 89 percent reduction in emissions of NO_X from point sources in the H/GA area.

As part of a negotiated settlement in the case of *BCCA Appeal Group* v. *Texas Natural Resource Conservation Commission,* No. GN1–00210 (250th Dist. Ct. Travis County)(complaint filed on January 19, 2001) reached on May 18, 2001, TNRCC issued a proposal to revise 30 TAC, Chapter 117 on May 30, 2001. On June 15, 2001, Texas Governor Rick Perry submitted a request letter to us asking to process the May 30, 2001, proposed rule revisions to 30 TAC, Chapter 117, as a revision to the SIP from point sources in the H/GA, through parallel processing.

On July 12, 2001 (66 FR 36532), we published a notice of proposed approval of the December 22, 2000 rules for point sources of NO_X in the H/GA. We also proposed to approve, through parallel processing, revisions to the NO_X rules for H/GA concerning (a) stationary diesel engines or stationary dual-fuel engines, (b) compliance schedules for utility electric generation and ICI sources and (c) lean-burn and rich burn engines. We noted, but did not propose

for approval, alternate NO_X emissions reductions and specifications contained in the May 30, 2001 proposed changes to the Texas rules.

On September 26, 2001, the TNRCC adopted as final rules amendments to 30 TAC, Chapter 117 proposed on May 30, 2001, with certain revisions.

On October 4, 2001, Texas Governor Rick Perry submitted a request letter to us asking us to process the September 26, 2001, final rule amendments to 30 TAC, Chapter 117, as a revision to the SIP for point sources in the H/GA area.

The State of Texas submitted this revision to us as a part of the NO_X reductions needed for the H/GA area to attain the 1-hour ozone standard. In this document we are taking five separate actions: (1) We are approving the December 22, 2000, rule revision to the Texas SIP as proposed at 66 FR 36532 (July 12, 2001). The State of Texas submitted this revision to us as a part of the NO_X reductions needed for the H/GA area to attain the 1-hour ozone standard. These NO_X reductions will assist H/GA to attain the 1-hour ozone standard. (2) We are approving exclusion of the CO and ammonia emission limits found in 30 TAC Chapter 117 in conjunction with NO_X emission limits, from the federally approved Texas SIP. In our 65 **Federal Register** 64148 document published on October 26, 2000, and 65 **Federal Register** 64914 document published on October 31, 2000, we included CO and ammonia emission limits, in addition to the NO_X emission limits, as a part of the federally approved Texas SIP. Texas did not originally request their inclusion and subsequently asked us not to have these limits included as a part of the federally approved SIP. In today's final rulemaking, we are excluding the limits on CO and ammonia emissions, resulting from use of post combustion controls, from the federally approved SIP for Texas as proposed at 66 FR 36532, 36533. (3) We are approving, through parallel processing, revisions made to sections of 30 TAC, Chapter 117 that Texas proposed on May 30, 2001, and submitted to us as final rules on October 4, 2001, concerning stationary diesel engines or stationary dual-fuel engines because Texas is relying on these NO_X reductions to demonstrate attainment of the 1-hour ozone standard in the H/GA 1-hr ozone nonattainment area. (4) We are approving, through parallel processing, revisions made to sections of 30 TAC, Chapter 117 that Texas proposed on May 30, 2001, and submitted to us as final rules on October 4, 2001, concerning NO_X emissions specifications and compliance schedules for utility electric generation and ICI sources in the H/GA area. (5) We are approving, through parallel processing, revisions made to sections of 30 TAC, Chapter 117 that Texas proposed on May 30, 2001, and submitted to us as final rules on October 4, 2001, concerning both the lean-burn and rich-burn reciprocating internal combustion engines.

In this document we are not approving the alternate or less stringent NO_X emissions specifications and less stringent emissions reductions that are part of the proposed May 30, 2001, Texas SIP revision, and submitted to us as final rules on October 4, 2001. See proposed action number six at 66 FR 66352, published on July 12, 2001.

Table I contains a summary list of the sections of 30 TAC, Chapter 117 that Texas proposed, on May 30, 2001, adopted on September 26, 2001, and submitted to us as final rules on October 4, 2001, that we are approving (with certain exceptions discussed below) for sources of NO_X in the H/GA area.

TABLE I.—SECTION NUMBERS AND SECTION DESCRIPTIONS OF 30 TAC, CHAPTER 117 AFFECTED BY THE MAY 30, 2001, PROPOSED RULE REVISION

Section	Description
117.10	Definitions.
117.101	Applicability.
117.103	Exemptions.
117.105	Emission Specifications for Reasonably Available Control Technology.
117.106	Emission Specifications for Attainment Demonstrations.
117.107	Alternative System-wide Emission Specifications.
117.108	System Cap.
117.110	System Cap.
117.111	Initial Demonstration of Compliance.
117.113	Continuous Demonstration of Compliance
117.114	Emission Testing and Monitoring for the Houston/Galveston Attainment Demonstration.
117.116	Final Control Plan Procedures for Attainment Demonstration Emission Specifications.
117.119	Notification, Recordkeeping, and Reporting Requirements.
117.121	Alternative Case Specific Specifications.
117.138	System Cap.
117.201	Applicability.
117.203	Exemptions.
117.205	Emission Specifications for Reasonably Available Control Technology (RACT).
117.206	Emission Specifications for Attainment Demonstrations.
117.207	Alternative Plant-wide Emission Specifications.
117.208	Operating Requirements.
117.210	System Cap.
117.211	Initial Demonstration of Compliance.
117.213	Continuous Demonstration of Compliance.
117.214	Emission Testing and Monitoring for the Houston/Galveston Attainment Demonstration.
117.216	Final Control Plan Procedures for Attainment Demonstration Emission Specifications.
117.219	Notification, Recordkeeping, and Reporting Requirements.
117.221	Alternative Case Specific Specifications.
117.471	Applicability.
117.473	Exemptions.
117.475	Emission Specifications.
117.478	Operating Requirements.
117.479	Monitoring, Recordkeeping, and Reporting Requirements.
117.510	Compliance Schedule for Utility Electric Generation in Ozone Nonattainment Areas.

TABLE I.—SECTION NUMBERS AND SECTION DESCRIPTIONS OF 30 TAC, CHAPTER 117 AFFECTED BY THE MAY 30, 2001, PROPOSED RULE REVISION—Continued

Section	Description
117.520	Compliance Schedule for Industrial, Commercial, and Institutional Combustion Sources in Ozone Nonattainment Areas.
117.534	Compliance Schedule for Boilers, Process Heaters, Stationary Engines, and Gas Turbines at Minor Sources.
117.570	Use of Emissions Credits for Compliance.

2. Did We Receive Written Comments on These Proposed Actions?

Yes, we received written comments on these proposed actions. See sections 4 and 5 of this document for additional information.

3. When Did the Public Comment Period for Our Proposal on These Actions Expire?

The public comment period for our proposal on these actions expired on August 13, 2001.

4. Who Submitted Comments to Us?

We received written comments from Reliant Energy, Inc. (RE); Environmental Defense (ED) of Austin, Texas; Louisiana-Pacific Corporation (LPC); Business Coalition for Clean Air Appeal Group (BCCAAG) represented by Baker Botts, L.L.P. of Dallas, Texas; and Texas Industries Operations, L.P. (TXI) represented by Jenkens and Gilchrist of Austin, Texas.

5. How Do We Respond to the Submitted Written Comments?

The summary of the written comments that we received and our response to those comments are as follows:

Comment #1: RE commented that it supports EPA's approval of the emissions specifications for the utility boilers (proposed action number four, section 9, Table VI of 66 FR 36532, published on July 12, 2001).

Response to comment #1: We appreciate the commenter's support in this regard.

Comment #2: RE commented that it supports the BCCAAG's position on alternate emission specifications and further adjustments to the proposed NO_X emissions reductions.

Response to comments #2: A Consent Order filed in *BCCA Appeal Group* v. *Texas Natural Resource Conservation Commission,* No. GN1–00210 (250th Dist. Ct. Travis County) (complaint filed on January 19, 2001), among other things, provides for completion of a Science Evaluation to study the causes of rapid ozone formation events and to identify potential control measures not found in the H/GA Attainment Demonstration. We can not act upon the suggested alternate emission specifications and any further adjustments to the State's NO_X rules without the completed studies and necessary modeling relevant to the H/GA area. Neither the State nor EPA has any final scientific data and modeling results to support a final action that relaxes the NO_X reductions required presently by the State for the H/GA area. Such an action is not ripe for EPA's review. Therefore, we acknowledged but did not propose to approve the BCCAAG's alternate emission reductions and schedules identified in 66 FR 36532, published on July 12, 2001. At present there is inadequate information in the record to demonstrate that the alternate emission specifications and further adjustments to the federally-approved NO_X emissions reductions would enable H/GA to attain the NAAQS for ozone.

Comment #3: RE states that it is incorporating its September 25, 2000 comments to TNRCC on the SIP into its present comments on EPA's proposed approval of the SIP. RE commented that it incorporates the BCCAAG's comments submitted to the TNRCC by reference in its letter. In the comments filed by letter of September 25, 2000, with TNRCC, RE proposed the REI NO_X Emission Reduction Plan, formulated by the company, as an alternative to the plan proposed by TNRCC. RE further commented that (a) the TNRCC proposed NO_X emission rates for gas-fired boilers were technically infeasible and economically unreasonable; (b) TNRCC underestimated the cost of controlling NO_X emission from utility boilers and gas turbines; (c) CO limits for Gas, Oil, and Coal-fired units need delineation; (d) the baseline heat input for 30-day average limit calculations should be changed; (e) heavy-duty engine NO_X reduction technology is not effective on power take off devices on utility vehicles; (f) REI supports the rule revisions regarding the cap and trade program filed by the Texas Industry Project (TIP); and (g) the photochemical modeling forming the basis of the rule is not simulating meteorological and chemical processes with sufficient accuracy to quantitatively predict the emission reductions needed to attain the ozone NAAQS.

Response to comment #3: We will respond to the BCCAAG's comments that have been incorporated by reference by RE later in this document. *See* our responses to comments #21 through #30. We are responding here only to those comments by RE in September 2000, which are germane to the present rulemaking adopting the TNRCC revisions to 30 TAC Chapter 117 into the SIP. The TNRCC responded to RE comments in Rule Log No. 2000–011H–117–AI (December, 2000). The Clean Air Act assigns to the states initial and primary responsibility for formulating a plan to achieve NAAQS. It is up to the state to prepare state implementation plans which contain specific pollution control measures. It is clear from review of the TNRCC's analysis, contained in Rule Log No. 2000–011H–117–AI, that the issues raised by RE comments were evaluated and considered by TNRCC during the state rulemaking process.

The EPA's responsibilities under the Act are qualitatively different from those of the state agency. The EPA is charged with reviewing and approving or disapproving of enforceable implementation plans prepared by states and other political subdivisions identified in the statute. It is not EPA's role to disapprove the State's choice of control strategies if that strategy will result in attainment of the one-hour standard and meets all other applicable statutory requirements. *See Union Electric* v *EPA,* 427 U.S. 246 (1976); *Train* v. *NRDC* 421 U.S 60 (1975). The EPA's role in reviewing SIP submittals is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (*see, Union Electric Co.,* v. *EPA,* 427 U.S. 246, 255–266 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a State Court has determined otherwise. Our review of the

TNRCC's responses to RE comments, taken together with all the rest of the information in the administrative record for the SIP, does not lead to the conclusion that the SIP is inadequate to attain the ozone NAAQS in the H/GA area.

Comment #4: LPC commented that the NO_X emission reductions and corresponding emission limits are too low for RACT for industrial wood-fired boilers.

Response to comment #4: The Emission Specifications for Attainment Demonstration (ESAD) for wood-fired boilers, taken together with ESADs for other point sources of NO_X, were developed in order for the H/GA area to achieve attainment with the ozone NAAQS. The ESADs are technically feasible standards which represent the level of point source NO_X controls necessary for the H/GA area to attain the NAAQS. The EPA recently published an updated version of AP–42 concerning wood-fired boilers, discussed in the next response.

Comment #5: LPC commented that EPA should evaluate the NO_X RACT on wood-fired boilers, and particularly how it applies to boilers of differing design, heat input, and wood-fuel. LPC noted that the California Air Resource Board's 1991 RACT for wood-fired boilers in certain nonattainment areas was 0.052 lb NO_X/MMBtu or 40 parts per million (ppm).

Response to comment #5: The AP–42 section 1.6.1 referenced by the LPC in the commentor's August 10, 2001, comment letter is from the 2/98 or 2/99 version of the AP–42 (older AP–42). The LPC's comment letter is dated August 10, 2001. On August 21, 2001, EPA released its final revised version of the AP–42, section 1.6 concerning ''Wood Residue Combustion in Boilers.'' You can find the latest version of the AP–42, section 1.6 (8/01 version) concerning ''Wood Residue Combustion in Boilers'' at *http://www.epa.gov/ttn/chief/ap42/ch01/final/c01s06.pdf.* The NO_X emission factor rating in the Table 1.6–2 of the older AP–42s were of ''C'' and ''D'' rating category. The NO_X emission factors in the new Table 1.6–2 are not categorized as being boiler type and heat input (size) specific or dependent. The NO_X emission factor rating of the new NO_X emission factor from wood-fired boilers listed in the new Table 1.6–2 is reported as high as ''A'' rating. The ''A'' rating of the NO_X emission factor, from wood-fired boilers in the new AP–42, indicates that differentiation of the boiler type and heat input may not be as significant as once thought to be. In Texas the original NO_X RACT rules, 30 TAC Chapter 117, were adopted in 1993 and earlier. As H/GA area continued to be nonattainment for ozone and photochemical grid modeling indicated that those early NO_X control measures were not adequate to bring the area into attainment with the one-hour ozone standard, more source categories became subject to Chapter 117 rules, and the Chapter 117 requirements and emission limitations became more stringent. The California Air Resource Board recommended the 0.052 lb NO_X/MMBtu limitation in a document entitled ''Determination of RACT/BARCT for Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters'' in 1991. The air pollution control technology is a dynamic and evolving process. Ten years ago, in 1991, a concentration based NO_X limit in single digit ppm was impracticable. With today's technology and advancements in process control techniques, such NO_X limits for combustion sources are not uncommon. Therefore, we are of the opinion that the State in its proposed NO_X emission limitation of 0.046 lb NO_X/MMBtu has taken the boilers of differing type and heat input into consideration, and this limit is approvable.

Comment #6: LPC recommended that EPA should consider and clarify potential complications with meeting PM–10 and NO_X emission limits with multiple and simultaneous controls. In particular, LPC commented that NO_X control technologies for wood-fired boilers are unproven, and that it was unable to locate industry-specific data supporting the proposed limit of 0.046 lb NO_X/MMBtu.

Response to comment #6: According to section 4.5 of the ''Background Document Report on Revisions to 5th Edition AP–42, Section 1.6, Wood Residue Combustion In Boilers'', dated July 2001, emission factors for NO_X have been replaced with new factors. The old (2/99) AP–42 NO_X emission factors separated the data by boiler configuration. The average NO_X emission factors for each individual combustor were grouped by fuel type. All of the data were from boilers that had no NO_X emission controls and were from boilers burning either dry wood or bark and bark/wet wood. After analysis of the data, the AP–42 factors were determined by grouping the data by dry or wet wood regardless of firing configuration. The following table shows the summary statistics of the data. The old (2/99) AP–42 factors have been converted to lb/MMBtu for this table. The units for the minimum and maximum are also lb/MMBtu. The following table contains NO_X emission factors for wood-fired boilers.

TABLE II.—NO_X EMISSION FACTORS FOR WOOD-FIRED BOILERS

Fuel	Firing configuration	2/99 AP–42 NO_X Factor (lb/MMBtu)	New AP–42 NO_X Factor (lb/MMBtu)	Count	Minimum	Maximum
Bark/Wet Wood	All	0.042/0.16/0.22	0.22	82	0.023	1.281
Dry Wood	All	0.042/0.16/0.22	0.22	8	0.187	0.863

The use of one emission factor for all firing configurations, 82 different counts of data, NO_X emission factors as low as 0.023 lb/MMBtu, all together indicate that the proposed limitation of 0.046 lb NO_X/MMBtu by adoption of combustion control and/or post combustion controls is practicable. Section 5 of the ''Background Document Report on Revisions to 5th Edition AP–42, Section 1.6, Wood Residue Combustion In Boilers' dated July 2001, contains a listing of 72 references used to develop this report. You can find a copy of this report at: *http://www.epa.gov/ttn/chief/ap42/ch01/bgdocs/b01s06.pdf*

On the issue of multiple controls, it is not uncommon to see a series of different control devices serving one combustion source. For example, a quick search of the California Air Resource Board's Clearinghouse reveals that for wood fired boilers, thirteen years ago, a 216 MMBtu/hr fluidized bed combustion boiler fired with pelletized wood waste (even smaller than LPC's 249 MMBtu/hr boiler) was permitted to use ammonia injection (thermal de-NO_X) to control NO_X emissions, limestone injection to control sulfur oxides (SOx) emissions, and multiclone and baghouse, to reduce particulate matter (PM) emissions. The permit A310–300–88, for this source was issued on 09/30/1988. This existing source is only one example of many

other wood-fired boilers that employ multiple control devices to reduce emissions of different pollutants without jeopardizing compliance with regulations whether proposed/promulgated by the State or EPA. The record supports that use of multiple controls in association with operation of a wood fired boiler has been successfully practiced elsewhere and is technically feasible in the H/GA area.

Comment #7: LPC commented that EPA should evaluate the negative impacts associated with a forced change from a sustainable and waste minimizing energy source to other energy alternatives.

Response to comment #7: Based on the background information discussed above concerning wood-fired boilers, EPA disagrees that the ESAD for this equipment in the Texas SIP approved today will necessitate a forced change of fuel source. There may be instances in which it may be practical or economically advantageous for an individual facility to effect such changes. On this issue as with others, the state has the initial and primary responsibility of formulating plans to attain the NAAQS.

Comment #8: LPC expressed its concern over introducing ammonia in its plywood mill that employs 400 people.

Response to comment #8: We can understand and do appreciate LPC's concern about safety of its employees due to potential introduction of ammonia into its plywood plant. Historically many facilities in Europe, Japan, and the United States have used injection of this reagent as a method of control to reduce NO_X or SOx emissions from their combustion sources. As material contained in the docket indicates if control equipment is properly operated, there would be no excess ammonia emissions. Once again, we are of the opinion that LPC's expressed concern, over introduction of a harsh compound at its mill, can be alleviated by proper training of its operators, implementing safe and good housekeeping/maintenance practices, and actively preparing employees for possible emergency episodes. As a regulatory safeguard, the 30 TAC, Chapter 117 does set short term emission limits for ammonia associated with operation of combustion sources and their associated control devices. See 117.105(j), 117.106(d)(1)(B)(2), 117.205(g), and 117.206(e)(2). Additionally, Chapter 117 allows for operational flexibility and emission cap and trading as viable options to a source or operator. We believe that LPC can safely introduce ammonia or other reagent to reduce NO_X emissions from its wood-fired boiler, but that LPC can also come into compliance by other means if it chooses to do so.

