



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

OCT 30 1992

MEMORANDUM

SUBJECT: Demonstrating Attainment of the Ozone National Ambient Air Quality Standards (NAAQS) with the Urban Airshed Model (UAM) for Detroit

FROM: Joseph A. Tikvart, Chief *J. Tibbitts*
Source Receptor Analysis Branch, TSD (MD-14)

TO: Rebecca Calby, Regional Meteorologist
Regulation Development Branch, Region V (AR-18J)

In response to your request, the Model Clearinghouse has reviewed the proposed Detroit UAM demonstration. The Michigan Department of Natural Resources (DNR) has identified two principal meteorological regimes and is proposing to model 4 of the 5 highest ranked days from these regimes. One of the proposed modeling periods, July 5-7, 1988, also includes a day (July 6) which recorded a higher peak ozone value. However, based on criteria in Section 3.1 of the Guideline for Regulatory Application of the Urban Airshed Model, the Michigan DNR is proposing to disregard the day for the purpose of the modeling demonstration.

Consensus has been reached that July 6 may be discarded and for the other 4 days that no modeled exceedance would be accepted for the Detroit UAM Application. For clarification, a modeled exceedance refers to any simulated ozone value >0.12 ppm. Therefore, the Detroit UAM demonstration should indicate values ≤ 0.12 ppm for every hour and every grid cell for the 4 remaining modeled days.

We believe it is important to encourage use of the most technically viable available tools in performing State implementation plan attainment analyses. Therefore, the consensus was influenced by the fact that Detroit is an intrastate moderate area and Michigan is not required to apply the UAM. However, the DNR and participating groups believe that the UAM application provides valuable information for air quality planning purposes and has opted to apply the model in lieu of the Empirical Kinetics Modeling Approach (EKMA). Furthermore, consensus that July 6 may be disregarded appears to be within

bounds of the Environmental Protection Agency's guidance on selection of episode days.

We understand that the proposed approach to selection of days to be modeled has been approved by the Regional Office and is included in the modeling protocol.

If you have any questions, please contact Ned Meyer at 919-541-5594.

cc: P. Dolwick, Region V
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FY-93 MODEL CLEARINGHOUSE MEMORANDA

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