



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711
February 8, 1989

Paul Steele
Dave
return to
Stacy
for filing

MEMORANDUM

SUBJECT: Yates Power Plant GEP SIP
FROM: *Dean A. Wilson*
Dean A. Wilson, Meteorologist
Source Receptor Analysis Branch (MD-14)
TO: Kevin D. McGee, Meteorologist
Stationary Source Planning Section
Region IV (4APT-APB)

In response to your request, the Model Clearinghouse has reviewed your proposed response to the State of Georgia regarding the appropriate modeling procedures for the Yates Power Plant GEP SIP. We do not have any significant problems with your position on the issues that are raised by the State. To be more responsive to the State's questions, however, we suggest the addition of the following Regional Response to Paragraphs 2 and 5:

The statement on Page 2-19 of the ISC users manual is meant to caution the user that the receptor above stack height may need to be analyzed with a complex-terrain model and that a determination should be made whether the complex-terrain model estimates or the ISC estimates are more appropriate. The "Guideline on Air Quality Models (Revised)" provides the current rationale for making that determination. The fact that the concentration estimates with ISCST in transitional terrain can be several times higher than those obtained from RTDM is one reason why the guidance is written the way it is. We are aware that if the receptor is well below plume height, but still above stack height, RTDM may calculate a very low concentration. Such an estimate may be unrealistically low compared to reality. Since we lack the data needed to determine what the best estimate should be, the Guideline says that the estimate may be as high as that concentration which would occur at stack height, for the same downwind distance from the source.

With regard to your proposed response to Paragraph 6 of the State's letter, we suggest the appropriate answer is:

To date no court has ruled on this issue.

Also, we are not clear on what the issue is. If they are contending that because of wind speed considerations the plume cannot arrive at the receptor within the averaging time of the standards, the Model Clearinghouse has provided some guidance to Region IV in a December 20, 1983, memorandum (attached) involving a Florida issue.

If you have any further questions, please contact me.

Attachment

cc: D. Grano, SDPMPB (MD-15)
S. Reinders, SRAB (MD-14)