

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

April 6, 1987

Roger D. Anderson, P.E.
Building 21-2W-05
Environmental Engineering and Pollution Control
3M Corporation
P.O. Box 33331
St. Paul, Minnesota 55133

Dear Mr. Anderson:

This is in response to your letter that we received on March 2, 1987, concerning appropriate volatile organic compound (VOC) emission limits for the proposed pilot coating equipment in Maplewood. The pilot coater is being added to an existing source that has the potential to emit more than 250 tons per year (tpy) of VOC's in an ozone attainment area.

Two issues have been raised during our discussions about this project, namely, (1) are the Prevention of Significant Deterioration (PSD) regulations applicable if the pilot coater is not expected to have emissions greater than 40 tpy, and (2) if the PSD regulations could apply, how can a permit be written to avoid PSD review.

The PSD regulations apply if an existing major source is modified resulting in a significant net increase in emissions. In determining what is the net increase in emissions of a modification, "actual" emission increases from the project are added to other "actual" increases and decreases occurring during the contemporaneous time period. In this case, the only emission increase is from the pilot coater. There are no other contemporaneous increases or decreases. Since the significance level for VOC emissions is 40 tpy for PSD purposes, you are correct in your understanding that the PSD review requirements are triggered when there is an "actual" net emission increase of 40 tpy of VOC occurring at an existing major stationary source. However, in your assumption that PSD does not apply to the proposed project because actual emissions from the pilot coater will be less than 40 tpy, one provision of the Federal rules was overlooked. That provision states that "actual emissions . . . for any emission unit which has not begun normal operations on the particular date shall equal the potential to emit of the unit on that date" (emphasis added). See section 40 CFR 52.21(b)(21)(iv). With this understanding, the addition of the pilot coater is a major modification because its potential to increase VOC emissions exceeds 40 tpy at an existing major stationary source.

The term "potential to emit" is defined in 40 CFR 5 2.21 (b) (4) as the capacity to emit a pollutant at maximum designed capacity after considering any federally enforceable limits on control equipment and federally enforceable limitations

on operations. The potential emissions of the pilot coater can be reduced to below 40 tpy, if a federally enforceable permit condition is placed in the construction permit. To be federally enforceable according to 40 CFR 52.21(b) (iv), the Administrator must be able to enforce limits under the State Implementation Plan which includes permit conditions issued under the Minnesota construction permit program.

Furthermore, the United States Environmental Protection Agency (USEPA) has determined in one of the two memoranda you cited in your letter (Attachment #1, January 20, 1984 memorandum from John O'Connor, Acting Director of the Office of Air Quality and Standards) its policy on federally enforceable averaging times for VOC emissions. The O'Connor memorandum states that for VOC emissions a daily emission limit is required for regulatory actions where continuous compliance is not feasible. Regulatory actions referenced in the memorandum include construction permits. If a daily emission limit is not economically or technically possible, a longer averaging time may be considered, but it must be as short as practicable and no longer than 30 days. In order for VOC emission limits to be federally enforceable and able to affect the potential to emit, the emission limit must comply with the averaging time requirements of the O'Connor memorandum.

USEPA has further determined in the other memorandum cited in your letter (Attachment #2 March 13, 1986 memorandum from Edward Reich, former Director of the Stationary Source Compliance Division) that if operating parameters (for example, hours of operations or amount of raw materials entering a process) are going to be limited, short-term averaging of these parameters is also required. Monthly averaging is generally the longest averaging time that USEPA will accept as federally enforceable with regard to operational limits. Please keep in mind that the March 13, 1986, memorandum from Edward Reich states that averaging periods recommended for operational limits are not to be confused with our policy on averaging periods for emission limits.

The 3M Company has not, as yet, demonstrated why a daily emission limit is not possible for the pilot coater. Perhaps, if such a demonstration cannot be made, the project should be considered a PSD source.

If you have additional questions in regard to this matter, please contact Ron Van Mersbergen at (312) 886-6056.

Sincerely yours,

Steve Rothblatt, Chief
Air and Radiation Branch (5AR-26)

Attachments

cc: Elizabeth Henderson MPCA