



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

MAR 25 1985

MEMORANDUM

SUBJECT: Annual Modeling of Existing Sources With
Mass/Time or Mass/Heat Energy Emission Limits

FROM: G. T. Helms, Chief *Tom*
Control Programs Operations Branch (MD-15)

TO: Winston A. Smith, Director
Air, Pesticides, and Toxics Management Division
Region IV

We have reviewed your memo dated February 6, 1985, which presents two scenarios for inputting emission rates to modeling analyses of existing point sources. (A copy of your memo is attached for reference.) Our comments are as follows.

This memo is consistent with our current policy on inputting maximum allowable emission limits and the actual historical maximum operating rate, based on the last 3 years of normal operation for existing point source compliance tests with national annual ambient standards. However, the maximum allowable capacity (design or permitted) should be input unless the sources' physical characteristics make it impossible to emit at the allowable capacity. In this case, the achievable maximum capacity may be used as long as this capacity is contained in a federally enforceable permit. Allowable capacity may be amended to conform to actual capacity if accompanied with measures to physically limit emissions to assure that the new capacity will not be exceeded.

Thus, in the examples described in your memo for annual modeling, "A" would be modeled at the maximum allowable emission limit, rated capacity, and the maximum actual hours operation of the last 3 years, i.e., $2.0 \text{ lbs/MMBtu} * 100 \text{ MMBtu/hr} * 5000 \text{ hours} \div 8760 \text{ hours}$, unless 80 MMBtu/hours is accepted by the source as an enforceable permit condition. "B" would be input as $200 \text{ lbs/hr} * 5000 \text{ hours} \div 8760 \text{ hours}$.

Background point sources having significant impact in the vicinity of the sources being considered for the SIP should be explicitly modeled. For evaluation against the annual ambient standards, the background sources should be modeled at worst-case actual emissions of the last 3 years, e.g., maximum actual emission limit (or rate in the case of a lbs per hour limitation) and maximum actual capacity with the highest annual number of operating hours during the last 3 years of operation.

To summarize, in the annual modeling analysis of sources under consideration for the SIP, the allowable emission limits and design capacity is input with the highest actual number of hours of operation of the last 3 years. Thus, in your examples, "B" is correct. "A" must have a SIP operating permit condition limiting boiler capacity to 80 MMBtu, thus making its actual operating rate its new allowable rate. Background sources should be modeled at worst-case actual conditions.

If you have any questions on this memo, please call Sharon Reinders at 629-5526.

Attachment

cc: Dean Wilson
Joe Tikvart
Bob Bauman
Chief, Air Branch, Regions I-X