Comment #9: TXI commented that its lightweight aggregate kilns in Fort Bend County, Texas are the only such kilns in the H/GA area and thus are unfairly targeted. TXI states that NO_X emissions from its kilns account for only 0.02% of the NO_X reductions from point sources and the NO_X reduction technique has not been demonstrated.

Response to comment #9: The EPA has reviewed the TNRCC's response to this and other comments, and generally agrees with the TNRCC's analysis. The logic for including lightweight aggregate kilns as a part of the control strategy to reduce its NO_X emissions is due to several factors. NO_X emissions from these kilns have been uncontrolled previously. The TXI plant in Fort Bend is a major source of NO_X. The photochemical grid modeling indicates that additional NO_X reductions are needed to bring the H/GA area into attainment with the one-hour ozone standard. The fact that large amounts of NO_X reductions are needed to bring the H/GA area into attainment constitutes grounds to require NO_X emissions reductions from a major and uncontrolled source of NO_X, as is the case with the TXI's Fort Bend operation, in a severe ozone nonattainment area, even though the source's NO_X emissions are a small percentage of the area's total NO_X emissions. Advances in air pollution control technology combined with the Chapter 117 rules' operational flexibility, and emission cap/trading as available options to the source or operator should enable the commenter to comply with the proposed emission limitation of 117.206(c)(13). The H/GA area's control strategy requires other sources with even lower NO_X emissions to reduce their emissions at much higher rates. An 11 hp stationary diesel engine emits less NO_X per day and year than TXI's plant in Fort Bend County. Under the proposed requirements, this 11 hp stationary diesel engines will have to reduce its emissions from 11.0 grams NO_X/hp-hr to 5.0 grams NO_X/hp-hr. This degree of reduction for stationary diesel engines in excess of 50% is far more than the degree of reduction required of TXI's lightweight aggregate kilns in Fort Bend County. Therefore, we disagree with the TXI's position that NO_X emissions from its lightweight aggregate kilns in Fort Bend County are small, that it has been unfairly targeted by the State, and that a reasonable NO_X control technique for the Fort Bend plant is not feasible.

Comment #10: TXI comments that the proposed Chapter 117 rule is a ''major environmental rule'' and potentially subject to the requirements of Texas Government Code section 2001.0225 (25 Texas Register of August 25, 2000). As a result, a cost, benefit and economic analysis to comply with the control strategy for TXI's lightweight aggregate plant should have been performed by the TNRCC.

Response to comment #10: As stated previously, EPA's role in reviewing SIP submittals is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (*see, Union Electric Co.,* v. *EPA,* 427 U.S. 246, 255–266 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a State Court has determined otherwise. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (*see, Union Electric Co.,* versus *EPA*, 427 U.S. 246, 255–266 (1976) and 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a court of competent jurisdiction determines otherwise.

Comment #11: TXI commented that mobile sources are the cause of nonattainment, that major cities of the State have expanded, and that point sources need not to be further controlled.

Response to comment #11: We do agree that mobile sources are a major source of air pollution in major cities in the States and mobile source emissions need to be controlled to help bring the nonattainment areas into attainment with the ozone standards. The State has proposed and adopted many measures to reduce emissions associated with on-road and off-road mobile source. However, as TNRCC noted in its response to this comment, while mobile sources contribute a significant share of the ozone-forming pollutants in H/GA, modeling analyses show that reducing mobile source emissions alone will not be sufficient to bring the area into attainment. The Texas SIP must

therefore also regulate point sources of NO_X. The 1996 emission inventory of NO_X sources in the H/GA area indicates that 54% (672.05 of total 1250.16 tpd) of emissions are from stationary sources, while on-road mobile sources account for 24% (302.04 of the total 1250.16 tpd) of the emissions. *See http://www.tnrcc.state.tx.us/air/aqp/ei/rsumhg.htm#nox.*

Further, the State has shown that even if it controlled all of the mobile source emissions to zero, the H/GA area would still be in nonattainment. Therefore, the record shows that both mobile and stationary sources need to be controlled simultaneously to achieve the ozone attainment goal.

Comment #12: TXI commented that the State did not have any technical justification for a 30% reduction in NO_X emissions from lightweight aggregate kilns. TXI contended the reduction requirement is arbitrary and has no scientific basis.

Response to comment #12: The TNRCC based the 30% reduction in NO_X emissions on availability of combustion modification, combustion control, mid-kiln firing, 30-day rolling average, and the emission cap and trading options to the source or operator. The available technologies, operational flexibilities, and the emission cap and trading allowed for in Chapter 117 rules, should accommodate a source to obtain 30% reduction in its NO_X emission as compared to the source's 1997 baseline emissions. The 30% reduction in NO_X emissions from a kiln is consistent with EPA's publication number ''EPA–453/R–94–004,'' entitled ''Alternate Control Techniques for Cement Plants.'' Therefore, we believe that the State's record supports the 30% reduction requirement, is technically feasible, and based on a sound scientific basis.

Comment #13: ED commented that the proposed rule for stationary diesel engines fails to provide sufficient emissions limitations.

Response to comment #13: As stated in section six of 66 FR 36532, published on July 12, 2001, Texas had not proposed any regulations in the SIP limiting NO_X emissions from stationary diesel engines or stationary dual-fuel engines prior to May 30, 2001. After the State adopted and submitted its December 2000 attainment demonstration SIP for the H/GA area, and based upon Texas' proposed Reasonably Available Control Measures (RACM) review, the State determined that this particular source category should be controlled in the H/GA area to meet the Act's RACM requirements. Adopting these emission limitations will only strengthen the existing federally-approved Texas SIP and further supports the H/GA area's attainment of the ozone NAAQS. This was our basis for proposing to approve the rule revision. The proposed emission specifications for stationary diesel engines or stationary dual-fuel engines are based on 40 CFR 89.112(a), Table I. For the H/GA area, the State has shown that the chosen emission limitations are technically and economically feasible and further reductions would not benefit the H/GA area's environment.

Comment #14: ED commented that the TNRCC should establish the same requirements for new and existing stationary diesel engines in the H/GA area that are not used exclusively during infrequent emergency or backup situations.

Response to comment #14: The TNRCC has adopted Chapter 117 regulations for control of NO_X emissions from stationary diesel engines or stationary dual-fuel engines. The emission specifications for stationary diesel engines or stationary dual-fuel engines are based on 40 CFR 89.112(a), Table I. We understand Texas has adopted even more stringent standards for new engines getting standard permits. We believe it is reasonable for existing engines to have less stringent standards than new engines because it is generally more feasible to achieve cleaner operation when starting from an initial design rather than retrofitting an older engine. Furthermore, the emissions of NO_X and CO from combustion sources are interrelated. Requiring further reductions in NO_X emissions from existing engines could potentially result in increases of CO emissions, and must be approached carefully. The State received a similar comment. In their response they explained that based on information in the emissions inventory and contact with diesel engine vendors and others familiar with the stationary diesel engines in the H/GA area, the State is unaware of any existing stationary diesel engines that are being operated in situations other than generation of electricity in emergency situations or operation for maintenance and testing. The TNRCC believes and EPA agrees that few existing engines will be moved from emergency service to routine or peak shaving operations for the following reasons. Any existing engines at a site with a collective design capacity to emit (from units with chapter 117 emission limits) greater than ten tpy of NO_X are subject to the Chapter 101 mass emissions cap and trade program if they choose to increase their operation to 100 hours per year or more (based on a rolling 12-month average) and, in addition to having to comply with the Chapter 117 rules, will only be issued NO_X emissions allocations based on their historical activity level which would be much lower than 100 hrs/year. Existing engines theoretically could be switched to peak shaving service up to 100 hours/year but in reality only about 40 hours/year would be available for this type of operation. The remaining time would have to be used for normal routine testing of the engines. It is unlikely that the profit from sale of electricity would justify the cost of the modifications to the switching system for only about 40 hours of operation. EPA concludes that additional control beyond the existing program is not reasonable.

Comment #15: ED comments that potential emissions from stationary diesel engines are significant and refers to an electricity management and consulting firm that is marketing the concept of linking these emergency diesel back up generators together as a mid-size peaking unit through a virtual power plant.

Response to comment #15: It is unclear how many or which of these emergency back up generators in the H/GA area could conceivably participate in such a virtual power plant marketing plan. Should the NO_X emissions and number of emergency back up generators participating in this virtual power plant market or otherwise operating in H/GA area grow to such a degree that they prove to be significant for purposes of attaining the ozone NAAQS, we will work with the State to evaluate this concern in the mid-course review process. Presently, neither the State nor we have the information whether this type of control is feasible for the H/GA area. Additional control measures will be required as necessary to achieve the NAAQS as expeditiously as practicable but no later than November 2007. This will allow adjustments to be made should a source category grow at an unexpectedly large rate.

Comment #16: ED commented that EPA should require the TNRCC to make ''one-date'' as the effective date for compliance with the NO_X emission limitations for the stationary diesel engines or dual-fuel stationary engines instead of the Tier 1, 2, or 3 approach.

Response to comment #16: The phased-in approach or the Tier 1, 2, or 3 compliance date method has been proven to work in practice at the Federal level (40 CFR 89.112(a)), and we have decided to adopt this approach for practical reasons. We are of the opinion

that the phased-in approach is a proper and practical method of phasing-in new emission limitations where a large range of engine sizes and various engine ages are involved. We disagree with the ED's position to have the TNRCC replace the effective compliance date of NO_X emission limitations for the stationary diesel engines or dual-fuel stationary engines from the proposed Tier 1, 2, or 3 method to a ''one-date'' for all.

Comment #17: ED commented that EPA should significantly strengthen the NO_X emission requirements for the existing small backup electric generating units.

Response to comment #17: As stated earlier, the emission specifications for stationary diesel engines or stationary dual-fuel engines are based on 40 CFR 89.112(a), Table I. Currently, we are not aware of any other State program that has adopted more stringent emission specifications for stationary diesel engines or stationary dual-fuel engines. Although it is possible that existing emergency diesel generators could be converted to a peak shaving use, and consequently contribute to ozone exceedances due to operation on high electricity demand during summer days and conditions that are conducive to formation of more ozone, these diesel units are normally equipped with a timer that operates the engines for one-half to one hour weekly for testing and maintenance purposes. To demonstrate continuous compliance, subsection 117.213(i) requires engines to operate with an elapsed run time meter and further states that the installed run time meters shall be ''non-resettable.''

52 weeks per year × ½ hour to 1 hour per week for maintenance and testing =26 to 52 hours per year for maintenance and testing. Due to the fact that the 100 hours per year limit includes the testing and maintenance times also, the remaining (100 hours per year − 26 to 52 hours per year for maintenance and testing = 74 to 48 hours per year for peak shaving) 48 to 74 hours per year would be too short a time to economically justify the expense of telemetry interconnect equipment in order to generate and supply power to a grid system. These inherent difficulties will serve as hurdles/reasons in discouraging an operator from converting its emergency backup generators to peak shaving units. Furthermore, by converting these backup generators the source or operator would always run the risk of not having power available to itself when a true emergency situation arises at its own site. As stated earlier, should the NO_X emissions and number of emergency back up generators participating in this virtual power plant market actually prove to be significant, we will work with the State to evaluate this concern in the mid-course review process.

Comment #18: ED commented that EPA must reject efforts to relax the control measures on the books before the identified shortfall in emission reductions is eliminated.

Response to comment #18: The Supreme Court has consistently held that under the Act, initial and primary responsibility for deciding what emissions reductions will be required from which sources is left to the discretion of the States. *Whitman* v. *Am. Trucking Ass'ns,* 531 U.S. 457 (2001); *Train* v. *NRDC,* 421 U.S. 60 (1975). This discretion includes the continuing authority to revise choices about the mix of emission limitations. *Train* at 79. Therefore, EPA believes that it is appropriate and authorized under the Act for a State to continue to update its growth projections, inventories, modeling analyses, control strategies, etc., and submit these updates as a SIP revision based on newly available science and technology.

However, Section 110(l) of the Act (added by the 1990 Amendments to the Act) governs EPA's review of a SIP revision from a state that wishes to make changes to its approved SIP. This section provides that EPA may not approve a SIP revision if it will interfere with any applicable requirement concerning attainment and reasonable further progress or any other applicable requirement of the Act. The Supreme Court under the 1970 CAA, observed that EPA's judgment in determining the approval of a SIP revision is to ''measure the existing level of pollution, compare it with the national standards, and determine the effect on this comparison of specified emission modifications.'' *Train* at 93. Therefore, if we receive an attainment demonstration SIP revision from Texas that contains relaxed control measures or the replacement of existing control measures, we would consider the revised plan's prospects for meeting the current attainment requirements and other applicable requirements of the Act. See, the Act section 110(k)(3), *Union Electric* v. *EPA,* 427 U.S. 246 (1976) and *Train* v. *NRDC,* 421 U.S. at 79.

In summary, the State may choose to submit a SIP revision in 2002 or 2003 as it has suggested it may do. If we receive a SIP revision that meets our completeness criteria, we will review it against the statutory requirements of section 110(l). Further, the Act requires us to publish a notice and to provide for public comment on our proposed decision. The EPA believes that it is in the context of that future rulemaking, not EPA's current approval, that the commenter's concern regarding the appropriateness of any replacement measures adopted by the State should be considered.

Comment #19: ED commented that EPA should not approve the NO_X reduction proposal of 90% for electric power plants, but should instead require the electric power plants to meet the 93% NO_X reduction.

Response to comment #19: The NO_X control strategy of December 22, 2000, SIP revision called for 595 tons per day reduction. *See* Table V, section 8 of this document. The revised NO_X control strategy of the May 30, 2001, calls for 588 tons per day reduction. *See* Table XI, section 16 of this document. Although ED is correct in stating that the amount of NO_X reduction from electric power plants has been reduced, the NO_X emissions reductions from recent State Legislative actions requiring some grandfathered sources to reduce their emissions by about 50% offsets and counter balances the power plant's NO_X emission reduction adjustment. Therefore, the NO_X emissions in east and central Texas (regional strategy) will be less than what the State SIP had called for in the December 22, 2000 SIP revision. In terms of cost per ton of overall NO_X removed, the modified NO_X emission limitations of the May 30, 2001 state proposal would be more cost effective than the December 22, 2000, control strategy scenario for the H/GA area. We disagree with the ED's position to reject the revised May 30, 2001 reduction proposal for the electric power plants.

Comment #20: ED commented that the compliance schedule under action number four of the proposal 66 FR 36532, (July 12, 2001) is not as expeditious as practicable.

Response to comment #20: The compliance schedule under action number four of the proposal 66 FR 36532, (July 12, 2001) was needed to allow affected sources more planning time and choices to put in place the NO_X emissions reductions. Action number four requires utility electric generation and ICI sources to adopt a phased-in approach (year by year) and incremental method (percent NO_X reduction required each year) for compliance purposes. According to this approach the ultimate compliance date of 2007 will remain unchanged. In our proposal published on July 12, 2001, we made it very clear that the final compliance date to attain compliance with the one-hour ozone standard in the H/GA area will remain the same and

unchanged and that any control strategy will have to achieve attainment with the federal one-hour ozone standard by 2007. The essential and resulting final compliance date will remain the same; the distinction is the route and method of approach used to reach the same end point. Therefore, we are of the opinion that compliance requirements under action number four of the July proposal are as expeditious as practicable.

Comment #21: BCCAAG commented that most of the NO_X emission limitations have been developed with a less than complete analysis of economic and technical feasibility or possible economic or environmental dis-benefits. It further stated that the TNRCC's 90% NO_X control approach is arbitrary and circumvents the intent established in the Texas Clean Air Act.

Response to comment #21: We do not believe that reducing NO_X and thus controlling ozone in the H/GA area will constitute an environmental dis-benefit.

This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Because this rule approves preexisting requirements under state law and does not impose any enforceable duty beyond that required by state law and hence does not have a significant economic impact on a substantial number of small entities, an analysis under the Regulatory Flexibility Act (5 U.S.C. § 601 *et seq.*) is not required.

Details on the State's assessments of financial impact and technical feasibility can be found throughout the record generated by the TNRCC for the SIP (''SIP documents''). The EPA's role in reviewing SIP submittals is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (*see, Union Electric Co.*, v. *EPA*, 427 U.S. 246, 255–266 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a State Court has determined otherwise.

Comment #22: BCCAAG commented that point sources control technology has advanced in recent years but there is no one demonstrated retrofit technology application to achieve 90% NO_X reduction from point sources.

Response to comment #22: We agree with the statement that NO_X point source control technology has advanced in recent years. In fact, levels of NO_X emissions control that can be achieved have advanced to degrees that may not have been practicable a decade or so ago. Pollution control technology is a dynamic and evolving field. The domain of reference for NO_X retrofit technology is not limited to this country. It is technologically feasible to accomplish the degree of control that the rule calls for; the issue becomes cost and economic feasibility rather than technical infeasibility. We also refer the commenter to 26 Texas Register 524, published on January 12, 2001, for a detailed explanation by the TNRCC of the level of NO_X control. We responded to comments on the cost and economic feasibility of the control requirements in our response to comment #22 of this document.

Comment #23: BCCAAG commented that not enough time (year-end 2004) has been allowed in the rule to implement the required NO_X reductions from point sources.

Response to comment #23: In Texas the original NO_X RACT rules, 30 TAC Chapter 117, were adopted in 1993 and earlier. As the H/GA area continued to remain nonattainment for ozone and it became evident that earlier NO_X control measures were not adequate to bring the area into attainment with the one-hour ozone standard, more source categories became subject to the Chapter 117 rules, and the Chapter 117 requirements and emission limitations became more stringent. Historical revisions to the Chapter 117 rules, including the additional NO_X control from point sources in the H/GA area, have not been introduced by the State without active participation of the stakeholders. We believe that the majority of the affected sources have been aware, involved, and actively participating in the regulatory development arena of Chapter 117 rules over the last decade. The H/GA area is classified as a severe-17 ozone nonattainment area according to the federal Clean Air Act, 42 U.S.C., § 7401 *et seq.*, and will need to attain the one-hour ozone standard by November 15, 2007. Under 42 U.S.C., § 7511a(d) the State of Texas is required to develop and submit to EPA a SIP revision that will bring the H/GA area into attainment with the one-hour ozone standard. To be classified as attainment with the one-hour ozone standard by EPA, three complete calendar years of ozone monitoring data are needed (Appendix H to 40 CFR Part 50—Interpretation of The 1-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone). Reading 42 U.S.C. § 7511a(d) and 40 CFR 50 Appendix H together, as a practical matter, the year-end 2004 deadline will effectively become an initial compliance deadline; otherwise the H/GA area will not be able to comply with the compliance deadline of November 15, 2007. Thirty plus years of ozone nonattainment in the H/GA area warrants no more delays. We fully support the State's proposed implementation deadline and therefore disagree with the commenter's position on insufficiency of time allowed to implement the required NO_X control measures.

Comment #24: BCCAAG commented that 90% reduction effectively eliminates the ability to create surplus credits under the cap and trade program and will cause regional economic impacts that would lead to a ''no future growth'' situation.

