MEMORANDUM

DATE: April 10, 1989

SUBJECT: Prevention of Significant Deterioration (PSD) Applicability to Sulfur Dioxide (SO2) Emissions from Incineration of Total Reduced Sulfur (TRS)

FROM: John Calcagni, Director
Air Quality Management Division (MD-15)

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

This is in response to your memorandum of March 16, 1989 in which you requested answers to questions concerning PSD applicability to SO2 emissions resulting from a boiler modification at Union Camp Corporation's Savannah, Georgia, kraft pulp mill. The issue, in general, is whether an increase in emissions of one pollutant at a source is exempt from PSD review when it results from the addition of an air pollution control device or a change in the method of operation of the source to reduce emissions of another pollutant. According to your memorandum, the Georgia Environmental Protection Division has contested Region IV's position that PSD would apply to an increase of SO2 emissions on the order of several thousand tons per year (tpy) from the pulp mill's power boiler as the result of incinerating TRS compounds. You asked whether Union Camp's power boiler would be subject to PSD for SO2 and whether best available control technology (BACT), ambient air impact, and increment consumption analyses would be required. You also asked whether any grandfathering provisions are applicable to sources that may have constructed under a permit that did not contain a BACT analysis for power boiler SO2 emission increases resulting from incineration of TRS compounds. In addition you requested: (1) a count of agencies with approved section 111(d) TRS plans indicating which ones have interpreted these rules similar to Florida; and (2) a list of sources that have not been required to undergo a BACT analysis under conditions similar to the Union Camp situation in question.

On July 7, 1986, the Office of Air Quality Planning and Standards sent to all Regional Air Division Directors a memorandum addressing this very issue (see attached). The memorandum also appears as item number 4.32 in the New Source Review PSD and Nonattainment Area Guidance Notebook. The memorandum makes
clear that the new source performance standard exemption of certain changes to a source's emission control systems (and resulting emissions increase) from inclusion in the definition of "modification" does not apply to the definition of "modification" under PSD. Because the modifications to the power boiler at the Union Camp mill result in an emissions increase exceeding the significance level (40 tpy) for triggering PSD applicability as defined in 40 CFR 52.21(b)(23)(i), the emissions increase is subject to a full PSD review, including "top-down" BACT, air quality impact, and increment consumption analyses.

State agencies and permit applicants should have been aware within six months of issuance of the policy explained in the July 7, 1986, memorandum. Therefore, no grandfathering is needed for sources permitted after January 7, 1987. In cases where a pulp mill or other source is constructing or operating based on a permit that erroneously exempted emission increases of a pollutant from PSD review, the source is subject to enforcement action by the State or local agency. Appropriate enforcement action would include requiring the source to perform any analyses required under full PSD review that were not done for the approved permit. The reviewing authority may, of course, using the complete PSD analyses submitted by the source, consider energy, environmental, and economic impacts in determining BACT. Under no circumstances may emissions cause or contribute to a violation of any national ambient air quality standard or PSD increment.

Concerning State TRS plans, the Code of Federal Regulations, Part 62, lists States with approved plans. I suggest that you refer to this Part to determine the status of the States' section 111(d) TRS plans. Also, we are not aware of any other similar sources that may have been issued a permit without undergoing a BACT analysis. However, this memorandum will be sent to the Regional Offices with a request that, if any Region is aware of sources which may have been issued a permit without undergoing a BACT analysis, they contact you directly. In addition, we will post it on the NSR electronic Bulletin Board and request that the Regions send a copy to the States.

If you have any more questions concerning PSD applicability at the Union Camp pulp mill, please contact Sam Duletsky in our New Source Review Section at FTS 629-0873.

Attachment

cc: E. Lillis
G. McCutchen
S. Duletsky
D. Painter