

MAR 17 1986

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Mr. James E. Evans  
Chief, Construction-Operations Division  
Department of the Army  
Chicago District, Corps of Engineers  
219 South Dearborn  
Chicago, Illinois 60604-1797

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E. E. I.

Dear Mr. Evans:

In accordance with our responsibility as a cooperating agency on the North-South Tollway Project, we have reviewed the report entitled Air Quality Assessment - North-South Tollway - January 1986. This report was prepared by Envirodyne Engineers as a background document to be used by the Corps of Engineers in preparing the environmental impact statement (EIS) for the project.

In general, the data and modeling analyses in the report appear to be adequate for identification and assessment of potential impacts on air quality. However, we have concerns regarding some of the details of the modeling and the coordination with the Illinois Environmental Protection Agency (IEPA). Our comments are arranged by topic in the following paragraphs.

COMMENT No.    Carbon Monoxide

- ① o NAAQS - The carbon monoxide (CO) National Ambient Air Quality Standards (NAAQS) are 10 milligrams per cubic meter ( $\text{mg}/\text{m}^3$ ; 8-hour average) and 40  $\text{mg}/\text{m}^3$  (1-hour average). The parts per million (ppm) values cited on page 6 should be regarded as approximate guides, and are not exact equivalents to the  $\text{mg}/\text{m}^3$  values. Equivalent ppm values can be derived by dividing the  $\text{mg}/\text{m}^3$  values by 1.15. Also, the CO analysis does not address the 1-hour standard. Attainment of both the 1-hour and 8-hour standards must be demonstrated.
- ② o Models - Documentation for the SIGNAL and COERP programs is desirable. It must be shown that these programs are consistent with USEPA modeling guidelines and procedures (such as MOBILE 3).
- ③ o Model Input - A copy of the computer printout page that lists all of the model input parameters should be provided, so that the values cited in the text can be verified. In addition, settling and deposition velocities and the units for assumed surface roughness should be discussed in the text.

- o Receptor Locations - The locations of receptors for the mainline (major interchanges, toll plazas, ramp tolls) and off-alignment analyses should be identified. Information should be provided to support the selection of these particular locations as representative of worst-case concentrations in each area. In addition, it appears that the recommendation in USEPA's June 20, 1985 and July 10, 1985 letters (to locate mainline receptors between the major interchanges or toll plazas) was not followed.
- o Interchanges (Off-Alignment) - Figure 2 identifies 48 interchanges, but the text and Table 1 refer to only 26 interchanges. Either the results for all 48 interchanges should be presented, or the rationale for not modeling the other 22 intersections should be provided. Some of these intersections should have been modeled to satisfy USEPA's recommendation to locate receptors at the intersections of the major cross-streets and the nearest major parallel roadway.

#### Lead

Receptor Locations - Per USEPA's letter of August 2, 1985, receptors should be located where traffic volume is maximized and roadway/right-of-way distance is minimized. (These factors may be a function of the alternative and year under consideration.) It should be shown that the five locations identified on page 40 follow this recommendation. The lack of receptors along Route 53, especially for Alternatives B and D, is troubling.

#### Total Pollutant Burden Analysis

Although the results of the analysis are presented and discussed, the air quality report and the draft EIS should address the project's consistency with the State Implementation Plan (SIP). This is particularly important for hydrocarbons and oxides of nitrogen. Conclusions should be drawn regarding the potential for the project alternatives to interfere with attainment or maintenance of the NAAQS. This is particularly important when the alternatives are compared in the year 2008, where the emissions under Alternative B would be greater than those under the No Action alternative. This projected result could indicate that if Alternative B is selected, there might be a problem meeting the standards for ozone. (Currently, the State of Illinois is projecting that the standards for ozone would be attained in 1987.)

In the total pollutant burden analysis, hydrocarbon emissions are estimated to continue to drop until 1989, then to rise between 1989 and 2008, but still remain below 1984 levels. It is not clear, however, whether hydrocarbon emissions will remain below the 1987 attainment year. This should be clarified. If the emission level would rise above the 1987 level, the subject of continued attainment of the 1987 standard must be addressed.

#### Conformity Determination

Under Section 176 of the Clean Air Act, projects must be in conformance with the SIP. The Army Corps of Engineers should coordinate with IEPA to obtain a determination of conformity.

State Coordination

(10) Comments received on the Air Quality Assessment report and the air quality sections of the EIS should be coordinated with IEPA.

Thank you for the opportunity to review the report. Please contact Kathleen Brennan of my staff at 312/886-6873 if you have any questions concerning our comments.

Sincerely yours,

William D. Franz, Chief  
Environmental Review Branch  
Planning and Management Division

cc: C. Dovas, Envirodyne Engineers  
M. Hayes, IEPA