Response to comment #24: We want to emphasize that it is not within the scope of this rulemaking to forecast on the region's future business growth and expansions. The Mass Emissions Cap and Trade Program (30 TAC Chapter 101, Subchapter H, Division 3) is being approved in an action published separately in this issue of the **Federal Register**. The emission credits under the mass emissions cap and trade program will have to be actual, surplus, real, enforceable, and certifiable. These rules will bring more flexibility and financial incentives to reduce air pollution, promote technological innovations, and encourage creative methods of pollution control over the old command and control approach for each individual source. The Chapter 117 rules do not limit or stop future economic expansion and growth. Generally, environmental regulations do not limit growth; they enhance sustainable growth. We do not believe that Southern California experienced no growth under its Regional Clean Air Incentives Market (RECLAIM) program. In fact, one cannot dispute the business expansions and economic prosperity of Southern California in the years following the adoption of its RECLAIM program. We disagree with the BCCAAG's position in this regard.

Comment #25: BCCAAG commented that according to their forecast for the 2000–2004 time frame, resource supply and demand for construction labor, design engineering staff, specialized labor, and Selective Catalytic Reduction (SCR) catalyst supply for the H/GA area exceed available capacities.

Response to comment #25: It is not within the scope of this rulemaking to forecast resource and market demand availability of a certain industrial sector. However, historically the market develops additional supply when there

is increased demand. Regulated units in the H/GA area can come into compliance in several ways, not all of which rely on physical installation of additional controls. Moreover, the TNRCC has extended the compliance deadlines for certain units, which is expected to mitigate any potential inadequate capacity problems. For objectivity and public record purposes, it appears that surveys cited as reference by the commenter are conducted or sponsored, in part, by the industry groups.

We refer the commenter to 26 Texas Register 524, published on January 12, 2001, for a detailed explanation of the level of NO_X control. The EPA's role in reviewing SIP submittals is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (see, *Union Electric Co.*, v. *EPA*, 427 U.S. 246, 255–266 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a State Court has determined otherwise.

Comment #26: BCCAAG commented that the proposed rules will decrease the production of ethylene and polyethylene plants during the 2003–2004 implementation period and will cause loss of sales/income.

Response to comment #26: We are not aware of any NO_X rules in the country that have tailored their compliance deadlines or emissions reduction plans to fit operation of one certain industrial sector (ethylene and polyethylene plants) or specific plants' long run maintenance or shutdown schedules. Any such accommodation in the rule could be interpreted as lowering the bar of emission control or extending special treatment to those specific plants. What seems to be missing from the commenter's statement of concern over production/sales losses from ethylene and polyethylene plants is the health care and welfare costs associated with failure to install the proposed controls. The fact that the construction/reconstruction and installation of a control device may cause temporary delay in production rate does not constitute grounds for exempting that source or subjecting the source to a less stringent control requirement than the regulations would otherwise require. We support the State's proposed implementation deadline and emission limitations and disagree with the commenter's position in this regard.

Comment #27: BCCAAG commented that the State has not weighed and analyzed costs and technical feasibility of the control options for utility boilers, gas turbines, heaters and furnaces, duct burners, internal combustion (IC) engines, and ICI boilers. The commenter proposes a NO_X standard comparable to those deployed in South Coast Air Quality Management District (SCAQMD).

Response to comment #27: On the subject of technical feasibility analysis we offer the following: The H/GA area is classified as a severe-17 ozone nonattainment area and is the largest emitter of NO_X emissions in the southern part of the country, a larger emitter in amount than the Los Angeles area. *See http://www.epa.gov/air/data/netemis.html.* The ozone control strategy in the H/GA area is driven more by NO_X control measures than VOC. Although the SCAQMD is normally the trend-setter in the field of air pollution control in the States, some of the point source NO_X standards the commenter refers to were set in the 1988 to 1991 time era. Air pollution control technology is a dynamic and evolving process. A decade ago, a concentration based NO_X limit in single digit ppm was impracticable; while with today's technology and advancements in process control techniques a concentration based NO_X limit in single digit ppm has become practicable and common. What used to be the state-of-art control technique a decade or so ago, as set by the SCAQMD, may not be so in the air pollution control industry now. Additionally, operational flexibility and emission cap and trading provisions built in the NO_X rules serve as viable options that a source or operator can take advantage of. We believe that advances in air pollution control technology combined with the Chapter 117 rule operational flexibility, and with emission cap/trading, should enable a source or operator to meet the proposed point source NO_X emission limitations. With regard to the cost and economic feasibility of the control requirements, actions such as the approval of a SIP revision which merely approve state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law are not subject to economic impact analysis under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). The EPA's role in reviewing SIP submittals is to approve state choices, provided that they meet the criteria of the Clean Air Act. Federal inquiry into the economic reasonableness of state action is not allowed under the Clean Air Act (*see, Union Electric Co.*, v. *EPA*, 427 U.S. 246, 255–266 (1976); 42 U.S.C. 7410(a)(2)) other than for purposes of evaluating the reasonableness and availability of alternatives for purposes of a waiver of Federal preemption. The State has submitted information indicating that the administrative requirements of Texas law have been met. We defer to the State analysis until such time as a State Court has determined otherwise. Furthermore, we refer the commenter to 26 Texas Register 524, published on January 12, 2001, for a detailed explanation of the level of NO_X control. We support the State's proposed NO_X emission limitations and therefore, disagree with the commenter's position on costs and technical feasibility of the emission controls from point sources of NO_X.

Comment #28: BCCAAG commented that introduction of post combustion technology with ammonia usage could increase ammonia emissions and concentrations in the H/GA area.

Response to comment #28: We can understand and do appreciate BCCAAG's concern about the potential for increase in ammonia emissions in the H/GA area. Historically many facilities in Europe, Japan, and the United States have used injection of this reagent as a method of control to reduce NO_X or SO_X emissions from their combustion sources. As material contained in the docket indicates if control equipment is properly operated, there would be no excess ammonia emissions. As a regulatory safeguard, 30 TAC Chapter 117 does set short term emission limits for ammonia associated with operation of combustion sources and their associated control devices. *See* 117.105(j), 117.106(d)(1)(B)(2), 117.205(g), and 117.206(e)(2). We support the State's proposed emission limitations and; therefore, disagree with the commenter's position in this regard.

Comment #29: BCCAAG commented that storage, handling, and transportation of ammonia is risky.

Response to comment #29: We can understand and do appreciate BCCAAG's concern about potential risk associated with the storage and handling of ammonia in the H/GA area. As a regulatory safeguard, 30 TAC Chapter 117 does set short term emission limits for ammonia associated with operation of combustion sources and their associated control devices. *See* 117.105(j), 117.106(d)(1)(B)(2), 117.205(g), and 117.206(e)(2). The commenter mentions that annually millions of pounds of ammonia would have to be transported, handled, stored,

and used throughout the H/GA area. We want to bring to the commenter's attention that many more millions of pounds of petroleum related chemicals are transported, handled, stored, and used throughout the H/GA area in association with activities related to some of the commenter's constituents, every year. Using a similar analogy, gasoline is a volatile, flammable solvent and is composed of potentially carcinogenic chemicals. Some of the BCCAAG constituents in the H/GA area are involved in the business of refining and producing gasoline and petrochemical solvents. Millions of Americans drive gasoline-fueled engines to and from work/home every day. We do not believe that it follows that these people will need to cease their daily driving activities due to the risk associated with the storage and handling of gasoline. We support the State's proposed emission limitations and therefore disagree with the commenter's position in this regard.

Comment #30: BCCAAG commented that there will be instances that shutdown of equipment may have to be considered to meet the desired NO_X emission reductions.

Response to comment #30: We agree that there may be instances that the shutdown of marginal (economically speaking) existing equipment will have to be considered. The surplus credit associated with these shutdowns could be used in emission trading for financial gains by the source or operator. The source also has the option to consolidate the emissions from marginal equipment with other point sources and utilize a combined control technique, or to obtain emission allowances. Both of these options have been built into the Chapter 117 rules.

6. What Are the NO_X Emission Specifications for Point Sources of NO_X, in the H/GA Area Based Upon the December 22, 2000, SIP Revision, That We Are Approving?

This rule revision requires reductions of NO_X emissions from point sources in the H/GA ozone nonattainment area. The following table contains a summary of the NO_X emission specifications for attainment demonstration purposes that we are approving for point sources in the H/GA.

TABLE III.—AFFECTED SOURCES AND NO_X EMISSION SPECIFICATIONS FOR ATTAINMENT DEMONSTRATION IN THE H/GA

Source	NO_X emission specification for attainment demonstration
Utility Boilers	0.010–0.060 lb/MMBtu.
Turbines and Duct Burners	0.015–0.150 lb/MMBtu.
Heaters and Furnaces	0.010–0.036 lb/MMBtu.
Internal Combustion Engines	0.045–0.133 lb/MMBtu or 0.17–0.50 gram/hp-hr.
Industrial Boilers	0.010–0.030 lb/MMBtu.
Coke-fired Boilers	0.057 lb/MMBtu.
Wood Fuel-fired Boilers	0.046 lb/MMBtu.
Rice hull-fired Boilers	0.089 lb/MMBtu.
Oil-fired Boilers	2.0 lb/1,000 gallons of oil burned.

We are approving the above-listed NO_X emissions specifications for point sources of NO_X in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour ozone standard in the H/GA nonattainment area.

7. What Is the Compliance Schedule for Point Sources of NO_X, in the H/GA Area Based Upon the December 22, 2000, SIP Revision, That We Are Approving?

The following table contains a summary of the affected sources and their compliance schedules for attainment demonstration purposes that we are approving for point sources in the H/GA.

TABLE IV.—AFFECTED SOURCES OF NO_X AND COMPLIANCE SCHEDULES

Sources	Compliance schedule	Additional information
Utility Electric Generation	March 31, 2003	Investor-owned; first 46% of total required NO_X reductions.
Utility Electric Generation	March 31, 2004	Investor-owned; the next 46% required NO_X reductions.
Utility Electric Generation	March 31, 2007	Investor-owned; final required NO_X reductions.
Industrial, Commercial, and Institutional Combustion Sources.	March 31, 2004	First 44% of required NO_X reductions.
Industrial, Commercial, and Institutional Combustion Sources.	March 31, 2005	Next 45% of required NO_X reductions.
Industrial, Commercial, and Institutional Combustion Sources.	March 31, 2007	Final NO_X reductions.
Boilers, Process Heaters, and Stationary Engines at Minor Sources.	March 31, 2005	In cap and trade program.
Boilers, Process Heaters, and Stationary Engines at Minor Sources.	March 31, 2005	Not in cap and trade program.

We are of the opinion that the above listed compliance dates and time-table combined with the cap and trade provisions of the rule offer operational flexibility to the affected point sources in the H/GA. We are approving the above-listed compliance dates for point sources of NO_X in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour

ozone standard in the H/GA nonattainment area.

8. What Are the NO_X Emissions Reductions for Point Sources of NO_X, in the H/GA Area Based Upon the December 22, 2000, SIP Revision, That We Are Approving?

This rulemaking will control/reduce NO_X emissions in the H/GA area in two phases or Tiers. We will refer to these two emission reduction phases as Tier I and Tier II Reductions. You can find a summary of the affected sources and their NO_X emission reductions for attainment demonstration purposes, that we are approving for point sources in the H/GA area, in the following table.

TABLE V.—AFFECTED POINT SOURCES, 1997 EMISSIONS, AND THEIR EMISSION REDUCTIONS FOR THE H/GA

Sources	1997 NO_X emissions, tons per day (tpd)	Tier I + Tier II reductions, (tpd)
Utility Boilers	196.44	184
Turbines and Duct Burners	155.65	141
Process Heaters and Furnaces	110.12	97
Internal Combustion Engines	86.37	75
Industrial Boilers	85.98	79
Other	32.99	19
Overall Point Sources	667.55	595

The combined NO_X emission reductions of Tier I and Tier II in the rulemaking will be 595 tpd or 89 percent, when compared to the 1997 emission levels. We are approving the overall NO_X point source reductions in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour ozone standard in the H/GA nonattainment area.

9. What Are the NO_X Emission Specifications, for Stationary Diesel Engines or Stationary Dual-Fuel Engines, That We Are Approving?

This rule revision requires reductions of NO_X emissions from stationary diesel engines or stationary dual-fuel engines in the H/GA area. The following table contains a summary of the NO_X emission specifications for stationary diesel engines in the H/GA area.

TABLE VI.—AFFECTED SOURCES AND NO_X EMISSION SPECIFICATIONS FOR STATIONARY DIESEL ENGINES OR STATIONARY DUAL-FUEL ENGINES IN THE H/GA AREA

Source	NO_X emission specification
Diesel engines in service after October 1, 2001: not modified, reconstructed, or relocated on or after October 1, 2001	11.0 gram/hp-hr.
Rated less than 11 hp: modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2004	7.0 gram/hp-hr.
Rated less than 11 hp: modified, reconstructed, or relocated on or after October 1, 2004	5.0 gram/hp-hr.
11 hp ≤ rated < 25 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2004.	6.3 gram/hp-hr.
11 hp ≤ rated < 25 hp: installed, modified, reconstructed, or relocated on or after October 1, 2004	5.0 gram/hp-hr.
25 hp ≤ rated < 50 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2003.	6.3 gram/hp-hr.
25 hp ≤ rated < 50 hp: installed, modified, reconstructed, or relocated on or after October 1, 2003	5.0 gram/hp-hr.
50 hp ≤ rated < 100 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2003.	6.9 gram/hp-hr.
50 hp ≤ rated < 100 hp: installed, modified, reconstructed, or relocated on or after October 1, 2003	5.0 gram/hp-hr.
50 hp ≤ rated < 100 hp: installed, modified, reconstructed, or relocated on or after October 1, 2007	3.3 gram/hp-hr
100 hp ≤ rated < 175 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2002.	6.9 gram/hp-hr.
100 hp ≤ rated < 175 hp: installed, modified, reconstructed, or relocated on or after October 1, 2002, but before October 1, 2006.	4.5 gram/hp-hr.
100 hp ≤ rated < 175 hp: installed, modified, reconstructed, or relocated on or after October 1, 2006	2.8 gram/hp-hr.
175 hp ≤ rated < 300 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2002.	6.9 gram/hp-hr.
175 hp ≤ rated < 300 hp: installed, modified, reconstructed, or relocated on or after October 1, 2002, but before October 1, 2005.	4.5 gram/hp-hr.
175 hp ≤ rated < 300 hp: installed, modified, reconstructed, or relocated on or after October 1, 2005	2.8 gram/hp-hr.
300 hp ≤ rated < 600 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2005.	4.5 gram/hp-hr.
300 hp ≤ rated < 600 hp: installed, modified, reconstructed, or relocated on or after October 1, 2005	2.8 gram/hp-hr.
600 hp ≤ rated < 750 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2005.	4.5 gram/hp-hr.
600 hp ≤ rated < 750 hp: installed, modified, reconstructed, or relocated on or after October 1, 2005	2.8 gram/hp-hr.
Rated ≥ 750 hp: installed, modified, reconstructed, or relocated on or after October 1, 2001, but before October 1, 2005.	6.9 gram/hp-hr.

TABLE VI.—AFFECTED SOURCES AND NO_X EMISSION SPECIFICATIONS FOR STATIONARY DIESEL ENGINES OR STATIONARY DUAL-FUEL ENGINES IN THE H/GA AREA—Continued

Source	NO_X emission specification
Rated ≥ 750 hp: installed, modified, reconstructed, or relocated on or after October 1, 2005	4.5 gram/hp-hr.

We are of the opinion that these emission specifications are in agreement with those found in Code of Federal Regulations (CFR), Title 40, section 89.112, and EPA's Document Number 420–R–98–016 dated August 1998, entitled ''Final Regulatory Impact Analysis: Control of Emissions from Nonroad Diesel Engines.'' We are also of the opinion that these NO_X emission specifications will contribute to the attainment of the 1-hr ozone standard in the H/GA area. We are approving these stationary diesel engines or stationary dual-fuel engines rule revisions under Part D of the Act because Texas is relying on these NO_X reductions to demonstrate attainment of the 1-hour ozone standard in the H/GA 1–hr ozone nonattainment area.

10. What Is the Proposed Compliance Schedule Date for Stationary Diesel Engines in the H/GA Area Based on the May 30, 2001, SIP Revision?

The compliance date for stationary diesel engines and stationary dual-fuel engines in the H/GA area is April 1, 2002. See sections 117.520 and 117.534 of the proposed rule. We consider the April 1, 2002, compliance date for stationary diesel engines and dual-fuel engines, in the H/GA area, to be as expeditious as practicable. We are approving these stationary diesel engines or stationary dual-fuel engines compliance schedules under Part D of the Act because Texas is relying on these NO_X reductions to demonstrate attainment of the 1-hour ozone standard in the H/GA 1-hr ozone nonattainment area.

11. What Are the NO_X Emissions Reductions for Stationary Diesel Engines in the H/GA Area Based on the May 30, 2001, SIP Revision, That We Are Approving?

The estimated NO_X emission reductions attributed to the stationary diesel engines or stationary dual-fuel engines that we are approving is 1.00 tpd.

12. What Are the NO_X Emissions Specifications for Point Sources of NO_X in the H/GA Area Based on the May 30, 2001, SIP Revision, That We Are Approving?

The following table contains a summary of the NO_X emission specifications for attainment demonstration purposes that we are approving for point sources in the H/GA.

TABLE VII.—AFFECTED SOURCES AND NO_X EMISSION SPECIFICATIONS FOR ATTAINMENT DEMONSTRATION IN THE H/GA

Source	NO_X Emission Specification for Attainment Demonstration
Utility Boilers, Gas-fired	0.020 lb/MMBtu.
Utility Boilers, Coal-fired or Oil-fired	0.040 lb/MMBtu.
Auxiliary Steam Boilers	0.010–0.036 lb/MMBtu.
Stationary Gas Turbines + Duct Burners in Turbine Exhaust	0.015–0.150 lb/MMBtu.

We are of the opinion that NO_X emission specifications listed in Table VII will contribute to attainment of the 1-hr ozone standard in the H/GA area. We are approving the above-listed NO_X emissions specifications for affected point sources of NO_X in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour ozone standard in the H/GA nonattainment area.

13. What Is the Compliance Schedule For Utility Electric Generation Point Sources of NO_X in the H/GA Area Based on the May 30, 2001, SIP Revision, That We Are Approving?

The following table contains a summary of the time-table/ compliance schedule for the affected utility electric generation point sources of NO_X in the H/GA that we are approving.

TABLE VIII.—AFFECTED SOURCES OF NO_X IN THE H/GA AND COMPLIANCE SCHEDULES

Sources	Compliance schedule	Additional information
Utility Electric Generation	March 31, 2003	At least 47% of total required NO_X reductions.
Utility Electric Generation	March 31, 2004	At least 95% of total required NO_X reductions.
Utility Electric Generation	March 31, 2007	Demonstrate compliance with system cap limits of 117.108.

We are of the opinion that the above-listed compliance dates and time-table for affected sources offer operational flexibility to the rule. We are approving the above-listed compliance dates for affected point sources of NO_X in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour ozone standard in the H/GA nonattainment area.

14. What Are the NO_X Emissions Specifications in the ICI Source Category for Attainment Demonstration Within the H/GA Area, Based on the May 30, 2001, SIP Revision, That We Are Approving?

You can find proposed NO_X emissions specifications for the ICI source category within the H/GA for attainment demonstration purposes in the H/GA in the following table.

