



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

June 29, 1984

MEMORANDUM

SUBJECT: Simplification of Modeling for Kaiser Aluminum PSD, Tacoma
FROM: *J. A. Tikvart for*
Joseph A. Tikvart, Chief
Source Receptor Analysis Branch (MD-14)
TO: Robert B. Wilson
Regional Meteorologist, Region X

The Model Clearinghouse has reviewed your proposal to limit the modeling modeling for all existing increment consuming sources in the Tacoma Tidelands to the area where the source currently subject to a PSD permit (Kaiser Aluminum) would have a significant air quality impact. While this technique has not been used in the past, we believe that it is technically supportable, is consistent with language in the PSD regulations relating to the exemption of a source from an air quality impact analysis if it would not have a significant air quality impact, and is prudent, given the costs involved in full scale modeling. Thus we concur with your proposal.

Let me clarify, primarily for the benefit of the other Regions, my understanding of other facts that have a bearing on the case. First, I understand that once the area of significant impact is defined, the emissions from all other sources will be input to a refined air quality model and that model will be run sequentially using one year of on-site data to determine the combined impacts over a grid encompassing the significant impact area. Second, the combined impact of all sources will be considered in determining whether there are violations of increments in a couple of distant Class I areas. Lastly, it should be noted that the State has the ultimate responsibility for increment tracking in the area and for revision of the SIP if increments are found to be violated. While the procedure you propose can be used for a specific PSD source, it does not lend itself to the increment tracking problem. Thus, the State would need to periodically run the applicable model(s) over a grid encompassing the entire area of significant impact from all sources to check on increment consumption.

It should be noted that your technique is similar to, but differs in one respect from, the "CorSTAR" technique which has been proposed for use to OAQPS and to some Regional Offices. In the CorSTAR technique the modeling of "all other sources" is not only limited to the area of significant impact but also to the specific time periods, e.g. 3-hour and 24-hours, during the year when the source in question had a significant impact. We

recommend that use of the CorSTAR technique be accepted only on a case-by-case basis considering the technical and policy issues that are involved; in your case we concur with its use in concept, but only the spatial sense and only for PSD activities.

If you have any questions, please contact Dean Wilson.

cc: R. Rhoads
T. Helms

bcc: Modeling Contact, Regions I-IX

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