

REVISIONS TO THE STATE IMPLEMENTATION PLAN
NITROGEN OXIDES REASONABLY AVAILABLE CONTROL TECHNOLOGY

TEXAS AIR CONTROL BOARD
12124 PARK 35 CIRCLE
AUSTIN, TEXAS

AUGUST 13, 1992

Committal State Implementation Plan for
Nitrogen Oxides Reasonably Available Control Technology

General

Section 182 of the Federal Clean Air Act (FCAA) Amendments of November 15, 1990 requires states to apply reasonably available control technology (RACT) to reduce emissions of nitrogen oxides (NO_x) from major stationary sources in ozone nonattainment areas. The FCAA Amendments require the states to submit State Implementation Plan (SIP) revisions in this regard by November 15, 1992. However, Section 182(f) also outlines conditions under which NO_x controls would not be required. This section states that control plan provisions for major stationary sources of volatile organic compounds (VOC) also apply for NO_x, except in specific cases where NO_x reductions would not contribute to attainment of the ozone standard or would not produce net ozone air quality benefits. The contribution of NO_x to ozone attainment will be determined by photochemical grid modeling and other evidence. As of August 15, 1992, the State of Texas has not completed the photochemical grid modeling for the nonattainment areas.

The time required to set up, run, and perfect these sophisticated photochemical grid models does not allow the luxury of having all

the answers before beginning to undertake emissions reductions. The most cost-effective and flexible control measures should be initiated whenever there is a reasonable expectation that improvements in ozone levels will result. The ingredients of NO_x RACT policy must include such technical issues as appropriate emission limits, the time necessary to design and install the emissions reduction technologies, review of modeling results to fine-tune the strategy on the Gulf Coast, and confirmation of the strategy in Dallas/Fort Worth and El Paso. Policy must also consider the FCAA Amendment deadlines for attaining the ozone standards (Dallas/Fort Worth, 1996; Beaumont/Port Arthur and El Paso, 1999; and Houston, 2007). This stepwise schedule allows the more polluted nonattainment areas more time to demonstrate attainment. However, since the more polluted areas also have more sources and emissions, the time to achieve compliance is also longer, even with early action by affected sources.

On the other hand, the relatively low VOC/NO_x ratios obtained from monitoring data in El Paso and Dallas/Fort Worth support a proposal to weigh modeling results heavily in developing NO_x RACT policy for these two areas. Results of the first rounds of urban airshed modeling, tentatively scheduled to be completed for El Paso and Dallas/Fort Worth by the third quarter of 1993, should assist the staff in evaluating what, if any, role NO_x RACT should play in developing an ozone control strategy for these

areas. For this reason, the TACB staff believes that the adoption of a NO_x control-based ozone control strategy in the El Paso and Dallas/Fort Worth areas is not technically justified at the present time. The current draft of TACB Regulation VII does not include the El Paso and Dallas/Fort Worth ozone non-attainment areas in the NO_x RACT control provisions. The committal SIP allows a delayed schedule for the El Paso and Dallas/Fort Worth areas to allow the consideration of modeling results.

The current draft of Regulation VII pertaining to the Houston/Galveston and Beaumont/Port Arthur ozone nonattainment areas contains an "escape clause" that would allow rule rescission upon a finding that net air quality benefits are greater in the absence of NO_x reductions for any ozone nonattainment area. This "escape clause" is provided for in the FCAA Amendments in Section 182(f) and is contingent upon U.S. Environmental Protection Agency (EPA) approval.

Resources

Modeling will enable the State of Texas to evaluate the effectiveness of NO_x reductions as ozone control strategies in each nonattainment area. The staff believes that there are adequate resources to complete the modeling effort for the 1994 SIP.

RACT Development Progress

In June of 1992, the Texas Air Control Board (TACB) circulated draft "strawman" NO_x RACT rules and held public meetings in Houston. A copy of these rules was also sent to EPA for comment. The TACB Regulation Development Committee, in its July 22, 1992 meeting, suggested that the staff continue to resolve the issues involving the technical aspects of the draft NO_x RACT rules. The TACB Regulation Development Committee voted to submit a committal SIP to EPA by November 15, 1992 and continue work on the NO_x RACT rules in the interim.

Commitment

Under Section 110(k)(4) of the FCAA Amendments, EPA may approve a SIP revision based on a commitment by the State of Texas to adopt specific enforceable measures. EPA's approval of this commitment would require the State of Texas to adopt rules within one year of EPA approval of the committal SIP. The lack of available NO_x RACT guidance has also affected the acceptability of a committal SIP.

The TACB commits to the development and implementation of NO_x RACT in each ozone nonattainment area. As a part of the committal SIP, the TACB is submitting copies of the EPA grant

commitment letters showing the schedule for photochemical grid modeling in each nonattainment area (see Attachment 1).

The TACB also commits to the submission of periodic progress reports indicating the progress of modeling and the NO_x RACT rules development. These reports will demonstrate the state's continuing commitment to the program. The first progress report is scheduled for February 15, 1993 with quarterly reports thereafter, until all of the commitments of the NO_x RACT committal SIP are met by the state.