TABLE IX.—AFFECTED INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL COMBUSTION SOURCES AND THEIR NO_X EMISSION SPECIFICATIONS FOR ATTAINMENT DEMONSTRATION IN THE H/GA

Source	NO_X Emission specification for attainment demonstration
Stationary, reciprocating internal combustion engines: gas-fired rich-burn firing on landfill gas	0.60 gram/hp-hr.
Stationary, reciprocating internal combustion engines: gas-fired rich-burn not firing on landfill gas.	0.17 gram/hp-hr.
Stationary, reciprocating internal combustion engines: gas-fired lean-burn firing on landfill gas	0.60 gram/hp-hr.
Stationary, reciprocating internal combustion engines: gas-fired lean-burn not firing on landfill gas.	0.50 gram/hp-hr.
Dual fuel engines with initial start of operation on or before December 31, 2000	5.83 gram/hp-hr.
Dual fuel engines with initial start of operation after December 31, 2000	0.50 gram/hp-hr.
Gas-fired boilers	0.010—0.036 lb/MMBtu.
Fluid catalytic cracking units. Includes CO boilers, CO furnaces, and catalyst regenerator vents	13 ppm @ zero percent O_2, dry basis.
Boilers and industrial furnaces	0.015—0.030 lb/MMBtu.
Coke-fired boilers	0.057 lb/MMBtu.
Wood fuel-fired boilers	0.046 lb/MMBtu.
Rice hull-fired boilers	0.089 lb/MMBtu.
Oil-fired boilers	2.0 lb/1,000 gallons of oil burned.
Process heaters	0.010—0.036 lb/MMBtu.
Stationary gas turbines	0.015—0.15 lb/MMBtu.
Duct burners in turbine exhaust ducts	0.015 lb/MMBtu.
Pulping liquor recovery furnaces	0.050 lb/MMBtu or 1.08 lb/ADTP.
Lime kilns	0.66 lb/ton of CaO.
Lightweight aggregate kilns	0.76 lb/ton of product.
Metallurgical heat treat furnaces	0.087 lb/MMBtu.
Metallurgical reheat furnaces	0.062 lb/MMBtu.
Incinerators	0.030 lb/MMBtu.

We are approving the above-listed NO_X emissions specifications for point sources of NO_X in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour ozone standard in the H/GA nonattainment area.

15. What Is the Compliance Schedule for Affected ICI Sources of NO_X in the H/GA Area Based on the May 30, 2001, SIP Revision That We Are Approving?

This rule revision offers a phased-in approach concerning the emission reductions and compliance schedule for point sources of NO_X in the H/GA area. The following table contains a summary of the time-table/compliance schedule for the affected ICI sources of NO_X in the H/GA area.

TABLE X.—AFFECTED ICI SOURCES OF NO_X IN THE H/GA AREA AND COMPLIANCE SCHEDULES

Sources	Compliance schedule	Additional information
ICI sources	March 31, 2004	At least 39% of total required NO_X reductions.
ICI sources	March 31, 2005	At least 67% of total required NO_X reductions.
ICI sources	March 31, 2006	At least 78% of total required NO_X reductions.
ICI sources	March 31, 2007	Demonstrate compliance with system cap limits of 117.210.

We are approving the above-listed compliance dates for affected ICI sources of NO_X in the H/GA as a part of the Texas 1-hour ozone SIP under Part D of the Act because Texas is relying on the NO_X control measures to demonstrate attainment of the 1-hour ozone standard in the H/GA nonattainment area.

16. What Are the NO_X Emissions Reductions Based on the May 30, 2001, SIP Revision, That We Are Approving?

This rulemaking will control/reduce NO_X emissions in the H/GA area in two phases or Tiers. We will refer to these two emission reduction phases as Tier I and Tier II Reductions. The following Table contains a summary of the 1997 NO_X emissions and the May 30, 2001, emission reductions for each point source category in the H/GA area that we are approving.

TABLE XI.—AFFECTED POINT SOURCES, 1997 EMISSIONS, AND PROPOSED EMISSION REDUCTIONS FOR THE H/GA

Sources	1997 NO_X emissions, tons per day (tpd)	Tier I + Tier II reductions, (tpd)
Utility Boilers	196.44	176
Turbines and Duct Burners	155.65	141
Process Heaters and Furnaces	110.12	97
Internal Combustion Engines	86.37	77
Industrial Boilers	85.98	79
Other	32.99	19
Overall Point Sources	667.55	588

The combined NO_X emission reductions of Tier I and Tier II in this SIP revision will be 588 tpd or 88 percent, when compared to the 1997 emission levels. The change in overall point sources NO_X reductions in Table XI, as compared with that of Table V in this document, is due to revisions to the requirements of subsections 117.106(c)(1) and 117.206(c)(9)(D).

17. When Did the State Adopt the Final Version of the Rule for Point Sources of NO_X in the H/GA Area?

The State adopted the final version of the rule for point sources of NO_X in the H/GA area on September 26, 2001.

18. Is There a Substantial Difference Between the State's Proposed and Final Versions of the Rule for Point Sources of NO_X in the H/GA Area?

For parallel processing purposes, there is no substantial difference between the State's proposed and final versions of the rule for point sources of NO_X in the H/GA area with regard to actions number three, four, and five of this document. We did not review actions number one and two through the parallel processing mechanism. There is no substantial difference between the State's proposed and final versions of the rule for point sources of NO_X in the H/GA area with regard to actions number one and two of this document.

19. What Are NO_X?

Nitrogen oxides belong to the group of criteria air pollutants. The NO_X result from burning fuels, including gasoline and coal. Nitrogen oxides react with volatile organic compounds (VOC) to form ozone or smog, and are also major components of acid rain.

20. What Is a Nonattainment Area?

A nonattainment area is a geographic area in which the level of a criteria air pollutant is higher than the level allowed by Federal standards. A single geographic area may have acceptable levels of one criteria air pollutant but unacceptable levels of one or more other criteria air pollutants; thus, a geographic area can be attainment for one criteria pollutant and nonattainment for another criteria pollutant at the same time.

21. What Are Definitions of Major Sources for NO_X?

Section 302 of the Act generally defines ''major stationary source'' as a facility or source of air pollution which emits, when uncontrolled, 100 tons per year (tpy) or more of air pollution. This general definition applies unless another specific provision of the Act explicitly defines major source differently.

According to section 182(d) of the Act, a major source in a severe nonattainment area is a source that emits, when uncontrolled, 25 tpy or more of NO_X. The H/GA area is a severe ozone nonattainment area, so the major source size for the H/GA area is 25 tpy or more, when uncontrolled. This rulemaking will regulate NO_X emissions from major stationary sources in the H/GA area.

22. What Is a State Implementation Plan?

Section 110 of the Act requires States to develop air pollution regulations and control strategies to ensure that State air quality meets the NAAQS that EPA has established. Under section 109 of the Act, EPA established the NAAQS to protect public health. The NAAQS address six criteria pollutants. These criteria pollutants are: carbon monoxide, nitrogen dioxide, ozone, lead, particulate matter, and sulfur dioxide.

Each State must submit these regulations and control strategies to us for approval and incorporation into the federally enforceable SIP. Each State has a SIP designed to protect air quality. These SIPs can be extensive, containing State regulations or other enforceable documents and supporting information such as emission inventories, monitoring networks, and modeling demonstrations.

23. What Does Federal Approval of a SIP Mean to Me?

A State may enforce State regulations before and after we incorporate those regulations into a federally approved SIP. After we incorporate those regulations into a federally approved SIP, both EPA and the public may also take enforcement action against violators of these regulations.

24. What Areas in Texas Will the Stationary Diesel Engines or Stationary Dual-Fuel Engines Rule Affect That We Are Approving Based on the May 30, 2001, SIP Revision Affect?

The following table contains a list of counties affected by this SIP revision concerning the stationary diesel engines or dual-fuel engines that we are parallel processing for approval.

TABLE XII.—RULE LOG NUMBER AND AFFECTED AREAS FOR TEXAS NO_X SIP

Rule log	Affected areas
2001–007B–117–AI Stationary diesel engines and dual-fuel engines provisions.	Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties.

If you are in one of these Texas counties, you should refer to the Texas NO_X rules to determine if and how today's action will affect you.

25. What Areas in Texas Will Be Affected by the Rule for Point Sources of NO_X, That We Are Approving Based on the May 30, 2001, SIP Revision?

The following table contains a list of counties affected by this SIP revision concerning point sources of NO_X that we are parallel processing for approval.

TABLE XIII.—RULE LOG NUMBER AND AFFECTED AREAS FOR TEXAS NO_X SIP

Rule log No.	Affected areas
2001–007B–117–AI ICI and electric utility sources.	Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties

Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This proposed action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et. seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4). For the same reason, this rule also does not significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. The rule does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. The EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings.'' This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Incorporation by reference, Nitrogen dioxide, Nitrogen oxides, Nonattainment, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: October 15, 2001.

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270 the entry for Chapter 117 in the table in paragraph (c) is amended as follows:

a. Under Subchapter A, revising the entry for section 117.10;

b. Under Subchapter B, revising the entries for sections 117.101, 117.103, 117.105, 117.106, 117.107, 117.108, 117.111, 117.113, 117.116, 117.119, 117.121, 117.138, 117.201, 117.203, 117.205, 117.206, 117.207, 117.208, 117.211, 117.213, 117.216, 117.219, and 117.221, and adding new entries for sections 117.110, 117.114, 117.210, and 117.214;

c. Under Subchapter D, adding new entries for sections 117.471, 117.473, 117.475, 117.478, and 117.479;

d. Under Subchapter E, revising entries for sections 117.510, 117.520, and 117.570, and adding a new entry for section 117.534. The revisions and additions read as follows:

§ 52.2270 Identification of plan.

* * * * *

(c) * * *

EPA APPROVAL REGULATIONS IN THE TEXAS SIP

State citation	Title/subject	State submittal/approval date	EPA approval date	Explanation
*	*	*	*	*
Chapter 117 (Reg 7)—Control of Air Pollution From Nitrogen Compounds Subchapter A				
Section 117.10	Definitions	09/26/2001	[Insert 11–14–01 Federal Register cite.]	

EPA APPROVAL REGULATIONS IN THE TEXAS SIP—Continued

State citation	Title/subject	State submittal/approval date	EPA approval date	Explanation
Subchapter B—Division 1—Utility Electric Generation				
Section 117.101	Applicability	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.103	Exemptions	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* * * *	*	*	*	
Section 117.105	Emission Specifications	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.106	Emission Specifications for Attainment Demonstrations.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.107	Alternative System-Wide Emission Specifications.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.108	System Cap	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* * * *	*	*	*	
Section 117.110	Change Ownership—System Cap	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
Section 117.111	Initial Demonstration of Compliance.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.113	Continuous Demonstration of Compliance.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.114	Emission Testing and Monitoring for the Houston Galveston Attainment Demonstration.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
* * * *	*	*	*	
Section 117.116	Final Control Plan Procedures for Attainment Demonstration Emission Specifications.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* * * *	*	*	*	
Section 117.119	Notification, Record keeping, and Reporting Requirements.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.121	Alternative Case Specific Specifications.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* * * *	*	*	*	
Section 117.138	System Cap	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* * * *	*	*	*	
Section 117.201	Applicability	09/26/2001	[Insert 11–14–01 Federal Register cite.]	

EPA APPROVAL REGULATIONS IN THE TEXAS SIP—Continued

State citation	Title/subject	State submittal/approval date	EPA approval date	Explanation
Section 117.203	Exemptions	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.205	Emission Specifications for Reasonably Available Control Technology (RACT).	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.206	Emission Specifications for Attainment Demonstrations.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.207	Alternative Plant-Wide Emission Specifications.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.208	Operating Requirements	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* *	* *	*	*	*
Section 117.210	System Cap	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
Section 117.211	Initial Demonstration of Compliance.	09/26/2001	11–14–01	
Section 117.213	Continuous Demonstration of Compliance.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.214	Emission Testing and Monitoring for the Houston Galveston Attainment Demonstration.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
* *	* *	*	*	*
Section 117.216	Final Control Plan Procedures for Attainment Demonstration Emission Specifications.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* *	* *	*	*	*
Section 117.219	Notification, Recordkeeping, and Reporting Requirements.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
Section 117.221	Alternative Case Specific Specifications.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* *	* *	*	*	*
Section 117.471	Applicability	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
Section 117.473	Exemptions	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
Section 117.475	Emission Specifications	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
Section 117.478	Operating Requirements	09/26/2001	11–14–01	New.
Section 117.479	Monitoring, Recordkeeping, and Reporting Requirements.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.

EPA APPROVAL REGULATIONS IN THE TEXAS SIP—Continued

State citation	Title/subject	State submittal/approval date	EPA approval date	Explanation
* *	* *	*	*	*
Section 117.510	Compliance Schedule for Utility Electric Generation in Ozone Nonattainment Areas.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* *	* *	*	*	*
Section 117.520	Compliance Schedule for Industrial, Commercial, and Institutional, Combustion Sources in ozone Nonattainment Areas.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* *	* *	*	*	*
Section 117.534	Compliance Schedule for Boilers, Process Heaters, Stationary Engines, and Gas Turbines at Minor Sources.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	New.
* *	* *	*	*	*
Section 117.570	Use of Emissions Credits for Compliance.	09/26/2001	[Insert 11–14–01 Federal Register cite.]	
* *	* *	*	*	*

[FR Doc. 01–27584 Filed 11–13–01; 8:45 am]
BILLING CODE 6560–5–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX 28–1–7538; FRL–7092–4]

Approval and Promulgation of Implementation Plans; Texas; Houston/Galveston Ozone Nonattainment Area Vehicle Miles Traveled Offset Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: In this final action, the EPA is approving, as part of the Texas State Implementation Plan(SIP) for the Houston/ Galveston Ozone Nonattainment Area (HGA), the Vehicle Miles Traveled (VMT) Offset Plan to offset any growth in emissions from growth in VMT, or number of vehicle trips in the Houston/ Galveston severe ozone nonattainment area. This is part of the State's effort to attain the National Ambient Air Quality Standard (NAAQS) for ozone. The State demonstrated that emissions from increases in VMT or numbers of vehicle trips within HGA will not rise above an established ceiling by 2007; thereby not requiring additional transportation control measure (TCM) offsets to prevent an increase in VMT above the ceiling. The requirements for the VMT Offset plan to be consistent with the State's demonstration of Reasonable Further Progress (RFP) and attainment are addressed in a corresponding action for the HGA area taken and published separately in this **Federal Register**. This action approves the proposed approval published on July 10, 2001 (66 FR 35920). Comments made on the direct final rule, published on July 10, 2001 (66 FR 35903) and withdrawn on September 4, 2001 (66 FR 46220), are addressed later in this action. This action is being taken under sections 110 and 182 of the Federal Clean Air Act, as amended (the Act, or CAA).

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of the relevant material for this action are available for inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment at least 24 hours before the visiting day.

Environmental Protection Agency, Region 6, Air Planning Section (6PD–L), 1445 Ross Avenue, Suite 700, Dallas, TX 75202–2377.

Texas Natural Resource Conservation Commission, 12100 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Ms. Brooke M. Ivener at (214) 665–7362 or Mr. Bill Deese at (214) 665–7253, Air Planning Section (6PD–L), EPA Region 6, Suite 700, 1445 Ross Avenue, Dallas, Texas 75202–2733.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

Table of Contents

1. What Are We Approving?

The EPA is approving a new SIP revision for VMT Offset submitted by the State on May 17, 2000. Specifically, we are approving the VMT Offset SIP, submitted by the State on August 25, 1997 and with minor, non-substantive revisions submitted on May 17, 2000. For information regarding our analysis

of the State submittal, please refer to the Technical Support Document for this action.

Section 182(d)(1)(A) of the Act directs states containing ozone nonattainment areas classified as severe, pursuant to section 181(a) of the Act, to adopt transportation control strategies and TCMs to offset increases in emissions resulting from growth in VMT or numbers of vehicle trips, and to obtain reductions in motor vehicle emissions as necessary (in combination with other emission reduction requirements) to comply with the Act's Reasonable Further Progress (RFP) milestones (CAA sections 182(b)(1) and 182(c)(2)(B)) and attainment demonstration requirements (CAA section 182(c)(2)(A)). The EPA General Preamble to Title I of the CAA (57 FR 13498, 13521–13523, April 16, 1992) explains our interpretation regarding how states may demonstrate that the VMT requirement is satisfied. (We incorporate that discussion by reference.)

In summary, the purpose of the VMT offset requirement is to prevent growth in motor vehicle emissions from cancelling out the emission reduction benefits of federally mandated programs in the Act. Sufficient measures must be adopted so projected motor vehicle volatile organic compound (VOC) emissions will stay beneath a ceiling level established through modeling of mandated transportation-related controls. When growth in VMT and vehicle trips would otherwise cause a motor vehicle emissions upturn, this upturn must be prevented by TCMs. If projected total motor vehicle emissions during the ozone season in one year are not higher than during the previous ozone season due to the control measures in the SIP, the VMT Offset requirement is satisfied.

For several years, we have consistently implemented this interpretation in response to several states' submissions of VMT SIPs under section 182(d)(1)(A) of the Act.[1] We first announced our intent to apply this longstanding interpretation to the HGA's SIP in 1997. See 62 FR 54598 (October 21, 1997) (proposed disapproval of HGA SIP). We similarly followed the General Preamble's approach in the July 10, 2001 direct final rule that would have approved the HGA SIP (see 66 FR at 35903, 35904).

The August 25, 1997 VMT SIP submittal from the State includes a projection of the mobile source emissions profile for HGA through 2007, the date by which the HGA area is to attain the NAAQS for ozone. The August 25,1997 submittal fulfills the first required element under CAA section 182(d)(1)(A)for a VMT Offset Plan in the HGA severe ozone nonattainment area. The second and third required elements under section 182(d)(1)(A) are fulfilled in the corresponding action addressing RFP and attainment for the HGA area taken and published separately in this **Federal Register.**

2. Response to Comments on the Direct Final Action

On July 10, 2001, the EPA published a direct final rule approving the Texas VMT Offset SIP, with the condition that if any adverse comments were received by the end of the public comment period on August 9, 2001 the direct final rule would be withdrawn, and that we would respond to the comments in taking final action on the proposal to approve the Texas VMT Offset SIP, published concurrently on July 10, 2001,(66 FR 35920). One set of comments was received from Environmental Defense (ED). The following summarizes the comments and EPA's response to these comments:

Comment 1: The comment argues that section 182(d)(1)(A) of the Act requires offsets for increased emissions attributable to all growth in VMT above 1990 levels, and that EPA is required by the House Report language (H. R. No. 101–490, Part I, 101st Cong., 2nd session at 242) to ensure emission reductions despite an increase in VMT. The comment states that EPA is acting inconsistently with the law by not applying ''the guidance provided by the House committee report in the review of VMT Offset SIPs[.]'' In other words, the comment challenges the longstanding interpretation of section 182(d)(1)(A) that we discussed in the General Preamble and in our other rulemaking actions approving states' VMT SIPs.

