

ILLINOIS POLLUTION CONTROL BOARD  
August 30, 1973

CATERPILLAR TRACTOR COMPANY, )  
 )  
 ) Petitioner, )  
 )  
 ) v. ) PCB 73-63  
 )  
 ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 ) Respondent. )

Hugh B. Thomas on behalf of Petitioner;  
Dale Turner, Assistant Attorney General, on behalf of Respondent.

OPINION AND ORDER OF THE BOARD (by Mr. Seaman):

On February 13, 1973, Petitioner, Caterpillar Tractor Company, filed its Petition for Variance with this Board. Petitioner requests a variance from the requirements of Rules 104(a) and 104(b)(2) of Chapter 2, Part I of the Pollution Control Board Regulations which require Petitioner to have a Project Completion Schedule to bring its facilities into compliance with the standards of Rules 204(c)(1)(A) and 204(c)(1)(B) after May 1, 1973 and as said Rules require a Project Completion Schedule containing a final compliance date which is no later than May 30, 1975.

More specifically, Petitioner requests a variance to operate its coal-fired boilers at its Aurora, East Peoria and Morton Plants even though their compliance with the May 30, 1975 sulfur dioxide and particulate emission standards will be delayed beyond that date allegedly as a result of Petitioner's development and testing of prototype sulfur dioxide emission control systems at its Joliet and Mossville Plants.

Petitioner has submitted to the Agency operating permit applications for the Joliet Plant and Mossville Plant setting forth Project Completion Schedules containing final compliance dates prior to May 30, 1975.

The Joliet Plant final compliance date is therein indicated as between April 1, 1974, and November 1, 1974, based upon a pilot project for the testing and installation of a scrubber system to control sulfur dioxide and particulate emissions. The Mossville Plant final compliance date is therein indicated as between January 1, 1975 and April 1, 1975. This is also based upon a pilot project for a scrubber system to control said emissions but incorporates certain variations and is being provided by a different supplier. The Petitioner states that it is "somewhat confident" that one or both of these pilot projects will accomplish the required control of sulfur dioxide and particulate emissions.

The Project Completion Schedules for the Aurora and Morton Plants contain final compliance dates of between December 1, 1976 and March 1, 1977, while the Project Completion Schedule for the East Peoria Plant contains a final compliance date of between January 1, 1977, and July 1, 1977. Since these dates exceed May 30, 1975, Petitioner requests a variance for three facilities from the above mentioned prohibitions and requirements. Petitioner alleges that accomplishment of the required sulfur dioxide and particulate emissions at these facilities is dependent upon the successful completion of the pilot projects at Joliet and/or Mossville insofar as they develop a means by which it is possible to attain these standards. The Petitioner intends to install whichever of the two systems that is proven effective at these three remaining facilities, but the time required to design, install, test and evaluate the pilot projects and thereafter to install the effective system at the remaining three facilities mandates a time frame which contains compliance dates beyond the May 30, 1975 deadline.

The activity involved is Petitioner's use of a total of 14 coal-fired boilers at the above mentioned three facilities for the production of steam, the primary purpose of which is facility heating. Said coal-fired boilers allegedly process Illinois coal with an average of approximately 2.9% sulfur content by weight and up to 12,000 Btu per pound of coal in maximum quantities ranging from 9 tons per hour to 35 tons per hour per facility. It is estimated that said boilers discharge particulates in the range of from .15 pounds to .35 pounds per million Btu and sulfur dioxide in the range of from 5.1 pounds to 5.6 pounds per million Btu. Said boilers currently contain either fly ash arresters or low velocity expansion chambers to control particulate emission, and it is proposed to add Venturi-type scrubbers using alkaline solution as the scrubbing medium with inclusion of a regeneration system to recycle the scrubbing solution and to prepare contaminants for proper disposal.

This cause comes before the Board after a lengthy hearing and subsequent briefs by the respective parties. Numerous arguments and points of law are presented therein; however, as in all variance proceedings, this Board must bottom its decision on an analysis of whether Petitioner has presented adequate proof that compliance with the rule or regulation in question would impose an arbitrary or unreasonable hardship. The costs that compliance would impose upon Petitioner and others must be balanced against the injury that the grant of the variance would impose upon the environment and the public.

The Board is satisfied that Petitioner has fallen short of meeting its burden of proof. The sulfur dioxide regulation was adopted, after extensive hearings, on the basis of evidence that convinced the Board that techniques were available, at a cost reasonable in light of the need, to reduce sulfur dioxide emissions by May 30, 1975, to the levels prescribed. The Petitioner can prevail only by showing that application of the regulation to its situation is so impractical or so costly in comparison to the benefits as to be arbitrary or unreasonable.

A variance is to be granted only in those extraordinary situations in which the cost of compliance is wholly disproportionate to the benefits; doubts are to be resolved in favor of denial. This Board stated in Illinois Power Company v. Environmental Protection Agency (PCB 72-190, October 24, 1972) at page 4:

"There is therefore a complete absence of proof that Illinois Power Company has any greater problem than any of the myriad other operators of coal-fired equipment in complying with the sulfur dioxide emission standard."

This is precisely the type of case for which the regulation was designed: Petitioner contributes substantially to sulfur dioxide emissions in areas of excessive ambient sulfur dioxide concentrations. To grant a variance here would be to repeal the emission standard as Petitioner has not demonstrated that compliance would create an arbitrary or unreasonable hardship. Further, the grant of a variance, based upon a record insufficient as regards necessary allegations and support thereof would be premature.

Notwithstanding our denial of the petition for extension of compliance dates as applied to the Aurora, Morton and East Peoria plants for the reasons above noted, we applaud Petitioner for its efforts to achieve compliance at its Joliet and Mossville Plants. We will watch with great interest the results achieved by the installation of the Zurn and FMC units, respectively, and hope that they can serve as a basis for more extensive sulphur dioxide emission control in other plants. We would hope that the installation schedules for each facility can be accelerated so that

the successful prototype could serve as a basis for installation at other locations. We would also hope that as the nature of the abatement process became more definitively ascertainable, comparable facilities could be installed at other locations at the earliest possible date and on an accelerated schedule that could meet or approximate the compliance dates mandated by the Regulations. In denying this variance request without prejudice, we do not foreclose further requests in the future that will be more specific in nature based on the equipment to be installed and the results to be achieved in appropriate cases, but we do not feel that we can, on the present record, grant the variances requested in the present proceeding without abrogating the entire sulphur dioxide control program and, in effect, repealing the Regulation involved.

Notwithstanding the foregoing Opinion and denial of the variances as requested, we will direct that the Agency issue operating permits with respect to the Aurora, Morton and East Peoria Plants in order that Petitioners' present operations not be deemed in violation for operation without an operating permit. In directing the issuance of said permits, however, we in no way are sanctioning the proposed time schedule for sulphur dioxide compliance as proposed by Petitioner.

This Opinion constitutes the findings of fact and conclusions of law of the Board.

IT IS THE ORDER of the Pollution Control Board that

1. The variance petition filed by Caterpillar Tractor Co. with respect to its Aurora, Morton and East Peoria plants be and the same is hereby denied without prejudice.
2. The Agency issue operating permits with respect to the Aurora, Morton and East Peoria plants in order that Petitioner's present operations not be deemed in violation for operation without an operating permit.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted by the Board on the 30<sup>th</sup> day of August, 1973, by a vote of 3 to 0.

Christan L. Moffett