



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202-2733

APR 03 1990

MEMORANDUM

SUBJECT: Request for Review of Air Modeling Plan

FROM: Gerald Fontenot  
Chief  
Air Programs Branch (6T-A)  
Original signed by: Gerald Fontenot

TO: Joseph Tikvart  
Chief  
Source Receptor Analysis Branch (MD-14)

I have attached for your review and comment a general air modeling plan for the El Paso, Texas - Ciudad Juarez, Chihuahua, Mexico airshed. The purposes of this proposed modeling are to (1) acceptably simulate the physical processes responsible for current ambient concentrations of O<sub>3</sub>, CO, and PM-10 in the airshed and (2) given success in (1), evaluate the effects of various, potential control strategies on the air quality levels in the airshed.

By way of background, El Paso County, Texas is a Group I area for PM-10 and is required to develop a SIP revision to reduce both 24-hour and annual concentrations below the NAAQS. The County is also a Section 107 nonattainment area for O<sub>3</sub> and parts of the County are Section 107 CO nonattainment areas (although the Texas Air Control Board (TACB) recognizes the CO problem to be area-wide); TACB must submit post-1987 CO and O<sub>3</sub> SIP revisions supported by air dispersion modeling.

For over 12 years the State of Texas and the City of El Paso have sought Federal actions to assess the air pollution contribution from Juarez and to seek bi-lateral efforts with Mexico to reduce the Juarez influence. Until recently, no mechanisms existed to acquire this necessary information. Thus, earlier El Paso SIP revisions in 1979 and 1985 completely ignored any contributions from Juarez. (Region 6 recommended that the modeling analysis for this latter, post-1982 O<sub>3</sub>/CO SIP revision submitted by TACB be disallowed.)

Recently, however, two events have occurred that expand the Federal and EPA role. First, Annex V to the 1983 U.S.-Mexico Border Agreement was signed on October 3, 1989; this Annex commits both countries to an extensive air monitoring, emission inventorying, and air modeling project to evaluate potential control strategies in the El Paso-Juarez air basin. Second, EPA received two Congressional add-ons to its appropriations for FY 1989 and FY 1990 to be used specifically on cooperative air pollution studies in El Paso-Juarez. Thus, EPA now has both the legal and financial means to accomplish analyses to provide defensible data in support of the El Paso SIP revisions.

In reviewing this general plan, I request that you keep in mind the following, crucial limitations:

(1) EPA's Mexican counterpart, SEDUE, is highly motivated to perform the emissions inventory and air monitoring work in Juarez itself; however, SEDUE is chronically underfunded and will have to rely upon EPA, TACB, El Paso, and EPA-contractor support. Even though U.S. entities may be able and willing to support SEDUE, SEDUE may elect to collect such data itself in a way that EPA would not approve.

(2) The Mexican air control regulations and requirements are considerably different from those in the U.S.; even though an EPA contractor plans to accompany SEDUE on its plant visits to hone the Juarez emissions inventory, the contractor may be limited in its ability to collect all required information.

(3) Although the Juarez emissions data will probably not be of as high a quality as the post-1987 O<sub>3</sub>/CO and PM-10 emissions data bases being compiled for El Paso, the Juarez emissions data will be the best possible emissions data base for Juarez and probably the best such data base in Mexico. Prior to modeling in earnest, Region 6 will encourage preliminary model runs to evaluate the accuracy of the Juarez emissions inventory vis-a-vis monitored ambient concentrations. (A detailed modeling protocol will be developed by TACB and coordinated with OAQPS to address such preliminary steps.)

In conclusion, I request that you and your staff provide comments on this plan bearing in mind that, although data collected in Juarez may not be of as high a quality as that collected in El Paso, this effort is an important first step that will yield useful inputs to the El Paso SIP revision process.

Should you have questions about this plan, please call me or have your staff call Jim Yarbrough at (FTS) 255-7214. Thank you.

Attachments

cc: Tom Helms (MD-15)  
Bill Hunt (MD-14)  
Bob Bauman (MD-15)  
Ned Meyer (MD-14)  
Dean Wilson (MD-14) ✓  
Oscar Ramirez (6E)