



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE INSPECTOR GENERAL

FEB 18 2004

The Honorable Eddie Bernice Johnson
Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment
U.S. House of Representatives
Washington, D.C. 20510

Dear Congresswoman Johnson:

This letter responds to your December 8, 2003 request that we investigate EPA's 2001 proposal to approve the extension of the ozone attainment date for the Dallas-Fort Worth non-attainment area based on impact of transported pollutants from the Houston-Galveston non-attainment area. As of the date of this letter, EPA has not issued a final approval of the attainment date extension for the Dallas-Fort Worth area. Specifically, you requested that we determine: (1) whether the evidence of transport developed by the State of Texas met the current EPA definition of "significant contribution," and (2) how the decision was reached by EPA to propose approval of the attainment extension and who was involved within and outside EPA in making this decision. To meet your need for a timely response to address the proposed legislation being considered by Congress, our review was limited in scope. This letter presents our observations regarding these issues.

The criteria in EPA's attainment extension policy, based on ozone transport as documented in the March 25, 1999, Federal Register, Vol. 64, pages 14441-14444, does not require that transported pollutants preclude attainment by a downwind area before an extension would be approved. Specifically, page 14443 notes that transported pollutants only have to impact an area to the degree that it affects an area's ability to attain the ozone standard. Any "significant contribution" would therefore affect an area's ability to attain the standard.

In 1998, as a result of the Ozone Transport Assessment Group (OTAG) study, EPA established factors for "significant contribution" for State-to-State ozone transport. These factors were included in EPA's final rule, "Finding of Significant Contribution and Rulemaking for Certain States in the Ozone Transport Assessment Group for Purposes of Reducing Regional Transport of Ozone," issued in Federal Register Vol. 63, pages 57355-57538, dated October 27, 1998. The factors were developed to consider "whole" State transport to other States. Ozone and modeling experts at EPA's Office of Air Quality Planning and Standards (OAQPS) told us that the factors in the 1998 rule were developed to assess interstate transport and not intrastate transport. EPA has not yet developed factors or criteria for assessing "significant contribution" from transport between two areas within the same State. They told us that transport between two areas within the same State and in close proximity to each other could result in the transport impacting the downwind area more frequently and over a larger area and for a longer period of time. As such,

they noted that the measures for determining the significance of intrastate transport could be less stringent than the measures for significant contribution for interstate transport, as shown in EPA's 1998 rule. According to an OAQPS atmospheric modeling expert who reviewed the State's summary data related to the impact of Houston-Galveston area ozone transport on the Dallas-Fort Worth area, Region 6 appropriately applied the two measures primarily used for determining that the impact was significant for intrastate transport. The two measures Region 6 primarily used in this determination were:

- whether the total, or magnitude, of the contribution was equal to or greater than 2 parts-per-billion (ppb), and
- whether the Houston-Galveston area transport could result in one or more exceedances per year of the 1-hour ozone standard for the Dallas-Fort Worth area (this one exceedance could contribute to one exceedance day per year; e.g, one monitor registering two or more violations; only three exceedance days are allowed over a three-year period for attainment of the 1-hour standard).

Regarding the magnitude of the contribution, the State summary data shows from 2 to 10 ppb contribution from Houston-Galveston area transport. Regarding the number of exceedances, Region 6's analysis of the State's supporting data related to backwind trajectories from Dallas-Fort Worth to the Houston-Galveston area indicated that over a five-year period (1994 - 1998), about one exceedance out of an annual average of nine exceedances may have been associated with Houston-Galveston area transport.

Our work, including interviews of EPA staff and a review of the State's transport evidence, did not include any assessment of the State's modeling and detailed technical support for its summary conclusions regarding the impact of Houston-Galveston area transport on the Dallas-Fort Worth area. Such an evaluation would require technical expertise such as modeling experts and meteorologists. In several instances the former EPA Region 6 modeler's (Mr. Richard Karp) comments on the State's evidence of transport contradicted the State's summary conclusions and appeared to be based on the State's underlying technical data. These contradictions cannot be resolved without a resource intensive, lengthy review of the State's supporting technical documentation. OAQPS staff stated that Mr. Karp's review of the State's data was the initial EPA analysis of the data and historically, such initial reviews are usually more critical of State submittals because EPA is trying to get the States to improve their submittals and related data.

We interviewed Mr. Karp, and he acknowledged that the analysis of the State's transport evidence, as quoted in new articles, was his initial review of the data. He further stated that his initial review was based on EPA's "overwhelming transport" policy, a more stringent criteria for ozone transport than the criteria included in EPA's attainment extension policy. The "overwhelming transport" policy identified significant contribution as an amount that, when subtracted from the area's average ozone exceedance (design value), would result in ozone levels at or below the 1-hour standard. Essentially, using the "overwhelming transport" policy as criteria would mean that the ozone transport was the primary cause of an area's non-attainment. However, Mr. Karp stated that he subsequently realized that the criteria in EPA's attainment extension policy only required that ozone transport "influence" or "affect" an area's non-attainment to qualify for an extension. Based on this other criteria, he said that he believes that

Region 6's decision to propose approval of an attainment extension for Dallas-Fort Worth, based on the affect of ozone transport, was appropriate. Mr. Karp said he still believes that the State's case was marginal, but EPA's unwritten policy has been that, where doubt exists with a State's submission, EPA will give the State the benefit of the doubt.

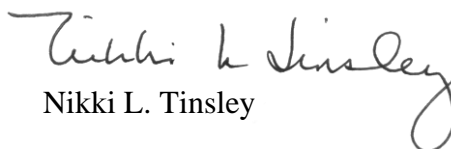
In regard to your second request, our initial contacts with Region 6 air program officials indicated that several Region 6 technical staff, as well as national modeling and ozone experts from EPA's OAQPS, were involved in the decision as to whether Houston-Galveston area transported pollutants significantly affected the Dallas-Fort Worth area attainment. OAQPS staff subsequently confirmed that they were involved in reviewing the State's transport data and Regions 6's analysis of the data. The consensus opinion of Region 6 staff and experts at OAQPS we contacted was that the Houston-Galveston area contribution, while marginal, was indicative of "significant contribution" from upwind sources to downwind areas within the same State. We have not performed an extensive review of the documentation that supports EPA's conclusion of "significant contribution" in order to identify all EPA staff and external organizations and individuals that provided input into EPA's decision-making process.

In conclusion, our limited review of the State's summary findings on transport and EPA's analysis of the State's data indicated the ozone transport from the Houston-Galveston area met the measures that EPA had established for "significant contribution" in this one case. However, since EPA has not established specific criteria or factors for assessing the significance of intrastate transport, we were not able to conduct any additional comparative analysis of the State's transport data. We did not attempt to perform an independent technical analysis of the supporting technical data and modeling performed by the State.

The Office of Inspector General already has ongoing and planned assignments that will, to some extent, address EPA's decisions on the extension of ozone attainment dates for certain non-attainment areas and the progress these areas have made in reducing ozone precursor emissions and related ambient ozone levels. Specifically, we are currently assessing the *Effectiveness of EPA, State, and Local Strategies in Reducing Ozone Precursor Emissions* (No. 2003-000499). We anticipate the results of this ongoing review will be available in August, 2004.

If after reviewing our response you would like to discuss further the information we provide in this letter, or your staff have any questions, please call me or Eileen McMahon, Assistant Inspector General for Congressional and Public Liaison at (202) 566-2546.

Sincerely,


Nikki L. Tinsley