

ILLINOIS POLLUTION CONTROL BOARD
April 25, 1974

AMF INCORPORATED,)
)
Petitioner,)
)
vs.) PCB 74-8
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

Mr. John V. Hayes, attorney, on behalf of Petitioner;
Mr. Thomas R. Casper, Attorney, on behalf of the Environmental Protection Agency.

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

On January 4, 1974, AMF Incorporated filed its Petition for Variance seeking therein variance from the provisions of Rule 205(f) of Chapter 2, Part II of the Air Pollution Regulations. The variance would apply to four operating permits previously granted to Petitioner's AMF Wheel Goods Division located near Olney, County of Richland, Illinois.

The operating permits involved are:

<u>Permit No.</u>	<u>Operation of</u>
03010550	Bicycle Paint
03010552	Flow Coating
03010553	Car and Tractor Paint
03010554	Velocipede Paint

Petitioner's Olney facility is engaged in the manufacture of bicycles and children's wheel goods. The Petition relates to the use of photochemically reactive solvents in Petitioner's bicycle paint, flow coating, car and tractor paint, and velocipede paint operations.

In 1972, Petitioner employed an engineering consulting firm to determine its facility's compliance with Illinois air pollution regulations. This data was subsequently utilized in filing the facility's operating permit applications. The study revealed, inter alia, that the four assembly line painting processes detailed above were each discharging more than 8 lbs/hr of organic material into the atmosphere, in violation of Rule 205(f).

In December 1972, Petitioner filed operating permit applications for these emission sources specifying compliance through change of solvents. On January 1, 1973, Petitioner made the change to exempt solvents (allegedly at a 50% continuous operating cost penalty over non-exempt solvents) and the operating permits were granted in March of 1973. Petitioner now asserts that a variance is necessary because major shortages of exempt solvents

have recently developed in the marketplace due to the worldwide shortage of petrochemical products and that Petitioner has been unable to procure sufficient exempt solvents to achieve continued compliance.

The raw materials processed through the subject facility and their emission sources are the solvent based paints and the metal bicycle and wheeled toy frames. The combined weight of all materials processed is approximately 13,100 lbs./hr.. The paint pigment solids and solvents constitute about 630 lbs./hr. of the combined process weight rate, the remainder consisting of metal parts.

The following are Petitioner's estimates of the quantity and type for the uncontrolled emission of contaminants by each of the subject emission sources:

<u>Permit No.</u>	<u>Quantity (lbs. per hour)</u>	<u>Type</u>
03010550	18.6	Hydrocarbons as CH ₄
03010552	15.4	Hydrocarbons as CH ₄
03010553	26.5	Hydrocarbons as CH ₄
03010554	8.0	Hydrocarbons as CH ₄

The Agency, however, takes issue with the above rates and computes the rates to be:

<u>Permit No.</u>	<u>Quantity (lbs. per hour)</u>	<u>Type</u>
0 3010550	20 lbs/hr.	Hydrocarbons as CH ₄
0 3010552	15 lbs/hr.	Hydrocarbons as CH ₄
0 3010553	33 lbs/hr.	Hydrocarbons as CH ₄
0 3010554	28 lbs/hr.	Hydrocarbons as CH ₄

Petitioner, in its response to the Agency Recommendation, mentions but takes no issue with the Agency computations.

Petitioner asserts that the marketability of wheeled toys and bicycles is substantially influenced by the cosmetic appeal of glossy finishes provided by solvent based paints and that at the present time the existing technology of painting processes offers glossy finishes only for solvent based paints.

The Agency notes for our consideration that Ford Motor Company and General Motor have had some success with water-based paint for automobiles, and have achieved cosmetic glosses. It appears, however, that the major automotive manufactures have restricted their use of water reducible watings to electro-deposition and dip applications of primers and shop coats in browns, grays and blacks, where cosmetic appearance of the finished product is not a factor. General Motors has 200 units in field service, finished with water reducible acrylic enamel in solid (non-metallic) colors. However, this is strictly in the experimental stages. (See Petitioner's Response to Respondent's Recommendation, p.9.).

The Agency suggests that Petitioner might use water-based paint as an undercoating. Petitioner replies that it has determined that such a procedure is not feasible, based on the technical consideration that the aluminum particles, used in and essential to the undercoat paint, hydrogenate in the presence of water. Such hydrogenation, it is argued, destroys the desired qualities and, indeed, the objective of the undercoat paint which is primarily to enhance the appearance of the final product. (See Petitioner's Response To Respondent's Recommendation, p.8.).

The Agency notes that thermal incineration afterburners would require 20,000 cubic feet of natural gas per hour and that it is unlikely that Petitioner could obtain natural gas in such quantities.

Although the Agency recommends that a variance be granted, subject to certain conditions, its primary concern appears to be that Petitioner has too lightly dismissed the possibility of compliance by the installation of a solvent recovery system. The Agency notes that a solvent recovery system has been installed at Petitioner's Lawville, New Jersey plant, although there are major differences between the two operations.

Petitioner has addressed this point in its Response To Respondent's Recommendation. Although it appears that installation of a solvent recovery system at the subject facility may well be impractical, we are of the opinion that our decision in the matter would be facilitated by a more thorough and detailed exposition by Petitioner and further enlightened by an Agency response thereto. Petitioner's request for variance will be granted in the interim.

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

IT IS THE ORDER of the Pollution Control Board that Petitioner be granted a variance from the provisions of Rule 205(f) of Chapter 2, Part II of the Air Pollution Regulations until September 30, 1974, subject to the following conditions:

1. On or before June 30, 1974, Petitioner shall submit to the Agency and this Board a report regarding feasibility and practicality of installing a solvent recovery system at the subject facility.
2. On or before July 31, 1974 the Agency shall submit to this Board and to Petitioner such comment on Petitioner's report as is deemed appropriate.
3. On or before August 31, 1974, Petitioner shall submit to this Board and the Agency any pertinent information regarding the Agency comment.
4. During the period of this variance, Petitioner shall continue to seek out sources of exempt solvents, and use same whenever available.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted on this 25th day of April, 1974 by a vote of 5-0.

Christan L. Moffett