

ILLINOIS POLLUTION CONTROL BOARD
June 18, 1976

DEERE AND COMPANY,)
)
) Petitioner,)
)
) v.) PCB 76-82
)
) ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

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

This matter comes before the Board upon a Variance Petition filed by Deere and Company (Deere) on March 26, 1976 requesting variance from Rule 205(f), Rule 103(a) and Rule 103(b) of Chapter 2 Air Pollution Control Regulations (Regulations) from June 1 until October 29, 1976.

Deere requests the variance for their facility known as the Plow and Planter Works which is located in Moline, Illinois, in Rock Island County. The purpose of the variance is to allow Deere to perform research and development work on a pilot solvent recovery system. The goal of this work is to capture and reuse photochemically reactive material. At the present time the installation is in compliance with the Board's Regulations under Rule 205(f). Deere now proposes to switch to the use of photochemically reactive material in order to test the pilot solvent recovery system. The use of this photochemically reactive material would cause the flowcoat painting system's emissions to violate Rule 205(f). The pilot solvent recovery system consists of a carbon adsorption system that will receive emissions from the flowcoater at a rate of 800 cfm. This amounts to approximately 5% of the volume of the photochemically reactive material emissions from the flowcoater during the time the recovery system is being used. Deere estimates the maximum emission rate of such photochemically reactive material during the period of

the requested variance would be about 77 pounds per hour. The maximum allowable emission rate for photochemically reactive materials under Rule 205(f) is 8 pounds per hour.

The test period is necessary, according to Deere, to ascertain whether an 85% control efficiency can be achieved. Periodically the charcoal bed will have to be totally removed and transported to a laboratory to extract the recovered solvents. Deere has found that the non-photochemically reactive solvents are not adsorbed by the carbon as readily as the photochemically reactive materials. In addition, because the solvents are driven from the adsorbing medium by steam stripping and the steam is then separated from the solvent vapors by condensation, water soluble solvents are not a suitable subject for recovery.

Deere's research into the operation of a solvent recovery system would result in very favorably long-range consequences with respect to elimination of hydrocarbons from the atmosphere. Testimony at recent regulatory hearings concerning ozone indicate that the reduction of all types of hydrocarbons from the atmosphere may be necessary to eliminate the ozone problem as it now exists (R75-5). The unreasonable and arbitrary hardship claimed by Deere in this case is the necessity, without a variance, to install some sort of abatement equipment such as an afterburner during the duration of the experimental work.

The Illinois Environmental Protection Agency (Agency) in its May 28, 1976 Recommendation agrees with Deere's estimation of the situation and proposes that Deere be granted the requested variance. In addition, the Agency points out that variance from Rule 103(a) is unnecessary once variance from the underlying substantive standard, Rule 205(f), is granted. Furthermore, the Agency points out that the Board in the past has consistently denied variances from the requirement of obtaining an operating permit such as in Rule 103(b). Another point brought out by the Agency in its Recommendation is the fact that the period of time requested in the variance petition includes the months of high ozone incidence in certain areas of the state. The Agency requests that Deere be required to cease all operations of its flowcoat painting operation during the period of any applicable ozone alert which occurs between June 1 and October 29, 1976.

Considering the importance of the proposed experimental work to be done by Deere and the unreasonable and arbitrary hardship which would be incurred by Deere if it were forced to put in temporary abatement equipment during this time, the Board will grant

Deere variance from Rule 205(f) of Chapter 2 of the Regulations from June 1, 1976 until November 1, 1976.

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

ORDER

It is the Order of the Pollution Control Board that

1. Deere and Company be granted variance from Rule 205(f) of Chapter 2 of the Air Pollution Control Regulations for its Plow and Planter Works in Moline, Illinois, from June 1, 1976 until November 1, 1976 except that should an ozone alert be called by the Illinois Environmental Protection Agency for the area including the aforesaid facility, Deere and Company shall cease all flowcoat painting operations at the facility during the duration of said alert.
2. Variance from Rules 103(a) and 103(b) of Chapter 2 of the Air Pollution Control Regulations is hereby denied.
3. Within 35 days of the date of this order, Petitioner shall execute and forward to the:

Control Program Coordinator
 Division of Air Pollution Control
 2200 Churchill Road
 Springfield, Illinois 62706

A Certification of Acceptance and agreement to be bound to all terms and conditions of the variance. The form of said Certification shall be as follows:

CERTIFICATION

I, (We) _____ having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 76-82 hereby accept said Order and agree to be bound by all the terms and conditions thereof.

SIGNED _____

TITLE _____

DATE _____

Mr. Dumelle dissented.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 18th day of June, 1976 by a vote of 4-1.


Christan L. Moffett, Clerk
Illinois Pollution Control Board