



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

AUG 23 1991

Paul Dubenetzky, Acting Assistant  
Commissioner  
Office of Air Management  
Indiana Department of Environmental  
Management  
105 South Meridian Street  
Indianapolis, Indiana 46225

REPLY TO ATTENTION OF:

Dear Mr. Dubenetzky:

This letter is in response to the Indiana Department of Environmental Management (IDEM) request for comments on a proposed Prevention of Significant Deterioration (PSD) construction permit for Kimball Office Furniture (Kimball) Salem Division, Salem, Indiana. Kimball is proposing to modify its plant by adding a second 8-hour shift. The modification will not entail any new construction or equipment.

The plant is presently permitted for one 8-hour shift operation which correlates to volatile organic compounds (VOC) emissions of 247 tons per year. This plant was issued its original construction permit, PC (88) 1593, on December 9, 1985. That permit contained a condition limiting VOC emissions from surface coating operations to less than 250 tons per year unless a PSD permit was obtained. It also contained a condition limiting sulfur dioxide (SO<sub>2</sub>) emissions from the boilers to less than 250 tons per year unless a PSD permit was obtained.

The second shift will increase VOC emissions; thus, Kimball's total potential to emit will be 465 tons per year of VOC. No modification to the boiler facilities would be required and no increase in boiler limits was requested.

The proposal will make Kimball, which was a minor source before (emits less than 250 tons per year), a major PSD source because it is not one of the 28 listed source categories and the PSD potential emission rate for VOC is greater than 250 tons per year for this source category. It is clear that the PSD rule will apply to the painting operation; however, the issue is whether PSD requirements also apply to the boiler facilities. In accordance with the PSD regulations in 40 CFR 52.21 (r) (4) which state that:

"At such time that a particulate source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraph (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification." (emphasis added)

The relaxation of the VOC limitation in the earlier permit which was imposed after August 7, 1980, makes the source major for all pollutants. The PSD requirements (j) through (s) would apply to the regulated emissions from the boiler which have potential emissions greater than the respective significant levels. This would probably include particulate matter, SO<sub>2</sub>, carbon monoxide, and nitrogen oxides from the boiler.

To avoid applying the Best Available Control Technology (BACT) PSD requirements to any of the boiler's emissions, the plant wide potential emissions would have to be restricted to below that pollutant's significant level (see 40 CFR 52.21(j)). However, other requirements would have to be met, for example 40 CFR 52.21(k) "source impact analysis".

The proposed modification will increase VOC emissions to a level higher than a major source level, therefore, Kimball must apply BACT to the total VOC emissions from surface coating operations. The BACT analysis submitted for Region V's review was not complete. The analysis only stated that various control technologies were rejected because costs were determined to be too high. A complete analysis needs to be submitted which contains a detailed cost analysis for each technically feasible control option showing as a minimum the cost effectiveness of each option. Before an option is rejected, it must be demonstrated that the source is unique or that the option would have a substantial cost above other similar controlled sources.

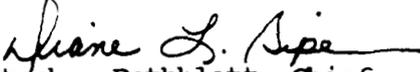
In considering control technology, the source should consider other technologies available which concentrates an effluent from a spray booth before incineration. For example, the source should consider using protective clothing for operators combined with recirculating of air to the manual booths followed by incineration of a slip stream.

When reviewing a control technology with a wide range of emission performance levels, it is presumed that the source can achieve the same emission reduction level as another source, unless a demonstration is provided showing that there are source-specific factors or other relevant information that provide a technical, economic, energy, or environmental justification to do otherwise. Indiana should consider the incineration technology used by Debra Hanna Corp. in Waverly, Ohio, for controlling emissions from the manual spray booth.

Furthermore, according to 40 CFR 52.21 (b) (12), BACT must be expressed in an emission limitation rather than a technology only. In conclusion, Kimball must present an evaluation of each control option impact along with appropriate supporting information. Consequently, both beneficial and adverse impacts should be discussed and, where possible, quantified.

If you have any questions, please contact Beronia Beniamine, of my staff, at (312) 886-6082.

Sincerely yours,

*for*   
Stephen Rothblatt, Chief  
Regulation Development Branch

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