Response: As discussed in the General Preamble, EPA believes that section 182(d)(1)(A) of the Act requires the State to ''offset any growth in emissions'' from growth in VMT, but not, as the comment suggests, all emissions resulting from VMT growth. See 57 FR at 13522–23. As we explained in response to similar comments objecting to our application of the General Preamble's approach when approving Illinois' and Indiana's SIPs, the purpose is to prevent a growth in motor vehicle emissions from canceling out the emission reduction benefits of the federally mandated programs in the Act. See 60 FR at 48898; 60 FR at 38720–21. The baseline for emissions is the 1990 level of vehicle emissions and the subsequent reductions in emission levels required to reach attainment with the NAAQS for ozone. Thus, the anticipated benefits from the mandated measures such as the Federal motor vehicle pollution control program, lower Reid vapor pressure, enhanced inspection and maintenance and all other motor vehicle emission control programs are included in the ceiling line calculations used by Texas in the VMT Offset SIP. Appendix B, Table 2, in the Texas submittal shows how emissions will decline substantially and will not begin to turn up, nor does it reach the ceiling established by the mandated controls. Emission reductions are expected every year through the year 2007.

Our approach is consistent with the purposes Congress had in enacting section 182(d)(1)(A). The ceiling line level decreases from year to year as the state implements various control measures, and the decreasing ceiling line prevents an upturn in mobile source emissions. Dramatic increases in VMT that could wipe out the benefits of motor vehicle emission reduction measures will not be allowed and will trigger the required implementation of TCMs. This prevents mere preservation of the status quo, and ensures emissions reductions despite an increase in VMT or number of vehicle trips. To prevent future growth changes from adversely impacting emissions from motor vehicles, States are required under section 182(c)(5) of the Act to track actual VMT and to periodically demonstrate that the actual VMT is equal to or less than the projected VMT, with TCMs required to offset VMT that is above the projected levels.

Under the commenter's approach to section 182(d)(1)(A), Texas would have to offset VMT growth even while vehicle emissions are declining. Although the statutory language could be read to require offsetting any VMT growth, EPA believes that the language can also be read so that only actual emissions increases resulting from VMT growth need to be offset. The statute by its own terms requires offsetting of ''any growth in emissions from growth in VMT.'' It is reasonable to interpret this language as requiring that VMT growth must be offset only where such growth results in emissions increases from the motor vehicle fleet in the area. Our interpretation of the language of section

[1] See, e.g., 62 FR 23410, 23417 (Apr. 30, 1997) (proposed approval of New Jersey's SIP); 61 FR 53624, 53624–25 (Oct. 15, 1996) (direct final approval of New York's SIP); 61 FR 51214, 51216 (Oct. 1, 1996) (direct final approval of New York's SIP); 60 FR 48896, 48897 (Sept. 21, 1995) (final approval of Illinois' SIP); 60 FR 38718, 38719–20 (July 28, 1995) (final approval of Indiana's SIP); 60 FR 2565, 2566–67 (January 10, 1995) (proposed approval of Wisconsin's SIP).

182(d)(1)(A) is entitled to deference. *Chevron U.S.A., Inc.* v. *NRDC,* 467 U.S. 837, 842–44 (1984).

While it is true that the language in the House Committee Report could appear to support the ED's interpretation of the statutory language, such an interpretation would have drastic implications for Texas if the State were forced to impose such draconian control measures as mandatory no-drive restrictions to fully offset the effects of increasing VMT if the area were forced to ignore the beneficial impacts of all vehicle tailpipe and alternative fuel controls. Although the original authors of this provision and of the House Committee Report on this provision may in fact have intended this result, EPA does not believe that the Congress as a whole, or even the full House of Representatives, believed at the time it voted to pass the CAA Amendments that the words of this provision would impose such severe restrictions. There is no further legislative history on this aspect of the provision, nor was it discussed at all by any member of Congress during subsequent legislative debate and adoption.

Given the susceptibility of the statutory language to these two alternative interpretations, EPA believes it is the Agency's role in administering the statute to take the interpretation most reasonable in light of the practical implications of such interpretation, and the purposes and intent of the statutory scheme as a whole. In the context of the intricate planning requirements Congress established in title I to bring areas towards attainment of the ozone standard, and in light of the absence of any discussion of this aspect of the VMT Offset provision by the Congress as a whole (either in floor debate or in the Conference Report), EPA has consistently concluded that the appropriate interpretation of section 182(d)(1)(A) requires offsetting VMT growth only when such growth would result in actual emissions increases.[2]

Comment 2: The comment asserts that the VMT Offset SIP submitted by the State ''does not contain sufficient measures to limit motor vehicle emissions to the levels needed for attainment'' because ''the area has not adopted sufficient control measures to ensure that total area emissions will attain the NAAQS.'' The comment argues that EPA has not adequately assessed the VMT Offset SIP against the statutory requirement that the SIP provide adequate enforceable control measures. In effect the comment asserts that EPA may not approve the HGA's VMT SIP until the HGA is able to demonstrate that its entire SIP will attain the NAAQS.

Response: As an initial matter, EPA does believe the area has an approvable RFP and attainment demonstration SIP, and we refer you to that corresponding final action for the HGA area taken and published separately in this **Federal Register**. The inclusion of the RFP and attainment demonstration in the corresponding final action satisfies the second and third elements of VMT Offset in 182(d)(1)(A), as discussed below.

As described in the General Preamble and above, the purpose of section 182(d)(1)(A) of the Act is to prevent growth in motor vehicle emissions from cancelling out the emissions reduction benefits of the federally mandated programs in the Act. EPA believes it is appropriate to interpret the VMT Offset provisions of the Act to account for how States can practicably comply with each of the provision's elements, as discussed in detail below.

The VMT Offset provision requires that States submit by November 15, 1992 specific enforceable Transportation Control Measures (TCMs) and Strategies to offset any growth in emissions from growth in VMT or number of vehicle trips, sufficient enough to allow total area emissions to comply with the RFP and attainment requirements of the Act. The EPA has observed that these three elements (i.e. offsetting growth in mobile source emissions, attainment of the RFP reduction, and attainment of the ozone NAAQS) create a timing problem of which Congress was perhaps not fully aware.[3] The SIP submittals showing attainment of the 1996 15 percent Rate-of-Progress (ROP) and the post-1996 RFP and NAAQS attainment demonstration are broader in scope than growth in VMT or in numbers of vehicle trips in that they necessarily address emissions trends and control measures for non motor vehicle emissions sources and, in the case of attainment demonstrations, involve complex photochemical modeling studies. It was neither practicable nor reasonable to expect that the subsequently required submissions could be developed and implemented so far ahead of schedule as to effectively influence the VMT Offset submission.

The EPA does not believe that Congress intended the VMT Offset provisions to advance the dates for these broader submissions. Consequently, EPA believes it is appropriate to interpret the Act to provide for staged deadlines for submittal of the elements of the VMT Offset SIP.

Section 182(d)(1)(A) sets forth three elements that must be met by a VMT Offset SIP. Under EPA's interpretation, the three required elements of section 182(d)(1)(A) are separable, and could be divided into three separate submissions that could be submitted on different dates. Section 179(a) of the Act, in establishing how EPA would be required to apply mandatory sanctions if a State fails to submit a full SIP, also provides that the sanctions clock starts if a State fails to submit one or more SIP elements, as determined by the Administrator. The EPA believes that this language delegates to EPA the authority to determine that the different elements of the SIP submissions are separable. Moreover, given the continued timing problems addressed above, EPA believes it is appropriate to allow States to separate the VMT Offset SIP into three elements, each to be submitted at different times: (1) The initial requirement to submit TCMs that offset growth in emissions; (2) the requirement to comply within the 15 percent periodic reduction requirement of the Act; and (3) the requirement to comply with the post-1996 periodic reduction and attainment requirements of the Act.

Under this approach, the first element—the emissions growth offset element—was due on November 15, 1992. The EPA believes this element is not necessarily dependent upon the development of the other elements. The State could submit the emissions growth offset element independent of an analysis of that element's consistency with the RFP or attainment requirements of the Act. Emissions trends from other sources need not be considered to show compliance with this particular offset element. The first element requires that a State submit a revision that demonstrates the trend in motor vehicle emissions from a 1990 baseline to the year for attaining the NAAQS for ozone, that year is 2007. As described in the General Preamble, and reiterated above, the purpose is to prevent growth in motor vehicle emissions from canceling out the emission reduction benefits realized from the federally mandated programs in the Act. The EPA interprets section

[2] As noted above, EPA has applied this interpretation since the enactment of the 1990 amendments to the Clean Air Act adding section 182(d)(1)(A), even in response to adverse comments submitted on other rulemaking actions. See, e.g., 60 FR 48898 (final approval of Illinois'' SIP) and 60 FR 39720–39721 (final approval of Indiana's SIP).

[3] See, e.g., 61 FR 53624–25; 61 FR 51215; 60 FR 48896; 60 FR 38719; 60 FR 22284, 22285 (May 5, 1995) (final approval of Wisconsin's SIP); and 60 FR 2565–2567.

182(d)(1)(A) to require that sufficient measures be adopted so that projected motor vehicle VOC emissions will never be higher during the ozone season in one year than during the ozone season the year before. When growth in VMT and vehicle trips would otherwise cause a motor vehicle emissions upturn, this upturn must be prevented. The emissions level at the point of potential upturn becomes a ceiling on motor vehicle emissions. This requirement applies to projected emissions in the years between the submission of the SIP revision and the attainment deadline and is above and beyond the separate requirements for the RFP and attainment demonstration.

Comment 3. The comment argues that EPA is allowing emissions reduction credit for elements contributing to reduced VMT and reduced emissions ''without requiring that such measures be enforceable obligations of the SIP.'' The comment claims that EPA has allowed Texas to base its calculations for compliance ''on emissions expected from the implementation of all facilities and services included in the H–GAC regional transportation plan and TIP prior to the attainment date, and not based solely on the TCMs contained in the VMT SIP revision.''

Response: EPA allowed Texas to calculate compliance with the emissions ceiling line using only the TCMs contained in the VMT SIP revision as further described below. The only TCMs EPA allowed Texas to receive credit for are those included in the 15 Percent ROP Plan submitted on July 24, 1996. See the corresponding final action for the HGA area taken and published separately in this **Federal Register**, *see also* the Final Conditional Interim Rule (63 FR 62943) and the Proposed Conditional Interim Rule (62 FR 37175, 37180). These TCMs have been included in the VMT Offset SIP as measurable emission reduction credits. As is stated in the direct final rule to which this comment applies (66 FR 35903), the TCMs approved for emission reduction credit are as follows in Table 1, with their associated emission benefits, as submitted in the VMT Offset SIP State submittal and as corresponds to Appendix 7K of the 15 Percent ROP Plan submittal:

TABLE 1.—TRANSPORTATION CONTROL MEASURES APPROVED FOR VMT OFFSETS

TCM	Quantity	Emissions benefit in 1996
High Occupancy Vehicle Lanes	14.7 miles	Approximately 424 pounds of VOC per day.
Park-and-Ride Lots	3,745 parking spaces	Approximately 69 pounds of VOC per day.
Arterial Traffic Management Systems	41 miles	Approximately 77 pounds of VOC per day.
Computer Transportation Management Systems	22.2 miles	Approximately 169 pounds of VOC per day.
Signalization	2.9 miles	Approximately 3 pounds of VOC per day.
		Total: approximately 742 pounds per day = 0.36 tons per day.

These emission benefits are enforceable, as they are approved in the 15 Percent ROP SIP and all TCMs included in the SIP are enforceable by rule. The direct final rule also stated that no credit is taken in the SIP for any additional TCMs. Thus the lower curve, depicting the mandated controls, the Motorist Choice I/M Program, and TCMs, includes only the enforceable TCMs through FY 1996 described above. The TCMs for FY 1999 and FY 2007, although explained, are not credited for the VMT Offset SIP demonstrations. In addition, although the State chose to include the five 1996 TCMs as enforceable measures, the analysis shows that even these measures are not necessary to offset emissions from growth in VMT.

Modeling of the lower curve in Graph 1 of the Technical Support Document, at no time, shows the emission estimates meeting or exceeding the lowest point in the upper curve, reached in 2007. The upper curve reached its lowest point in 2007, so there is no upward turn demonstrated in this instance. Usually the low point establishes the ceiling, but no true ceiling is established because there is no upward turn of the curve by which to identify the lowest point. Since the curve does not turn upward (indicating the control programs are efficiently offsetting increases from growth in VMT) no TCMs would be necessary to offset emissions from growth in VMT. The State included the five TCMs, although they are not necessary for this plan to be approved.

Three comments were also received in response to the proposed disapproval (referenced above) of the 1993 and 1994 submittals which comprised the VMT Offset requirement. Two comments supported the proposed disapproval because the SIP relied upon the repealed I/M and ETR Programs. The SIP submittal being acted upon in this action does not rely on those two programs. A third comment supported approval of the August 1997 VMT Offset submittal.

3. Final Action

The EPA has determined that Texas has adequately demonstrated that emissions from growth in VMT and number of vehicle trips will not rise above the ceiling, or low point shown as the effects of required reductions from mandatory programs. Therefore, based on the State's submittal and in consideration of the comments received in response to the proposal, we are approving the VMT Offset SIP, submitted by the State on August 25, 1997 and with minor, non-substantive revisions submitted on May 17, 2000, under sections 110 and 182 of the Act, as meeting the requirements of the first element of section 182(d)(1)(A). Please see the corresponding final action for the HGA area on RFP and attainment taken and published separately in this **Federal Register** for EPA's conclusions regarding the State's satisfaction of the second and third elements of section 182(d)(1)(A).

4. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, I hereby certify that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any

unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 14, 2002. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements. (*See* section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons Incorporation by reference, Intergovernmental relations, Nitrogen oxides, Ozone, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: October 15, 2001.

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270, paragraph (e), in the table entitled ''EPA Approved Nonregulatory Provisions and Quasi-Regulatory Measures in the Texas SIP,'' one entry is added to the end of the table to read as follows:

§ 52.2270 Identification of Plan.

* * * * *

(e) * * *

EPA APPROVED NONREGULATORY PROVISIONS AND QUASI-REGULATORY MEASURES IN THE TEXAS SIP

Name of SIP provision	Applicable geographic or nonattainment area	State submittal date/ effective date	EPA approval date	Comments
* *	*	*	* *	*
Vehicle Miles Traveled Offset Plan	Houston/Galveston Ozone nonattainment area.	05/09/2000	[Insert 11/14/2001 Federal Register cite.].	Originally submitted 11/12/93 and revised 11/06/94, 8/25/97, and 05/17/00.

[FR Doc. 01–27585 Filed 11–13–01; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–133–1–7543; FRL–7092–3]

Approval and Promulgation of Air Quality State Implementation Plans (SIP); Texas Mass Emissions Cap and Trade Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: The EPA is approving the Texas Mass Emissions Cap and Trade (MECT) program as a revision to the Texas State Implementation Plan (SIP). The program was submitted on December 22, 2000. The MECT program will contribute to attainment of the 1-hour ozone National Ambient Air Quality Standard (NAAQS) in the HGA ozone nonattainment area. The EPA is approving these revisions to the Texas SIP to regulate emissions of NO_X in accordance with the requirements of the Federal Clean Air Act (the Act).

The EPA proposed approval of the Texas MECT program on July 23, 2001 on the condition that Texas resolve eight issues. The State revised the MECT rule to adequately address the EPA issues identified in the proposed rulemaking and submitted these revisions to EPA as a SIP revision which EPA is approving in this action by parallel processing. Comments were received on the proposed rulemaking from Environmental Defense, Inc. on September 22, 2001, from Baker and Botts L.L.P. representing the Business Coalition for Clean Air Appeal Group on August 13, 2001, and from Reliant Energy, Inc. on August 13, 2001. The major comments regarded the use of credits from other trading programs for MECT compliance, inflation of the cap, undermining of the attainment demonstration, emissions monitoring and program evaluations. After reviewing the comments and the State response to the eight issues raised in the proposed rulemaking, EPA has concluded that the Texas MECT program fully satisfies all relevant guidance and the Clean Air Act.

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment with the appropriate office at least 24 hours before the visiting day. Environmental Protection Agency, Region 6, Air Planning Section (6PD-L), 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733. Texas Natural Resource Conservation Commission, 12100 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Merrit H. Nicewander, Air Planning Section (6PD-L), EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–7519. (*nicewander.merrit@epa.gov*)

SUPPLEMENTARY INFORMATION: This supplemental information section is organized as follows:

Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

I. What action Is EPA Taking?

We are granting final approval of the nitrogen oxides (NO_X) Mass Emissions Cap and Trade program for the Houston/Galveston (HGA) one-hour ozone nonattainment area. The rule was adopted and submitted as a SIP revision by letters of the Governor dated December 22, 2000 and June 15, 2001. We proposed approval of the program at 66 FR 38231 on July 23, 2001 through parallel processing. Other than changes as referenced in the proposed approval, there were no significant changes between the version proposed on July 23, 2001 and the version submitted on October 4, 2001. On September 26, 2001 the State adopted as final rules amendments to 30 TAC Chapter 101 which were proposed on May 30, 2001 with certain revisions. On October 4, 2001 Texas Governor Rick Perry submitted a letter requesting EPA to process the September 26, 2001 final rule amendments to 30 TAC, Chapter 101, as a revision to the MECT SIP. The MECT rule is one element of the control strategy for the HGA nonattainment area to comply with the requirements of the Clean Air Act (CAA) and achieve attainment for ozone.

The HGA ozone nonattainment area is required to attain the one-hour ozone standard of 0.12 parts per million (ppm) by November 15, 2007. The area will need to reduce nitrogen oxides (NO_X) to reach attainment with the one-hour standard. The MECT emissions banking rule was evaluated as an integral component of the HGA control strategy to reduce NO_X emissions. The rule submitted by the TNRCC is the Mass Emission Cap & Trade Program (30 Texas Administrative Code (TAC) Chapter 101, Subchapter H, Division 3). The MECT regulation is found at sections 101.350 through 101.363. As noted in our proposed approval, we are not approving sections 101.353(a)(3)(B) and (D). With the MECT rule revisions submitted on October 4, 2001, the State adopted definitions found at 30 TAC Section 101.1. These revisions to definitions were proposed on June 15, 2001. No comments were received on this section. We are also granting final approval of 30 TAC 101.1.

The MECT program is mandatory for stationary facilities that emit NO_X in the HGA ozone nonattainment area (at sites that have a collective design capacity of 10 tons per year or more) and which are subject to the TNRCC NO_X rules as found at 30 TAC Chapter 117. NO_X is a precursor gas that reacts with volatile organic compounds (VOCs) in the presence of sunlight to form ground-level ozone. The program sets a cap on NO_X emissions beginning on January 1, 2002 with a final reduction to the cap occurring in 2007. Facilities are required to meet NO_X allowances on an annual basis. Facilities may purchase, bank or sell their allowances. The program has a provision to allow a facility to use emission reduction credits (ERCs), discrete emission reduction credits (DERCs) and mobile discrete emission reduction credits (MDERCs) in lieu of allowances if they are generated in the HGA area.[1]

II. What Did EPA Propose?

EPA proposed to approve the Texas Mass Emission Cap and Trade program provided that TNRCC took eight specific steps. The EPA proposed approval of the MECT program was based upon the prerequisites that TNRCC must: (1) Specify the number of days of violation if an annual cap is exceeded, (2) revise the rule to require that deviation from monitoring protocols be approved by both the TNRCC Executive Director and EPA, (3) provide public access to production data necessary to calculate emissions, (4) provide for missing data provisions when monitoring equipment is not functioning properly, (5) clarify that allowances used for offsets will be obtained for the life of the new source, (6) commit to require notification of the

[1] As discussed subsequently in this notice, we are not acting on 30 TAC Chapter 101, Subchapter H, Division 4 and neither DERCs nor MDERCs can be utilized in the MECT program prior to our approval of the rule unless approved as a site-specific SIP revision.

