

ILLINOIS POLLUTION CONTROL BOARD
November 29, 1973

FORD MOTOR COMPANY,)
)
 Petitioner,)
)
 vs.) PCB 73-265
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

Allan W. Masters and Sheldon A. Zabel, Attorneys, on behalf
of Petitioner,
John E. Slattery, Assistant Attorney General, on behalf of
the Environmental Protection Agency.

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

On June 26, 1973, Petitioner, Ford Motor Company,
filed its Petition for Variance in the captioned cause.
On September 24, 1973, Petitioner filed an Amended
Petition for Variance. Petitioner operates an automobile
assembly plant located in Chicago, County of Cook, Illinois.

The subject facility includes, inter alia, a painting
operation consisting of paint spray booths, bake ovens
and a flow coating operation. Petitioner seeks a variance
from Section 9 (a) of the Environmental Protection Act
until October 1, 1974, during which time a course of
corrective action for odor abatement would be implemented
and evaluated at the subject facility.

Studies of the extent and nature of odors and control
techniques would be conducted simultaneously. Petitioner
states that if the proposed control program does not
achieve compliance an additional program will be developed
by December 1, 1974.

Petitioner states (Amended Petition for Variance,
p. 1) that the extent of odor emissions from assembly
plant operations is unknown, both in quantity and quality.
However, in paragraph 5 of its Recommendation, the Agency
alleges that the presence in the atmosphere of these odors
causes air pollution as defined in Section 3 (b) of the
Environmental Protection Act.

Agency calculations indicate the following solvent emission rates from the subject facility:

<u>Material</u>	<u>Emission Rate (lb/hr)</u>
Primer solvents	321
Enamel solvents	551
Sealer and deadener solvents	120
Small parts flow coat solvents	11

Petitioner is in the process of converting from photo-chemical to non-photochemically reactive solvents and expects the conversion to be completed by December 31, 1973. The Agency states that this conversion will lead to compliance with Rule 205 (f) of Chapter 2, Part II of the Pollution Control Board Regulations. However, the Agency notes that an odor problem may still remain due to the Small Parts Flow Coat operation, which utilizes non-photochemically reactive solvents and still contributes to the objectionable odor surrounding Petitioner's facility.

Petitioner utilizes water spray curtains to control particulate emissions from the paint spray booths. Recent inspections by Agency surveillance personnel revealed that the water spray curtains are being operated at optimum levels of efficiency and are controlling particulate emissions to within the prescribed standards.

Petitioner has organized a paint odor reduction task force to study odors which emit from its various paint operations throughout the country. The study is being conducted during the period of the Variance sought and results will be available in early 1974. If the conversion to non-photochemically reactive solvents and the proposed control program in the Small Parts Flow Coat operation is not successful in eliminating an odor nuisance, then Petitioner will utilize the results from the paint odor reduction task force and submit an additional odor abatement control program after the completion of the control program for the Small Parts Flow Coat operation.

Petitioner believes that the primary source of odors at this plant emanates from the Small Parts Flow Coat operation. Petitioner proposes an odor abatement control program for the Small Parts Flow Coat operation, which includes the following:

- 1) Revision of the exhaust duct system to improve air flow.
- 2) Installation of an afterburner for the exhaust gas streams which have been identified as conveying odors. Tentative plans call for a direct gas-fired afterburner to operate at approximately 1400°F. Heat exchangers and other measures will be incorporated in the system's design to minimize fuel consumption.
- 3) As an alternative to the afterburner, Petitioner is also investigating the use of a wet scrubber utilizing specific chemical solutions to control the odors.

Regardless of what system Petitioner utilizes (a scrubber or an afterburner) the control program on the Small Parts Flow Coat operation will be completed by October 1, 1974. The availability of gas to operate the afterburner will be the determining factor in Petitioner's decision of whether or not to install an afterburner or a scrubber. Petitioner estimates that the cost of the control devices on the Small Parts Flow Coat operation could exceed \$500,000. The Agency is of the opinion that a properly designed afterburner or scrubber would eliminate the effluent which contributes to the odor nuisance emanating from Petitioner's facility.

The Agency is not able to evaluate what the exact effect will be when Petitioner switches from photochemically reactive solvents to non-photochemically reactive solvents on its paint spray booths. The Agency is of the opinion that photochemically reactive solvents from the paint spray booths and bake ovens will be eliminated. These solvents emit fumes which often are the source of odors. It is likely that the new solvent will not contain fumes which contribute to the odor problem that exists around Petitioner's plant. It is possible, therefore, that switching to non-photochemically reactive solvents and the installation of a properly designed afterburner or scrubber in the Small Parts Flow Coat operation could significantly reduce emissions from Petitioner's facility to a level where it would not cause air pollution as defined in Section 3 (b) of the Environmental Protection Act.

However, it is possible that upon completion of this project, odors could emanate from Petitioner's plant which

do constitute a violation of Section 9 (a) of the Environmental Protection Act and cause air pollution as defined in Section 3 (b) of the Environmental Protection Act. If at that time an odor problem continues to exist, Petitioner states it will develop a new program for the abatement of any remaining odors, based upon the results of the paint odor reduction task force.

The Agency recommends that the subject variance be granted. We feel that Petitioner's proposed odor abatement plan, and the expense attendant thereto, manifest a resolve to abate the problem and a good likelihood of achieving same in the near future. Accordingly, the variance is granted, subject to conditions.

Finally, we feel that a bond in the amount of \$100,000 is appropriate to insure completion of the conversion to non-photochemically reactive solvents by December 31, 1973, and the completion of the installation of an afterburner or a scrubber on the Small Parts Flow Cost operation by October 1, 1974. However, we feel that Petitioner is in a position to furnish its own bond, and no surety will be required.

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

ORDER

IT IS THE ORDER of the Pollution Control Board that Petitioner, Ford Motor Company, be granted a Variance from Section 9 (a) of the Environmental Protection Act as regards its painting operation at the subject facility until October 1, 1974, subject to the following conditions:

1. Petitioner shall complete the conversion to non-photochemically reactive solvents by December 31, 1973;
2. Petitioner shall have operational a properly designed afterburner or scrubber on the Small Parts Flow Coat operation by October 1, 1974. Petitioner shall obtain all necessary construction and operating permits for this control device;
3. Petitioner shall submit to the Agency during the period of this Variance all applicable reports or documents of the paint odor reduction task force;

4. Petitioner shall submit, in writing, to:

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

progress reports indicating progress towards completion of the control program;

5. Within thirty-five (35) days of the date of this Order, Petitioner shall post a Performance Bond in the amount of \$100,000 in a form satisfactory to the Agency. Said bond shall be submitted to:

Illinois Environmental Protection Agency
Fiscal Services
2200 Churchill Road
Springfield, Illinois

Said bond shall insure completion of the conversion to non-photochemically reactive solvents by December 31, 1973 and the completion of the installation of an afterburner or a scrubber on the Small Parts Flow Coat operation by October 1, 1974.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted this 29th day of November, 1973 by a vote of 5 to 0.

Christan L. Moffett