Schedules

Houston/Galveston

1. Modeling Activities - Refer to Attachment 2 entitled "Urban Airshed Modeling Milestones for Ozone Nonattainment Areas"
2. Submit draft NO_x RACT rules to EPA for review - 10/23/92
3. Public Notice of NO_x RACT rules in Texas Register - 11/24/92
Public Hearings of NO_x RACT rules in Houston - 12/14/92
4. Final Submittal to EPA - 06/01/93

Beaumont/Port Arthur

1. Modeling Activities - Refer to Attachment 2 entitled "Urban Airshed Modeling Milestones for Ozone Nonattainment Areas"
2. Submit draft NO_x RACT rules to EPA for review - 10/23/92
3. Public Notice of NO_x RACT rules in Texas Register - 11/24/92
Public Hearings of NO_x RACT rules in Beaumont - 12/15/92
4. Final Submittal to EPA - 06/01/93

El Paso

1. Modeling Activities - Refer to Attachment 2 entitled "Urban Airshed Modeling Milestones for Ozone Nonattainment Areas"
2. Submit draft NO_x RACT rules to EPA for review - 08/15/93
3. Public Notice of NO_x RACT rules in Texas Register - 09/15/93
Public Hearings of NO_x RACT rules in El Paso - 10/15/93
4. Final Submittal to EPA - 11/15/93

Dallas/Fort Worth

1. Modeling Activities - Refer to Attachment 2 entitled "Urban Airshed Modeling Milestones for Ozone Nonattainment Areas"
2. Submit draft NO_x RACT rules to EPA for review - 08/15/93
3. Public Notice of NO_x RACT rules in Texas Register - 09/15/93
Public Hearings of NO_x RACT rules in Dallas - 10/15/93
4. Final Submittal to EPA - 11/15/93

TEXAS AIR CONTROL BOARD

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ATTACHMENT 1

July 2, 1992

Mr. Robert Lawrence
105 Project Officer
U.S. Environmental Protection
Agency, Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Dear Mr. Lawrence:

The enclosed information is submitted for the specific
FY-92 Clean Air Act Amendments grant output objectives and
milestones listed below.

OUTPUT

OBJECTIVE: URBAN AIRSHED MODELING - (CAAA-V-115)

Milestone 4: State will submit to EPA an updated,
TASK 1 detailed schedule for UAM modeling for
Report Due SIP purposes in Texas.
4/1/92

OUTPUT

OBJECTIVE: OZONE PROGRAM IMPLEMENTATION - (CAAA-I-103)

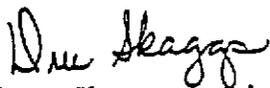
Milestone 1: State will submit to EPA a schedule for
Report Due the implementation of the CAAA require-
6/30/92 ments in ozone nonattainment areas. The
schedule will outline the date of the SIP
submission as well as the milestones for
activities prior to SIP submission. The
milestones should at a minimum address
emission inventory development (base year
and adjusted base line) and modeling
activities.

July 2, 1992

Comments: TACB requested by letter of June 3, 1992 that the schedules required in the above two milestones be submitted to EPA in a single report by June 30, 1992. This proposal was discussed with Mr. Guy Donaldson during his visit to the TACB on May 18, 1992. The above-mentioned schedules are enclosed.

If you have any questions, please contact Mr. Cyril Durrenberger of the Air Quality Planning Program at (512) 908-1482.

Sincerely,



Dru Skaggs, Director
Intergovernmental Funding

Enclosures

cc: Mr. Tom Diggs, Chief, State Implementation Plan
Activities, U.S. Environmental Protection Agency,
Region 6, Dallas
Mr. John Benham, State Implementation Plan Activities,
U.S. Environmental Protection Agency, Region 6,
Dallas
Mr. Jim Yarbrough, State Implementation Plan
Activities, U.S. Environmental Protection Agency,
Region 6, Dallas
Mr. Guy Donaldson, State Implementation Plan
Activities, U.S. Environmental Protection Agency,
Region 6, Dallas

ATTACHMENT 2

URBAN AIRSHED MODELING MILESTONES
FOR OZONE NONATTAINMENT AREAS

MILESTONE & COMPLETION DATES	<u>NONATTAINMENT AREA</u>			
	Dallas/ Fort Worth	El Paso	Beaumont/ Port Arthur	Houston/ Galveston
Draft Modeling Protocol to Photochemical Modeling Workgroups	05/13/92*	06/15/92*	09/01/92	08/26/92
Final Draft Modeling Protocol(s)				
projected	06/30/92	06/30/92	09/30/92	10/31/92
actual	<u>10/31/92</u>	<u> </u>	<u> </u>	<u> </u>
Draft Modeling Runs				
projected	08/31/93	09/30/93	01/31/94	01/31/94
actual	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Submittal of Final Modeling to EPA				
projected	11/15/94	11/15/94	11/15/94	11/15/94
actual	<u> </u>	<u> </u>	<u> </u>	<u> </u>

* EPA attended these workgroup meetings