Metropolitan Planning Organization (MPO) when MDERCs are used in the MECT program, (7) demonstrate that Alternative Emission Limitations (AELs) will not increase the allowances for a facility, and (8) revise the rule relating to the executive director discretion to deviate from allocation procedures in ''extenuating circumstances'' by either demonstrating that the allocations would not be inconsistent with the attainment demonstration and would comply with the Act, or by modifying the rule to eliminate executive director discretion or require EPA approval of allocations issued pursuant to the subsection.

III. What Comments Did EPA Receive?

EPA received one comment letter during the public comment period that closed on August 22, 2001. Environmental Defense submitted seven comments in a letter dated August 22, 2001. Two respondents to the HGA attainment demonstration SIP stated that their comments made on September 25, 2000 to TNRCC during the public comment period for the final State MECT rule were to be included by reference. The two respondents were Reliant Energy, Inc. (REI) and Baker and Botts L.L.P. on behalf of The Business Coalition for Clean Air Appeal Group (BCCA). BCCA and REI both in comments on our proposed approval of the attainment demonstration SIP incorporated by reference their comments submitted in response to the State's proposed MECT rule.

Environmental Defense commented that EPA must not defer action on the use of DERCs and MDERCs for MECT compliance. ED commented that EPA should not approve the MECT program as long as it allows the use of MDERCs in lieu of allowances. ED further stated that EPA may not approve the MECT without squarely addressing the issue of whether MDERCs can be used for MECT compliance.

ED questioned EPA's deferral of the decision to separately act on the MDERC rules (30 TAC 101 Subchapter H Division 4). However, they did indicate that it is an entirely separate question whether the MDERC portions of TNRCC's rules are approvable on their own (and used for purposes other than MECT compliance). ED questioned if EPA ultimately decides at some future date that it cannot approve the use of MDERCs for MECT compliance, after having approved the MECT program in this rulemaking, what the effect would be on the approval of the MECT, whether the approval of the MECT would become a disapproval, what the effect of disapproval would be on the proposed approval of the attainment demonstration, and whether a final approval of the attainment demonstration SIP would become a disapproval.

ED further commented that the use of DERCs and MDERCs will undermine the MECT program by allowing sources in the MECT program to use MDERCs, whereby actual emissions during any given control period could exceed the overall MECT cap without contemporaneous reductions having occurred to offset the excess emissions. ED further felt that allowing the use of MDERCs for MECT compliance was improper as there is a lack of a credible baseline to establish whether a reduction that might have been surplus at the time an MDERC was generated continues to be surplus at the time of use. ED commented that predicting results in the integrity element of quantifiable is compromised because it is impossible to predict for any control period what the balance between the generation and use of MDERCs for MECT compliance, and there is an issue of uncertainty in the integrity element of quantifiable by using reductions from one type of source at another type of source. Using emission reductions that generated MDERCs are not permanent ED commented because they took place at some point in the past. Finally, trading between economic incentive programs (EIPs) by allowing sources subject to the requirements of the mass cap and trade program to use credits generated by sources outside of the cap as a compliance option should not be allowed.

ED also commented that the method for determining the allocation of allowances to new sources creates an opportunity to inflate the cap and that additional allowances will further undermine the attainment demonstration. It further commented that requirements for emissions monitoring are inadequate, initial program evaluations should occur earlier than three years after program inception, and there appears to be a discrepancy in the amount of emissions that constitute an allowance.

Comments on the MECT rule were made in commenting on the attainment demonstration SIP by the BCCA and REI by reference to their comments to the TNRCC during the public comment period for the final State MECT rule.

BCCA commented that the MECT program should be strengthened by feasible reduction levels, and a five-year phase-in period. It additionally commented that the cap allocation methodology should be strengthened in a number of respects. The NO_X reductions required by the MECT rule are not technically or economically feasible, the phase-in time-frame should be for five years, the baseline activity level should be derived from a 12-month average, cap reductions should be weighted toward the target year, there is no reasoned justification for the rate of emission reductions, allowances should be allocated for 30 future years, not year-by-year, the additional definitions ''Account'' and ''NO_X Cap Plant'' should be incorporated, allocations should be fixed despite equipment shutdowns or changes, an opt-in mechanism should be incorporated for non-emission standards for the attainment demonstration (ESAD) sources, modified, as well as new, sources should be granted allocations at permitted levels, and the allocation methodology should be simplified. They feel that open-market credits should be fully incorporated, that ERCs should be creditable to allowances, and the 10% assessment should be dropped for credit use in the program. Further comments indicated that daily and 30-day limits should be dropped for sources participating in the MECT program, and an emission cap should be employed to meet new source review requirements. They commented that the true-up period should be extended to April 1, allowances should be divisible in tenth tons, enhanced monitoring should await the target year, VOC credits should be creditable against NO_X allocations upon an appropriate demonstration, and the Economic Incentive Program should be expanded and strengthened.

REI comments indicated generally that it supports a market-based cap and trade program as achieving overall NO_X reductions at the least cost. It contends that a viable cap and trade program depends on feasible reduction levels and that allowances should be allocated for a stream of years, not every year. Open Market Credits should be fully incorporated to preserve investments made to achieve early reductions, it commented. The cap and trade program should incorporate Plant-wide Applicability Limits to satisfy New Source Review requirements for changes in NO_X emissions. In addition, REI commented that the true-up date for the annual cap compliance should be extended to conform to the annual inventory deadline, daily and 30-day limits should be dropped for sources participating in the cap and trade, and VOC reductions should be creditable against NO_X allocations upon an appropriate demonstration.

Our response to these comments is included in Section V of this notice.

IV. How Did Texas Respond to Prerequisites for Approval?

As indicated by the responses below, Texas has satisfied all of EPA's prerequisites to approval.

Prerequisite: Our proposed approval requested the State to clarify in response to comments that the State has authority to impose penalties where every day of a long term violation is a separate violation.

Response: The State in the preamble to the final MECT rule responded that EPA's interpretation of these statutes is correct; each day of noncompliance is a separate violation. Thus, every day that the annual cap is exceeded may be considered as a separate violation.

Prerequisite: Our proposed approval requested the State amend the rules to provide that any use of monitoring protocols other than those specified in Chapter 117 will be approved by EPA.

Response: The State amended section 101.354(a) by adding language clarifying that established protocols in 30 TAC Chapter 117 must be used when quantifying actual emissions for facilities subject to the cap and trade program. The authority of the Executive Director to approve monitoring protocols other than those specified has been eliminated. The authority to quantify actual emissions by means other than those specified in 30 TAC 117 is now limited by section 101.353(b) to circumstances where required monitoring and testing data is missing or unavailable. (*See* subsequent response relating to missing data.)

Prerequisite: Our proposed approval requested the State to clarify in response to comments that the confidentiality provisions will not prevent public disclosure of activity level data necessary to determine emissions under the cap program. We also requested that any exemptions from disclosure be noted in the annual compliance report.

Response: The State clarified that emissions data cannot be held confidential. The State clarification indicated that the Office of the Attorney General makes such a determination in specific cases. Attorney General Opinion No. H–539 (February 26, 1975) ruled that emissions data supplied to the state may not be treated as confidential. Emissions data has been interpreted to include information on the nature and amount of emissions from a facility. The State agreed to include any notice of exemptions from disclosure in the annual report.

Prerequisite: Our proposed approval requested the State amend the rules to specify missing data provisions as described in EIP guidance § 5.2(c).

Response: The State added a new section 101.354(b) that provides a procedure which may be followed to determine actual emissions in the event the data required under section 101.354(a) is missing or unavailable. The procedure establishes the order of missing data methods that must be used as follows: continuous monitoring; periodic monitoring; stack or vent testing data; manufacturer's emissions data; and EPA Compilation of Air Emission Factors (AP–42). These methods must be demonstrated to most accurately represent actual emissions.

Prerequisite: Our proposed approval requested the State to clarify that emissions offsets must be obtained for the life of the NSR source.

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

Prerequisite: Our proposed approval requested the State to provide notification of MDERC generation to the metropolitan planning organization (MPO).

Response: The State agreed in the preamble to the final MECT rule that MPOs should be made aware of MERC and MDERC generation projects because of the necessity to avoid double counting reductions that may be banked and also used for SIP credit under other programs.

Prerequisite: Our proposed approval requested the State to demonstrate how existing rule provisions will prevent the issuance of Alternate Emission Limits (AELs) that could increase a NO_X emissions cap.

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

Prerequisite: Our proposed approval requested the State to modify, or make demonstrations relating to, subsection 101.353(g), stated that in ''extenuating circumstances'' the TNRCC executive director may deviate from the requirements for determining the amount of allowances to be issued to a facility. The FR notice said the state must either (1) demonstrate that the allocations that could be issued pursuant to that subsection would not be inconsistent with the attainment demonstration and would comply with the CAA, or (2) modify the rule to eliminate executive director discretion or require EPA approval of allocations issued pursuant to the subsection.

Response: The State revised section 101.353 of the rule by stating that the owner or operator of a facility may, due to extenuating circumstances, request up to two additional calendar years to establish a baseline period more representative of normal operation as determined by the executive director. The State response is consistent with the NSR definition of actual emissions which allows for an alternate period when the baseline period does not reflect normal operations. EPA's objection relating to Executive Director discretion has been resolved.

V. What Are EPA's Responses to Comments?

Environmental Defense Comment 1

Comment: EPA must not defer action on the use of DERCs and MDERCs for

MECT compliance. EPA should not approve the MECT program as long as it allows the use of MDERCs in lieu of allowances. EPA may not approve the MECT without squarely addressing the issue of whether MDERCs can be used for MECT compliance.

Response: The Clean Air Act does not prohibit EPA from determining at a later date whether or not DERCS or MDERCs may be utilized in the MECT program. The DERC and MDERC rules (30 TAC Chapter 101 Division 4) are separate and independent from the MECT rules since, unlike the MECT rules, the DERC and MDERC rules were not submitted by the state for emission credit in the attainment demonstration. In addition, the use of DERCs or MDERCs in the MECT program is not necessary for that program to achieve emission reductions needed for attainment, or for that program to comply with other applicable Clean Air Act requirements. The purpose of utilizing DERCs or MDERCs in the MECT program is to provide sources with a voluntary compliance option.

As we stated in the **Federal Register** Notice proposing action on the MECT rules, DERCS and MDERCs may not be used for compliance with the MECT rules unless the DERC and MDERC rules are approved by EPA for inclusion into the SIP. In addition, a source-specific SIP revision may be utilized to seek EPA approval for the use of DERCs or MDERCs in the MECT program on a case-by-case basis.

The DERC and MDERC rules, and any individual trades, will be fully evaluated for approvability as a SIP revision when EPA proposes action on them. This evaluation will determine whether or not those rules or trades comply with all applicable Clean Air Act requirements, considering the interaction of the use of DERCs or MDERCs with existing SIP provisions, including the MECT program. The public will be provided an opportunity to comment on the approvability of the DERC and MDERC rules and any individual trades as a SIP revision at the time EPA proposes action on those rules or trades.

If at some future date, EPA determines that the DERC or MDERC rules or an individual trade cannot be approved, MECT facilities would not have the flexibility of using such credits for compliance. Such facilities would, however, still have to achieve all emission reductions required by the MECT program, all other provisions of the MECT program would continue to function, and approval of the MECT program—and the SIP—would remain in effect.

Comment: If EPA ultimately decides at some future date that it can not approve the use of MDERCs for MECT compliance, after having approved the MECT program in this rulemaking, what would be the effect on the approval of the MECT?

Response: As stated above, if at some future date, the MDERC rule cannot be approved, the MECT program could not use MDERCs for compliance with the allowance cap. The use of MDERCs for MECT compliance is for source flexibility. Should the MDERC program be determined to not be approveable at some point in the future, the MECT facilities would no longer have the flexibility of using MDERCs for compliance. All other provisions of the MECT program would continue to function as they were designed, and the approval of the MECT program would not be affected.

Comment: Would the approval become a disapproval?

Response: As stated above, the approval of the MECT program and the SIP would remain in effect.

Comment: What would be the effect of converting the MECT approval to a disapproval on the proposed approval of the attainment demonstration?

Response: Since there would be no conversion of the MECT approval to a disapproval, there would be no effect on the proposed approval of the attainment demonstration. As indicated above, should the MDERC program be disapproved, the MECT program would be required to achieve the required compliance with the allowance cap, but without source flexibility of using MDERCs for cap compliance.

Comment: Since EPA has already stated that it cannot finalize approval of the attainment demonstration SIP until (among other things) it has finalized action on the NO_X MECT program since it is relied upon in the attainment demonstration, then would a final approval of the attainment demonstration SIP thus become a disapproval if EPA later disapproves the MECT program?

Response: Again, as stated above, once the MECT program and the attainment demonstration are SIP approved, a subsequent disapproval of the MDERC program would not change the approval status of the attainment demonstration. The emission reductions relied upon by the implementation of the control technology measures contained in the MECT would be achieved without the source flexibility of MDERC use as provided for in the MDERC rule.

Environmental Defense Comment 2

Comment: ED made a number of comments specific to the DERC and MDERC rules as they relate to the MECT. Generally, ED commented that the use of DERCs and MDERCs will undermine the MECT program by allowing sources in the MECT program to use MDERCs, whereby actual emissions during any given control period could exceed the overall MECT cap without contemporaneous reductions having occurred to offset the excess emissions. ED further felt that allowing the use of MDERCs for MECT compliance was improper as there is a lack of a credible baseline to establish whether a reduction that might have been surplus at the time an MDERC was generated continues to be surplus at the time of use. ED commented that predicting results in the integrity element of quantifiable is compromised because it is impossible to predict for any control period what the balance will be between the generation and use of MDERCs for MECT compliance, and there is an issue of uncertainty in the integrity element of quantifiable by using reductions from one type of source at another type of source. Using emission reductions that generated MDERCs are not permanent, ED commented, because they took place at some point in the past. Finally, trading between economic incentive programs (EIPs) by allowing sources subject to the requirements of the mass cap and trade program to use credits generated by sources outside of the cap as a compliance option should not be allowed.

Response: These issues do not arise unless EPA approves a SIP revision allowing the use of DERCs or MDERCs in the MECT program. EPA is not at this time taking action on the DERC or MDERC rules, or any individual DERC or MDERC trades.

As we stated in the **Federal Register** Notice proposing action on the MECT rules, DERCS and MDERCs may not be used for compliance with the MECT rules unless the DERC and MDERC rules are approved by EPA for inclusion into the SIP. In addition, a source-specific SIP revision may be utilized to seek EPA approval for the use of DERCs or MDERCs in the MECT program on a case-by-case basis.

The DERC and MDERC rules, and any individual trades, will be fully evaluated for approvability as a SIP revision when EPA proposes action on them. This evaluation will determine whether those rules or trades comply with all applicable Clean Air Act requirements, considering the

interaction of the use of DERCs or MDERCs with existing SIP provisions, including the MECT program. The public will be provided an opportunity to comment on the approvability of the DERC and MDERC rules and any individual trades as a SIP revision at the time EPA purposes action on those rules or trades.

EPA will respond to these comments at the time the agency acts on a SIP revision including the DERC and MDERC rules, or any individual trades, if they are submitted in connection with such action.

Until EPA completes its evaluation of the DERC and MDERC rules or an individual trade, the agency has no basis to take final action disapproving the use of DERCs or MDERCs in the MECT program. The acquisition and use of credits generated under one (EIP) to meet the requirements of another EIP is not prohibited by the Clean Air Act, and is specifically contemplated by the EPA EIP guidance document, Improving Air Quality with Economic Incentive Programs (EPA–452/R–01–001) January 2001, as long as certain criteria are met.

Environmental Defense Comment 3

Comment: Environmental Defense's third comment was that the method for determining the allocation of allowances to new sources creates an opportunity to inflate the cap. ED commented that the number of allowances issued to certain new sources lacking a historic emissions baseline will be based on allowable emissions for two years, but only until an actual emission baseline is established. ED contended that these new sources have the incentive to maximize production and/or emissions to establish a baseline that is close to the allowable emissions limit. ED commented that once the artificially high baseline is established, the source can return to normal production and/or emission levels and be left with a windfall of surplus allowances that it would then be free to trade to other sources in the MECT program. ED contended that EPA's review of the MECT program fails to address this possibility.

ED commented that new sources without an established, actual baseline can be viewed as sources that are not covered, because their emissions baselines have not yet been established. ED was concerned that the increment between actual emissions during normal operating conditions and the permit allowables represents a pool of excess allowances that can be captured by these new sources. If new sources can successfully capture this windfall, the overall emissions budget for the MECT program will end up higher than it otherwise would have been.

Response: The attainment demonstration modeling inventory for new sources without a historical baseline consisted of the allowable emissions for these sources. These sources were included in the allowance cap at their allowable level. The State's attainment demonstration for HGA used this level of emissions. Accordingly. we have no basis to challenge this part of the method for allocating allowances. Further, the establishment of a baseline for these sources at actual emission levels below their allowables will reduce or shrink the cap.

Environmental Defense Comment 4

Comment: Environmental Defense's fourth comment was that additional allowances issued under MECT section 101.353(g) will further undermine the attainment demonstration. ED contended that the TNRCC issuance of additional allowances would further undermine the SIP. ED states that they are uncertain how TNRCC can demonstrate that additional allocations ''are not inconsistent with the attainment demonstration.'' Section 101.353(g) in the December 2000 regulation stated that ''in extenuating circumstances, the executive director may deviate from the requirements of this section to determine the amount of allowances allocated to a facility.''

Response: The State revised section 101.353(g) in the October 4, 2001 submittal. The final rule states that ''(t)he owner or operator of a facility may, due to extenuating circumstances, request up to two additional calendar years to establish a baseline period more representative of normal operation as determined by the executive director.'' This revision of the regulation for determination of baseline emissions is consistent with the new source review definition of actual emissions and actual baseline emissions used to determine surplus emission reductions from other trading programs.

Environmental Defense Comment 5

Comment: Environmental Defense's fifth comment was that the requirements for emissions monitoring are inadequate. ED commented that EPA fails to provide any factual basis for its conclusion that TNRCC's selection of emission measurement protocols are adequate. ED stated that they can find no evidence of the TNRCC's adoption of specific monitoring requirements in Chapter 117 to ensure compliance with the MECT. Instead, it appears to ED that monitoring consists of whatever methods were already in place prior to the adoption of ESADs in Chapter 117. ED commented that the creation of a cap and trade program should be accompanied by additional monitoring requirements to ensure the program's success. ED commented that the TNRCC should require monitoring requirements no less stringent than those of the Acid Rain Program and the NO_X SIP Call.

