ILLINOIS POLLUTION CONTROL BOARD February 19, 1976

CATERPILLAR T	RACTOR	NY, ioner,)))		
v.)))	PCB	75-93
ENVIRONMENTAL	PROTEC	AGENCY	,) ,)		

Hugh B. Thomas appeared on behalf of Petitioner. Roger Zehntner appeared on behalf of Respondent.

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

This matter comes before the Pollution Control Board (Board) upon the Petition for Variance filed by Caterpillar Tractor Company (Caterpillar) on February 25, 1975. Caterpillar seeks variance from the permit requirement of Rule 103 and the particulate emission limitation of Rule 203 of the Air Regulations for furnaces at its gray iron foundry located on U.S. Route 24, Mapleton, Peoria County, Illinois. The Environmental Protection Agency (Agency) filed its Amended Recommendation on June 3, 1975. On June 5, 1975, a hearing was held at the Peoria County Courthouse. Caterpillar has waived its right under Section 38 of the Environmental Protection Act (Act) to a decision by the Board within 90 days after the filing of a Petition.

Caterpillar's Mapleton plant, which employs approximately 3,200 persons, is engaged in the melting and casting of ferrous metal. The products of this foundry operation are processed in other plants owned by Caterpillar and are ultimately incorporated in Caterpillar's primary products, which include earthmoving and construction equipment and diesel engines. The foundry has twelve (12) electric induction melt furnaces, each rated at a 25-ton capacity and operated at a seven ton per hour process weight rate. Ten to eleven of the induction furnaces are operated simultaneously while the remaining furnace or furnaces are down for relining of the refractory or maintenance. The twelve furnaces are arranged in a straight line and are all housed under one roof. The roof has fourteen ventilators mounted in a line over the melt furnaces. These

ventilators evacuate to the atmosphere particulate emissions generated by the furnaces. It is these particulate emissions for which Caterpillar seeks a variance.

Since September, 1972, Caterpillar has submitted four applications for an operating permit to the Agency. Each has been denied. The final application was denied on February 1, 1974, for failure to show compliance with Rule 203. Tests performed by Batelle Columbus Laboratories in 1974, with the acquiescence of the Agency, indicate that each of Caterpillar's furnaces emits 8.93 pounds of particulate per hour. This emission level violates the allowable emission level of Rule 203(a), the applicable rule in this matter (due to failure to prove compliance with Rule 203(c)) by 7.18 pounds per hour. When the total emissions for all twelve induction furnaces are aggregated, Caterpillar's Mapleton plant melt area, at a combined process weight rate of 84 tons per hour, exceeds the Rule 203(a) allowable emission limit by approximately 80 pounds of particulate per hour.

In order to reduce the particulate emissions from the furnaces, Caterpillar has proposed to install a duct system and cloth bag filters through which the particulate emissions from the melt furnaces will be vented. Caterpillar has estimated, and the Agency agrees, that the dust collection efficiency of this control system will be 99 percent. Furthermore, when the expected control efficiency is applied to the aggregated emission levels when twelve furnaces are operating simultaneously, compliance with the limitations of Rule 203(a) should be achieved.

Caterpillar alleges that a requirement of immediate compliance with Rules 103 and 203 would impose an arbitrary and unreasonable hardship on Caterpillar in that it could result in cessation of Caterpillar's production activities.

The Board finds that, although Caterpillar has acted in good faith, Caterpillar's petition for variance must be dismissed. Caterpillar has failed to prove that its emissions do not contribute to a violation of the ambient air quality standards and, therefore, has not met its burden under Procedural Rule 401(c), nor has Caterpillar shown that compliance will impose an arbitrary and unreasonable hardship.

At the hearing, Caterpillar presented a preliminary report on 1974 ambient air monitoring data, gathered by the Agency, which contained data gathered at six monitoring stations in the Peoria area. The report indicated no violations of the 24 hour particulate concentration regulation and one violation of the annual limitation. However, the data on the annual concentration gathered at three of the monitoring stations, including the station closest to Caterpillar's

facility, were incomplete.

In September, 1975, the Agency published the final 1974 Annual Air Quality Report. The Board hereby takes official notice of that document. The report indicates that the annual particulate concentrations at the monitoring station closest to Caterpillar, which is only five miles northeast (R 17) and at the station 11 1/2 miles from Caterpillar's foundry (R 34-35) were in violation of the annual limitation of 75 micrograms per cubic meter.

We have held that a variance may be granted when the "hardship imposed by refusing the variance so far outweighs the benefits to the community as to be arbitrary and unreasonable." EPA v. Lindgren Foundry Company, 1 PCB 11. The burden for proving arbitrary and unreasonable hardship is placed upon the Petitioner in of the Act §§31 (c) and 35. Caterpillar has alleged that a refusal by the Board to grant the requested variance could result in a cessation of Caterpillar's production activities. However, denial or dismissal of a variance is not, in and of itself, a shutdown order. Eltra Corporation v. EPA, 19 PCB 143. Caterpillar has not proved that its particulate emissions do not cause or contribute to a violation of the ambient air quality standards in the area affected. Maintenance of the ambient air quality is essential to the health and welfare of the people. Therefore, Caterpillar has not met its burden of proving that the hardship imposed by our dismissal of this variance petition so far outweighs the benefit to public as to be "arbitrary and unreasonable." The Board therefore dismisses Caterpillar's Petition for Variance.

ORDER

It is the Order of the Pollution Control Board that Caterpillar's Petition for Variance from Rules 103 and 203 of the Air Regulations be and is hereby dismissed.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on day of Telmus , 1976 by a vote of **S-O**

> Christan L. Illinois Pollution Control Board