The MECT rules at section 101.354(a) describe the method for determining how many allowances will be deducted from a compliance account. This deduction should be based, to the maximum extent possible, on the measured mass of NO_X emissions and should require Texas to measure and track mass emissions instead of emissions rates and activity levels, the product of which is only a surrogate for mass emissions. Measuring mass emissions will improve the transparency and environmental integrity of the MECT program.

Response: The State submitted the monitoring requirements of Chapter 117 to fulfill the monitoring protocol requirements of the MECT. For electric utility facilities the Chapter 117 monitoring requirements consist of the continuous emission monitoring requirements of the Acid Rain program at 40 CFR part 75 and 40 CFR part 60 Appendix A. Thus the MECT monitoring requirements are the same as those in the Acid Rain program and NO_X SIP Call. The State has estimated that approximately 90% of the total allowances in the MECT program are allocated to sources that are required to have CEMs. EPA can find no basis for the ED statement that the MECT monitoring requirements are less stringent than those of the Acid Rain Program and the NO_X SIP Call.

Environmental Defense Comment 6

Comment: Environmental Defense's sixth comment was that the initial program evaluations should occur earlier than three years after program inception. ED was pleased that the TNRCC included an explicit requirement to perform an audit of the program after three years to ensure that it is achieving the target NO_X emission reduction throughout the control period. The EPA and TNRCC should emphasize that this audit may result in the imposition of additional restrictions (weekly or monthly caps, geographic trading restrictions, e.g.) to ensure the program's integrity. This would encourage capped sources to account for this possibility up front when making investments, trading, or banking decisions. The FR notice refers to the EIP guidance expectation that annual

evaluation of the program is appropriate for at least two years, until the projected emissions have been adequately confirmed (66 FR 38237). Despite this expectation, EPA concluded that MECT program meets the expectations of the EIP guidance, even though TNRCC's audit will only occur triennially. This conclusion is unjustified.

Response: Although the MECT audit will occur triennially as required by the MECT regulation, a review will be conducted in 2002 as a result of the settlement reached in BCCA Appeal Group v. Texas Natural Resource Conservation Commission, No. GN1–00210 (250th Dist. Ct.)(filed on January 19, 2001). The attainment demonstration SIP requires a mid course correction evaluation in 2004. The degree of control technology and implementation schedules are an integral part of both of these audits. EPA believes that with these two audits in 2002 and 2004 plus the triennial MECT audits, the audit frequency is adequate to help assure that the reductions will lead to attainment. The EPA EIP guidance, which in any event is not binding, did not assume the additional audits requested above.

Environmental Defense Comment 7

Comment: Environmental Defense's seventh comment was that there appears to be a discrepancy in the amount of emissions that constitute an allowance. According to section 101.352(g) allowances will be allocated, transferred, or used in tenths of tons. On the other hand, the equations for calculating the number of allowances to be deposited into an account at section 101.353(a) and the allowances to be deducted from an account at section 101.354(a) appear to yield allowances in tons. There is thus an error of a factor of ten in the calculations that needs to be corrected.

Response: The MECT rule defines one MECT allowance to equal one ton of NO_X emissions. The level of accuracy in section 101.352(g) for allocation, transfer or use is in tenths of tons which is consistent with the requirements of sections 101.353(a) and 101.354(a). As in a bank account, the currency denomination is in dollars but the account itself is debited and credited in dollar amounts with an accuracy of two decimal places, i.e. dollars and cents. Thus, there is not an error of a factor of ten but rather an accuracy of allowances to one decimal place.

EPA responses to BCCA and REI comments made on September 25, 2000, are as follows:

Comment: BCCA commented that the proposed NO_X reductions intended to be implemented under MECT rule are not technologically or economically feasible and will not result in an economic incentive under the cap and trade rule because there will be insufficient surplus allowances. The cap and trade system should be based on current California point source controls, which are the most stringent achieved in practice.

Response: This comment is not relevant to our decision whether to approve the MECT rule. We are not authorized to review control requirements for their economic or technological feasibility. In any event, the State made no changes to the MECT rule in response to these comments. EPA notes, however, that combined use of combustion modification and flue gas controls on the majority of large combustion units result in point source NO_X reductions in the range of 90%. Combustion modification capabilities and flue gas controls are well documented in the EPA Alternative Control Technology (ACT) documents, the NO_X control literature, and papers presented at numerous meetings of research and trade organizations for industry, NO_X control vendors, constructors, and the government. These documents report combustion-based reductions from minimal to over 90%, and flue gas controls in the range of 75% to 95%. We agree with the State that both combustion modifications and flue gas cleanup are established technologies. We agree with the State that the market-based approach embodied in the adopted rules give nearly complete freedom on how to achieve the goals and based on experience from California, will stimulate the development of new and innovative reduction technologies and strategies.

Comment: BCCA commented that the rule should afford a five-year phase-in period. In the proposed rule the final, target allocations would be issued in 2005 and remain fixed thereafter. In other words, the necessary controls must be in place by year-end 2004 in order to meet the target allocations under the Proposal. This timeframe is neither practical nor feasible. The Proposal should be amended to incorporate a five-year phase-in period, beginning in 2002 and ending in 2007.

Response: The State revised the rules submitted on December 22, 2000 and October 4, 2001 based on these comments. The State accepted the notion that phasing in compliance with these rules is critical to the success of the program for many reasons including availability of equipment needed to make reductions as well as the need to satisfy the SIP requirement that reductions are made as soon as practicable. The new schedule contained in section 101.353 will ensure that NO_X emission from stationary facilities will be reduced to a level necessary to reach attainment.

Comment: BCCA commented that a consecutive 12-month period would more accurately reflect activity levels and would reduce requests for case-by-case reviews. The TNRCC had proposed the use of an entire 3-year average (1997–1999) to determine baseline activity level. BCCA believes that a 12 month baseline activity period will dramatically reduce the number and complexity of petitions for case-by-case review.

Response: We recognize that the baseline period utilized to establish the cap should be representative of normal source operations. The State took the view that the 1997, 1998, and 1999 period is the most recent and should best represent the emissions of facilities currently in operation. The State did not revise the rule based upon this comment. The State's view is reasonable and we see no basis to disapprove based on the commenter's concerns.

Comment: Both BCCA and REI commented that there is no reasoned justification for the rate of NO_X emission reductions in one-third increments and this rate of reduction is not needed to meet rate-of-progress requirements.

Response: The State revised the rules submitted on December 22, 2000 and October 4, 2001 based on these comments. Phasing in compliance with these rules is critical to the success of the program. Availability of equipment needed to make reductions must be balanced with the SIP requirement that reductions are made as soon as practicable. We concluded that a less rapid reduction of NO_X from affected facilities influenced by equipment availability can be phased in between 2002 and 2007. The State revised the rule with a new schedule contained in section 101.353. We agree with the State that the new schedule will ensure that NO_X emission from stationary facilities will be reduced on the appropriate time frame to a level necessary to reach attainment.

Comment: Both REI and BCCA commented that allowances should be allocated for a stream of 30 years or more rather than allocated yearly to allow for more fluid trading and a defined period, greater than one year, of over-control or under-control for participating sites. This methodology would also simplify allocations.

Response: The State made no revisions to the rule based upon this comment. The State seemed to adopt the view that the allocation of allowances on an annual basis, with an annual compliance report by the State to EPA and the public, is necessary to record and track a successful cap and trade program. The provision for audits and necessary corrective action every three years can best be accomplished by the annual allocation of allowances. The State responded that allocation of allowances on a yearly basis enhances the ability to plan and anticipate effects on air quality and that it also provides an enforcement mechanism for facilities whose actual emissions exceed the allowances in their compliance account through the reduction of subsequent yearly allocations. As the State noted, nothing would prohibit facilities from entering private agreements for the sale of future allocations or rights to allocations. We see no basis to disapprove based on the commentor's concerns.

Comment: BCCA commented that the term ''source'' is used to denote an overall site over the ten-ton applicability trigger but is also used to denote a single emitting unit. BCCA and REI commented that sources not subject to emission specification for attainment demonstration (ESAD) rates under the SIP that can make cost effective reductions should have the option to participate in the cap and trade program and its allowances allocated in the same manner for current ESAD sources.

Response: The State adopted a rule revision on May 23, 2001 which clarified that the applicability of the cap and trade program is determined by the collective emissions at a site and that the ten-ton per year applicability requirement does not apply to individual facilities. The rule revision was effective on June 13, 2001. The State did not create a new definition of '' NO_X Cap Plant'' as requested by this comment. We agree with the State that facilities not subject to the cap and trade program may eventually be able to trade with MECT facilities under the current rule without compromising the attainment demonstration.

Comment: BCCA commented that the State should clarify that target allocation based on 1997–1999 activity will not change despite shutdowns, replacements or changes to equipment.

Response: The State revised the rules submitted on October 4, 2001 by adding section 101.353(h) which clarifies that allowances will not change despite subsequent reductions in activity levels assuming the allowances are based on historical activity levels. These subsequent reductions in activity levels could result from shutdowns, replacements, or changes to equipment. We believe that the clarification by the State in response to this comment maintains the integrity of the program.

Comment: BCCA commented that an opt-in mechanism should be incorporated for non-ESAD sources. An opt-in provision for sources not subject to ESAD rates under the SIP would provide an effective incentive to accomplish surplus reductions.

Response: The rule provides for surplus reductions accomplished by non-ESAD sources to be traded for allowances for each compliance period. Such trades would provide the non-ESAD source with the same economic incentive to obtain surplus emission reductions as if the source had the ability to elect to be in the program. Any such trades would require reductions beyond what was relied upon in the attainment demonstration and could contain DERCs or MDERCs after we act on the DERC and MDERC rules.

Comment: BCCA and REI commented that the rule allows sources newly authorized by permit application or permit by rule to receive allowances based on their permitted or actual activity levels. BCCA and REI support this concept but commented that newly modified sources should be treated identically.

Response: The State revised the rules submitted on December 22, 2000 based on this comment at section 101.353(a) to refer to new and modified facilities. By ''modified facilities'' the State referred to the modification itself. For example if an existing facility is modified to double its capacity in 1998, the emissions from the original facility will be allocated in the same way as facilities existing before 1997. The increase in emission allowable associated with the modification will be treated as a facility which did not exist before 1997. We agree with the State approach to the extent that the attainment demonstration modeling included the actual emissions for the facility, and that for modified facilities that have not begun normal operations, the emissions relied upon in the attainment demonstration are the allowable emissions.

Comment: BCCA commented that the allocation methodology should be simplified. The allocation methodology language in proposed Section 101.353 is overly complicated and confusing. The methodology is based on a complete re-allocation in each of the initial four years, and is structured to revisit allocations for new sources several times. As noted in an earlier comment, the methodology should allow all allocations for 2002 through 2032 to be issued in a single action before program commencement.

Response: The State made no revisions to the rule based upon this comment. The State appeared to accept the view that the allocation of allowances on an annual basis, with an annual compliance report by the State to EPA and the public, is necessary to record and track a successful cap and trade program. The provision for audits and necessary corrective action every three years can best be accomplished by the annual allocation of allowances. The ability to plan and anticipate effects on air quality and to provide an enforcement mechanism for facilities whose actual emissions exceed the allowances in their compliance account through the reduction of subsequent yearly allocations are necessary elements of the program. We see no basis to disapprove based on the commentor's concerns. The allocation methodology is sufficient to achieve the program objectives and we are concerned that any further simplification could lead to a compromise of the program objectives.

Comment: BCCA and REI commented that emission reduction credits should be convertible to allowances and the rule lacks reasoned justification why this is not allowed. By definition all recognized emission credits are real, quantifiable, and surplus to the SIP.

Response: The State revised the rule submitted on October 4, 2001 by adding a new section 101.356(h) which provides that ERCs may be converted into a yearly allocation of allowances if the ERCs were generated prior to December 1, 2000 and were evaluated and included in the HGA attainment demonstration. We proposed to approve and are in this action approving this revision to the rule. We agree that these ERCs, if converted into a stream of allowances would not increase emissions beyond those levels modeled that demonstrated compliance with the NAAQS for ozone.

Comment: REI and BCCA commented that the existing discrete emission reduction credit trading rules require a 10% environmental contribution and a 5% compliance margin. This requirement has been extended to the use of DERCs in lieu of allowances. They stated that there is not a reasoned justification for this requirement and that it is not necessary to meet a region wide cap.

Response: The State revised section 101.356 of the rule submitted on October 4, 2001 based on this comment. Although EPA has not yet acted on

those rules, we note that the requirement of retiring an additional 10% of DERCs and MDERCs for an environmental contribution and an additional 5% for a compliance margin is not required when using DERCs and MDERCs in lieu of allowances under the HGA cap and trade program. In any event, in today's action, we are not taking action on the DERC/MDERC rules.

Comment: REI and BCCA objected to the daily and monthly NO_X limits for utility sources in addition to the annual MECT cap. These limits render the cap and trade flexibility meaningless.

Response: The 30-day average system cap emission limit functions as a flexible but controlling limit which ensures that a specified emission level is achieved during a typical peak ozone season day. The State's actions are consistent with the view that the much less stringent daily maximum limit ensures that the 30-day average is not manipulated to allow higher NO_X emissions on a single day when ozone may be a problem. We see no basis to disapprove based on the commentor's concerns.

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

Response: The nonattainment new source review and prevention of significant deterioration permitting are requirements of the Act. We agree with the State that any facility having major increases of NO_X should undergo a nonattainment/prevention of significant deterioration review to ensure it is meeting BACT or LAER as applicable, regardless of whether the facility operates under the cap.

Comment: REI and BCCA believe that one month is an inadequate period to calculate a control period's emissions and compare those emissions to cap and trade activity for the control period to balance the account. They recommend April 1 of the succeeding year as the deadline for reconciling accounts.

Response: The facilities have one month for trading allowances after December 31 of the compliance year. Allowance trades must be approved by the State within thirty days. Section 359 of the rule requires a facility to submit the allowance compliance report by March 31. This reporting parallels the State's emission inventory reporting guidelines and we agree with the State that the rule need not be revised. We see no basis to disapprove based on the commentor's concerns.

Comment: REI and BCCA commented that the requirement to trade allowances in whole tons lacks reasoned justification. The number of allowances is rounded up or down whichever provides the holder or buyer less credit. Some credits have been traded with a value of $80,000 per ton and rounding can result in the taking of considerable value. They recommend that trading occur in one-tenth tons. This is consistent with ERC trading. During the years of target allowances, rounding down can result in zero allowances.

Response: The State revised section 101.350(1) by the submission of October 4, 2001 to divide allowances into tenths of a ton. The rounding methodology was not changed from the normal mathematical rounding procedures. However, by allocating, transferring, and using allowances in tenths of tons, the impact of rounding will be reduced. We agree with the State that the incorporation of rounding allowances to a tenth of a ton will provide a more realistic and workable program.

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

Response: The State revised the rules submitted on December 22, 2000 in response to this comment to take into account the practicalities identified by the comments. Both PEMS and CEMS vendors indicated that the number of monitors required in one year would strain their abilities to provide the equipment. The owners identified clear benefits of installing the monitors in conjunction with the control equipment. We agree with the State that since the rules have been revised to require that the monitors will be phased over a four-year period, at the earlier of installing emission controls or December 31, 2004, this phase-in will achieve the end result benefits of specified emissions reduction by 2005. Because the first reduction period has been extended to 2004, the greater uncertainty about NO_X emissions in the first two years of the program (compared to monitors in place by 2002) will be of less consequence. Phasing in CEMS/PEMS with the emission control equipment is a more rational and cost effective approach and remains consistent with attainment needs.

Comment: REI and BCCA commented that the rule should contain a provision allowing volatile organic compound reductions in the place of NO_X allowances where the VOC reductions are demonstrated to reduce ozone an equal amount.

Response: The State modified section 101.356 of the rule submitted on December 22, 2001 based on the comment. EPA is not taking action on the DERC or MDERC rules. Generally, however, EPA agrees that if a demonstration has been made and approved by the executive director and the EPA to show that the use of VOC DERCs or MDERCs is equivalent to the use of NO_X allowances in reducing ozone then we support the State allowing VOC use in place of a NO_X reduction.

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

Response: The State's actions are consistent with the view that the establishment of a private fund for pollution control projects is outside the scope of the adopted rules and will be left to the discretion of affected industries. This comment is not relevant for EPA's action on this SIP submittal.

VI. Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104–4). For the same reason, this rule also does not

significantly or uniquely affect the communities of tribal governments, as specified by Executive Order 13084 (63 FR 27655, May 10, 1998). This rule will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999), because it merely approves a state rule implementing a federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. The rule does not involve special consideration of environmental justice related issues as required by Executive Order 12898 (59 FR 7629, February 16, 1994). As required by section 3 of Executive Order 12988 (61 FR 4729, February 7, 1996), in issuing this rule, EPA has taken the necessary steps to eliminate drafting errors and ambiguity, minimize potential litigation, and provide a clear legal standard for affected conduct. The EPA has complied with Executive Order 12630 (53 FR 8859, March 15, 1988) by examining the takings implications of the rule in accordance with the ''Attorney General's Supplemental Guidelines for the Evaluation of Risk and Avoidance of Unanticipated Takings.'' This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Hydrocarbons, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements.

Dated: October 15, 2001.

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270 the table in paragraph (c) is amended under Chapter 101 by:

a. Revising the heading immediately above the entry for section 101.1 to read ''Chapter 101—General Air Quality Rules'' followed on a separate line by the heading ''Subchapter A—General Rules.''

b. Revising the entry for section 101.1.

c. At the end of Chapter 101 following the entry for ''Section 101. Rule 19'' by adding new heading ''Subchapter H—Emissions Banking and Trading'' followed on a separate line by the heading ''Division 3—Mass Emissions Cap and Trade Program'' followed by individual entries for Sections 101.350, 101.351, 101.352, 101.353, 101.354, 101.356, 101.358, 101.359, 101.360, and 101.363.

The revisions and additions read as follows:

§ 52.2270 Identification of plan.

* * * * *

(c) * * *

EPA APPROVED REGULATIONS IN THE TEXAS SIP

State citation	Title/Subject	State approval/submittal date	EPA approval date	Explanation
Chapter 101—General Air Quality Rules,				
Subchapter A—General Rules				
Section 101.1	Definitions	09/26/2001	11/14/01 [Insert [Federal Register citation]	
*	* * * * * *			
Subchapter H—Emissions Banking and Trading				
Division 3—Mass Emissions Cap and Trade Program				
Section 101.350	Definitions	09/26/2001	11/14/2001 [Insert Federal Register citation.]	
Section 101.351	Applicability	05/23/2001	11/14/2001 [Insert Federal Register citation.]	
Section 101.352	General Provisions	09/26/2001	11/14/2001	

EPA APPROVED REGULATIONS IN THE TEXAS SIP—Continued

State citation	Title/Subject	State approval/submittal date	EPA approval date	Explanation
Section 101.353	Allocation of allowances	09/26/2001	11/14/2001 [Insert Federal Register citation.]	Subsections 101.353(a)(3)(B) 101.353(a)(3)(D) NOT IN SIP.
Section 101.354	Allowance deductions	09/26/2001	11/14/2001 [Insert Federal Register citation.]	
Section 101.356	Allowance Banking and Trading.	09/26/2001	11/14/2001 [Insert Federal Register citation.]	
Section 101.358	Emissions Monitoring and Compliance Demonstration.	12/09/2000	11/14/2001 [Insert Federal Register citation.]	
Section 101.359	Reporting	12/09/2000	11/14/2001 [Insert Federal Register citation.]	
Section 101.360	Level of activity certification	09/26/2001	11/14/2001 [Insert Federal Register citation.]	
Section 101.363	Program audits and reports	09/26/2001	11/04/2001 [Insert Federal Register citation.]	
*	*	*	*	* * *

[FR Doc. 01–27586 Filed 11–13–01; 8:45 am]
BILLING CODE 6560–50–P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[TX–134–3–7528; FRL–7092–9]

Approval and Promulgation of Air Quality State Implementation Plans; Texas: Motor Vehicle Inspection and Maintenance Program

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final Rule.

SUMMARY: The EPA is approving State Implementation Plan (SIP) revisions submitted by the State of Texas on establishing a Vehicle Inspection and Maintenance (I/M) Program for the Dallas/Fort Worth (DFW), Houston-Galveston Area (HGA), and El Paso (ELP) nonattainment areas. EPA proposed approval of the DFW I/M SIP revision on January 22, 2001, and the HGA I/M SIP revision on June 11, 2001. The revisions replace the two-speed idle test in Dallas, Tarrant, and Harris Counties with ASM–2, expand the upgraded I/M program to cover the entire DFW nonattainment area plus five additional counties, and the eight county HGA nonattainment area. The revisions also implement On-Board Diagnostic (OBD) testing in the DFW and HGA testing areas, and El Paso County.

The I/M SIP revisions are part of the DFW and HGA Attainment Demonstrations.

DATES: This final rule is effective on December 14, 2001.

ADDRESSES: Copies of the documents relevant to this action are available for public inspection during normal business hours at the following locations. Persons interested in examining these documents should make an appointment with the appropriate office at least 24 hours before the visiting day. Environmental Protection Agency, Region 6, Air Planning Section (6PD-L), 1445 Ross Avenue, Suite 700, Dallas, Texas 75202–2733. Texas Natural Resource Conservation Commission, 12100 Park 35 Circle, Austin, Texas 78753.

FOR FURTHER INFORMATION CONTACT: Ms. Sandra G. Rennie, Air Planning Section (6PD-L), EPA Region 6, 1445 Ross Avenue, Dallas, Texas 75202–2733, telephone (214) 665–7367.

SUPPLEMENTARY INFORMATION: Throughout this document ''we,'' ''us,'' and ''our'' means EPA.

What action is EPA taking today?

We are granting final approval of Texas' Motorist Choice (TMC) vehicleI/M program. The program applies to the HGA and ELP nonattainment areas, and the DFW nonattainment area plus five adjoining attainment counties. EPA proposed approval of the DFW I/M SIP revision on January 22, 2001 (66 FR 6521), and the HGA I/M SIP revision on June 11, 2001 (66 FR 31199).

What are the Clean Air Act Requirements?

EPA approval of this SIP revision is governed by sections 110 and 182 of the Act, and section 348 of the National Highway Systems Designation Act (NHSDA) of 1995.

Section 182 of the Act provides for plan submissions and plan requirements. Section 182 (b)(4) requires vehicle I/M programs in nonattainment areas classified as moderate or above. Section 182(c)(3) requires enhanced vehicle I/M programs in areas classified serious or above.

Under the NHSDA, EPA cannot apply an automatic 50 percent credit discount to I/M SIPs under section 182, 184, or 187 of the Act because the I/M program in the SIP revision is decentralized or a test-and-repair program. (See EPA's I/M program requirements final rule published November 5, 1992, at 57 FR 52950.) The automatic discount has been effectively replaced with a presumptive equivalency criterion, which places the emission reductions credits for decentralized networks on par with credit assumptions for centralized networks, based upon a state's good faith estimate of reductions as provided by the NHSDA.

The NHSDA directs EPA to grant interim approval for a period of 18 months to approve I/M submittals. The NHSDA also directs EPA and the states to review the interim program results at the end of that 18-month period, and to make a determination as to the effectiveness of the interim program. Following this demonstration, EPA will adjust any credit claims made by the state in its good faith effort, to reflect the emission reductions actually measured by the state during the program evaluation periods. Per the NHSDA requirements, this conditional interim rulemaking expired February 11, 1999, 18 months after the interim final rule became effective on August 11, 1997.

Why is EPA taking this action?

We are taking this action because the State submitted an approvable enhanced vehicle I/M program SIP for each nonattainment area requiring a program. The Beaumont-Port Arthur nonattainment area is not required to have a program because the 1995 I/M flexibility amendments (60 FR 48029, September 18, 1995) set a population requirement of 200,000 or more for a 1990 Census-defined urbanized area to implement a program.

Previous actions taken toward full approval of the TMC I/M program include: a proposed conditional interim approval proposed on October 3, 1996 (61 FR 51651); an interim final conditional approval published on July 11, 1997 (62 FR 37138); and a direct final action on April 23, 1999 (64 FR 19910) to remove the conditions.

What does the State's Texas Motorist Choice I/M program include?

The State's TMC program requires that gasoline powered light-duty vehicles, and light and heavy-duty trucks between two and twenty-four years old, that are registered or required to be registered in the I/M program area, including fleets, are subject to annual inspection and testing.

Vehicles in Dallas, Tarrant, Collin, Denton, Ellis, Johnson, Kaufman, Parker, and Rockwall counties in the DFW area, and Harris, Galveston, Brazoria, Fort Bend, Montgomery, Liberty, Waller, and Chambers in the HGA nonattainment area that are 1995 and older will be subject to an ASM–2 tailpipe test. Vehicles in those counties that are 1996 and newer will receive the On-Board Diagnostic (OBD) test in place of the tailpipe test.

Vehicles in El Paso county will be subject to the two-speed idle tailpipe test if they are 1995 or older, or an OBD test if they are 1996 or newer.

All vehicles in the area programs are currently subject to a gas cap pressure check and an antitampering inspection.

The schedule to begin this new testing is as follows:

May 1, 2002. On-Board Diagnostic (OBD) testing will be added to the low-enhanced, two-speed idle test currently being implemented in Harris, Dallas, Tarrant, and El Paso Counties. The shortfall in vehicle coverage for the DFW and HGA nonattainment areas will continue to be made up by remote sensing within Dallas, Tarrant, and Harris Counties to identify gross polluting vehicles commuting in from the surrounding nonattainment counties only until tailpipe testing begins in those counties.

May 1, 2002. ASM–2 and OBD vehicle testing in Dallas, Tarrant, Collin, Denton, and Harris Counties.

May 1, 2003. The State will expand the I/M program to include the DFW attainment counties of Ellis, Johnson, Kaufman, Parker, Rockwall, and the HGA nonattainment counties of Galveston, Brazoria, Fort Bend, and Montgomery. May 1, 2004. The State will expand the I/M program further to include the HGA nonattainment counties of Chambers, Liberty, and Waller.

The vehicle coverage shortfall in the HGA area will continue to be covered by the remote sensing program until all counties become subject to I/M testing. An optional opt-out alternative for Chambers, Liberty, and Waller Counties allows any or all of these counties to opt-out of I/M and substitute an alternative air control strategy. This provision is subject to an expedited timeline and the State's submission of SIP revisions substituting equivalent reductions of VOC and NO_X, based on modeling. Remote sensing would then be used to monitor vehicles from those counties which are not part of the urbanized area.

What did the State submit?

The State submitted SIP revisions for 30 Texas Administrative Code (TAC) 114 on March 14, 1996, April 25, 2000, and December 20, 2000. The submittals contained documentation to support an approval under section 182 of the Act and 40 CFR part 51, Subpart S-Inspection/Maintenance Program Requirements. For further discussion of the submittals, see the proposed approvals, October 3, 1996 (61 FR 51651), January 22, 2001 (66 FR 6521), June 11, 2001 (66 FR 31199) and accompanying Technical Support Documents.

We are not approving as part of the Texas I/M SIP the State's 30 TAC 114.50(b)(2). This rule places an additional reporting burden upon commanders at Federal facilities regarding affected Federal vehicles, that is not imposed upon any other affected non-federal vehicle. The additional reporting requirement is not an essential element for an approvable I/M program, since affected Federal vehicles are also subject to the same reporting requirements as other affected non-federal vehicles. See 30 TAC 114.50(b)(1) and (7). These rules apply to vehicles operated on Federal facilities as well as to non-Federal vehicles. They in turn require compliance with the Department of Public Safety (DPS) annual vehicle inspection requirements. Section 02.25.00 (Details of Inspection) of the DPS manual for vehicle emissions describes how the inspector must enter required data into the exhaust gas analyzer as prompted by the analyzer. Upon completion of the inspection, the report must be signed by the inspector and forwarded to Vehicle Inspection Records. Therefore, the additional reporting requirement for Federal vehicles is not essential for reporting and compliance purposes. The same purposes are served by the other reporting requirement that applies to all affected vehicles, whether Federal or non-federal.

The March 1996 I/M rules were codified differently than the April and December 2000 rules. The State

submitted a Recodification SIP that we approved on July 1, 1998 (63 FR 35839). That approval acted upon the rule numbering alone and did not approve any new or revised rules into the SIP at that time. The rule numbers that appear in this action are the current recodified rule numbers.

On February 8, 1999, the State submitted a program effectiveness demonstration as required by the NHSDA. We reviewed Texas' 18-month program effectiveness demonstration as required by the I/M provisions of the NHSDA. This Act allowed States to claim full (100%) credit for test and repair I/M networks that previously had been allowed to claim only 50% effectiveness credit. We determined that the demonstration is an acceptable approach to meeting the requirement of the NHSDA, and that the State's emission reduction credit estimate was valid. Therefore, we are approving Texas' program effectiveness demonstration.

What comments did EPA receive in response to the proposed rules?

Comments on the October 3, 1996, proposal were addressed in the Interim Final Rule (62 FR 37138, July 11, 1997).

No comments were received on the January 22, 2001, proposal.

EPA received comments on the June 11, 2001, Notice of Proposed Rulemaking (NPR) from citizens of Brazoria, Fort Bend, and Montgomery Counties under a cover letter from the Brazoria County Criminal District Attorney, and the Department of the Air Force on behalf of the Department of Defense (DoD).

Federal Facility Requirements

Comment: The DoD commented that it is illegal for Federal Facility commanders to report to the State, as required by 30 TAC 114.50(b)(2), and the I/M revision should be disapproved by our agency. This is based on the Department of Justice's opinion which concluded that the authority for States to regulate vehicle use activity in 40 CFR 51.356(a)(4) exceeded the waiver of sovereign immunity set forth in 42 U.S.C. 7418(c) and (d).

Response: Texas revised its regulations to include EPA's Federal facilities' reporting requirement found in 40 CFR 51.356(a)(4). This particular Federal regulation requires an approvable State I/M program to have Federal facilities operating vehicles in the I/M program areas(s) report certification of compliance to the State. This requirement appears to be different than those for other non-Federal groups of affected vehicles. EPA is not requiring States to implement or adopt this reporting requirement dealing with Federal installations within I/M areas at this time. The Department of Justice has recommended to EPA that this particular Federal regulation be revised since it appears to grant States authority to regulate Federal installations in circumstances where the Federal government has not waived sovereign immunity. It would not be appropriate to require compliance with this regulation or to require it for an approvable I/M program, if it is not constitutionally authorized. EPA will be addressing this provision in the future and will review State I/M SIPs with respect to this issue whenever a new rule is final. Therefore, for these reasons, EPA is not approving or disapproving the specific requirements of 30 TAC 114.50(b)(2) which apply to Federal facilities at this time as part of the Texas I/M SIP.

Remote Sensing

Comment: Citizens of Brazoria, Fort Bend, and Montgomery counties questioned the scientific validity of remote sensing.

Response: Remote sensing is a non-intrusive tool used to monitor a portion of the vehicle fleet and identify excessive polluters as a complement to the traditional mobile source emission control program. It is designed to detect potentially high-emitting vehicles. We recognize that remote sensing is not currently as accurate as the tailpipe test in characterizing vehicle emissions, and therefore the remote sensing program requires identified vehicles to submit to a confirmatory tailpipe test for validation of remote sensing results.

Comment: Citizens of Brazoria, Fort Bend, and Montgomery counties asked why commuters from Harris county to surrounding counties are not subject to remote sensing?

Response: The remote sensing program serves two functions in the TMC I/M program. One function is to identify commuters coming into Harris County from adjacent nonattainment counties. The other function is to characterize the emissions of the fleet of on-road vehicles as a whole in the entire nonattainment area, as required by Federal rule. To accomplish this objective, high emitting vehicles are also identified regardless of the nonattainment county in which they are registered. This includes Harris County.

Comment: Citizens of Brazoria, Fort Bend, and Montgomery counties also stated that remote testing is unconstitutional as it involves surveillance and documentation of the citizenry when no crime has been committed and for innocent travel.

Response: The remote sensing program is operated on public highways and roadways on which there is no expectation of privacy. The remote sensing program tracks and documents exhaust plumes from high emitting vehicles, not the drivers of those vehicles. Vehicles are identified through license plates which are put on vehicles for law enforcement purposes, of which remote sensing is an example. Vehicle drivers are never tracked or identified.

Being detected as a high-emitter by remote sensing equipment is not a crime. If a vehicle is detected as a high emitter, the operator is required to bring the vehicle in for an emission test. If the operator chooses to repair the vehicle before the test and the vehicle passes, there are no further conditions to be met. If the vehicle fails the test, the operator must repair the vehicle or qualify for a waiver within a certain period of time. If an operator fails to bring the noncompliant vehicle in for a test or does not follow up after a failed test, only then is the operator subject to penalty under the program.

Vehicle Coverage

Comment: Citizens of Brazoria, Fort Bend, and Montgomery counties questioned why newer vehicles that come from the manufacturer equipped with emission control devices are required to submit to emission control testing, when a tampering check would be sufficient.

Response: The antitampering inspection visually identifies that certain emission control equipment is installed on the vehicle and has not been disconnected. It does not guarantee that this equipment is functioning or functioning properly. There is a small percent of newer vehicles on which emission control equipment fails. Because some newer vehicles do fail, and because vehicles subject to testing are more likely to be better maintained, the amount of emission reduction benefits that can be obtained from inspections is reduced as more model years are exempt from the program. In addition, because newer vehicles are still under manufacturer's warranty, identifying emissions-related problems is viewed as consumer protection and may potentially save the vehicle's owner future repair costs.

Repair Assistance

Comment: Citizens of Brazoria, Fort Bend, and Montgomery counties were concerned about repair assistance for low-income owners of non-compliant vehicles. They stated that when a

vehicle owner is told he cannot drive his non-compliant vehicle, that is an unconstitutional taking.

Response: In order to assist the public, the TMC I/M program includes two waiver options: the minimum expenditure waiver and the individual vehicle waiver. The minimum expenditure waiver is available to those who have made repairs to their vehicle within the established criteria an met the dollar limits established by Federal I/M rule. The individual vehicle waiver is for those who cannot meet emissions standards despite every reasonable effort by the motorist. In addition to these two waivers, the TMC I/M program offers the low-income time extension that allows one test cycle (12 months) for the owner to bring the vehicle into compliance.

Furthermore, the Texas Legislature, in the 2001 session, passed a law that provides the opportunity for participating I/M program counties to offer repair assistance to low-income vehicle owners. Also, when it is not cost-effective to repair a noncompliant vehicle, the program offers a vehicle replacement/scrappage program that will assist low-income vehicle owners to obtain cleaner vehicles. Participation in the vehicle replacement/scrappage program is entirely voluntary, and no vehicle owner will be forced to participate.

EPA's Rulemaking Action

We are granting final full approval of Texas I/M program referred to as the Texas Motorist Choice program pursuant to sections 110 and 182 of the Act, and section 348 of the NHSDA.

Administrative Requirements

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is not a ''significant regulatory action'' and therefore is not subject to review by the Office of Management and Budget. For this reason, this action is also not subject to Executive Order 13211, ''Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use'' (66 FR 28355, May 22, 2001). This action merely approves state law as meeting Federal requirements and imposes no additional requirements beyond those imposed by state law. Accordingly, the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*). Because this rule approves pre-existing requirements under state law and does not impose any additional enforceable duty beyond that required by state law, it does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4).

This rule also does not have tribal implications because it will not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes, as specified by Executive Order 13175 (65 FR 67249, November 9, 2000). This action also does not have Federalism implications because it does not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132 (64 FR 43255, August 10, 1999). This action merely approves a state rule implementing a Federal standard, and does not alter the relationship or the distribution of power and responsibilities established in the Clean Air Act. This rule also is not subject to Executive Order 13045 ''Protection of Children from Environmental Health Risks and Safety Risks'' (62 FR 19885, April 23, 1997), because it is not economically significant.

In reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the Clean Air Act. In this context, in the absence of a prior existing requirement for the State to use voluntary consensus standards (VCS), EPA has no authority to disapprove a SIP submission for failure to use VCS. It would thus be inconsistent with applicable law for EPA, when it reviews a SIP submission, to use VCS in place of a SIP submission that otherwise satisfies the provisions of the Clean Air Act. Thus, the requirements of section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) do not apply. This rule does not impose an information collection burden under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*).

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a ''major rule'' as defined by 5 U.S.C. section 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by January 14, 2002. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements.

(See section 307(b)(2).)

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Carbon monoxide, Hydrocarbons, Incorporation by references, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: October 15, 2001.

Gregg A. Cooke,

Regional Administrator, Region 6.

Part 52, chapter I, title 40 of the Code of Federal Regulations is amended as follows:

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 *et seq.*

Subpart SS—Texas

2. In § 52.2270 the table in paragraph (c) is amended under Chapter 114 (Reg 4).

a. Under Subchapter A, by adding a new entry for Section 114.2;

b. After Subchapter A, by adding a new Subchapter B entitled ''Subchapter B—Vehicle Inspection and Maintenance'' and individual entries for Sections 114.50, 114.51, 114.52, and 114.53.

The additions read as follows:

§ 52.2270 Identification of plan.

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(c) * * *

EPA APPROVED REGULATIONS IN THE TEXAS SIP

State citation	Title/subject	State submittal/approval date	EPA approval date	Explanation
* * * * * * *				
Chapter 114 (Reg 4)—Control of Air Pollution from Motor Vehicles				
* * * * * * *				
Subchapter A: Definitions				
* * * * * * *				
Section 114.2	Inspection and Maintenance Definitions.	04/19/2000	11/14/2001 [Insert Federal Register citation.]	
* * * * * * *				
Subchapter B: Vehicle Inspection and Maintenance				
Section 114.50	Vehicle Emission Inspection Requirements.	12/06/2000	11/14/2001 [Insert Federal Register citation.]	Subsection 114.50(b)(2) is NOT part of the approved SIP.
Section 114.51	Equipment Evaluation Procedures for Vehicle Exhaust Gas Analyzers.	12/06/2000	11/14/2001 [Insert Federal Register citation.]	
Section 114.52	Waivers and Extensions for Inspection Requirements..	12/06/2000	11/14/2001 [Insert Federal Register citation.]	
Section 114.53	Inspection and Maintenance Fees	12/06/2000	11/14/2001 [Insert Federal Register citation.]	
* * * * * * *				

[FR Doc. 01–27587 Filed 11–13–01; 8:45 am]
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