

ILLINOIS POLLUTION CONTROL BOARD  
October 25, 1973

BARRETT VARNISH COMPANY )  
PETITIONER )  
 )  
 )  
 v. ) PCB 73-341  
 )  
 )  
 ENVIRONMENTAL PROTECTION AGENCY )  
 RESPONDENT )  
 )

N. J. FELLER, JR., EXECUTIVE VICE-PRESIDENT AND TREASURER, on behalf of BARRETT VARNISH COMPANY  
LEE A. CAMPBELL, ASSISTANT ATTORNEY GENERAL, on behalf of the ENVIRONMENTAL PROTECTION AGENCY

OPINION AND ORDER OF THE BOARD (by Mr. Marder)

This action involves a variance petition filed by Barrett Varnish Company. Petitioner seeks relief from Rule 203 (b) relating to particulate emissions.

Barrett Varnish Company owns and operates a facility for the manufacture of specialty paints, varnishes, and other surface coatings. The reactants (alkid resins) are prepared in gas-heated covered kettles. Heating, cooling, mass transfer and thinning are among the unit operations employed by Petitioner. The facility is located in Cicero, Illinois.

The Agency recommends a grant, but points out that compliance with 203 (a) rather than 203 (b) is required. Petitioner's compliance plan will allow compliance with 203 (a).

Contaminants emitted into the atmosphere are typically particulate matter (primarily sublimed phthalic anhydride), water, and oil. Petitioner claims a ratio of 40%, 40%, and 20%. Stack tests performed yield the following results:

Particulate emissions	7.3 lbs/hr.
Hydrocarbons	3.6 lbs/hr.

These emissions are per reactor.

Petitioner operates no more than two reactors at any one time. Rule 207 (f) calls for an allowable emission rate of eight pounds per hour, so Petitioner is clearly in compliance in this respect.

Rule 203 (a), based on Petitioner's charge of 1400 pounds and a process time of 7 hours, allows an emission rate of 0.77 lbs/hr. Therefore a reduction of 91% is required for compliance.

Petitioner proposes to install a high energy air filter (HEAF) (manufactured by Johns-Manville Corporation) on its discharge air stream. This filter has been shown to be 95% efficient and will thus allow compliance with 203 (a).

Hardship: Petitioner claims that an unreasonable and arbitrary hardship will be imposed if this variance is not granted. Failure to grant said variance will result in the forced shutdown of Petitioner's operation, resulting in several thousand dollars of loss and a potential layoff of personnel. It is also claimed that compliance could not have come sooner in that the high energy air filter has only become available in the past few months.

Environmental Impact: Cicero is a fairly highly polluted section of the state. The Illinois Environmental Protection Agency air monitoring network report of August 16, 1973, states that the 24 hour max. was found to be 180 ug/m<sup>3</sup>, with a primary and secondary air quality standard of 260 ug/m<sup>3</sup> and 150 ug/m<sup>3</sup> respectively.

Petitioner has calculated that the contribution would be 10 ug/m<sup>3</sup>. This is equivalent to 6.5 percent of the 24 hour max. of 180 found in the area. For a facility as small as Barrett this contribution is exceedingly high. Furthermore, Petitioner's figures reflect only one reactor's emissions, while in fact two reactors were running at the same time. This fact would double the emissions to 20 ug/m<sup>3</sup>. Petitioner's own calculations use a dilution ratio of 10,000 at the discharge of the stack. This ratio seems very low, and it is evident that the 6.5 percent figure used above is out of proportion (very high) in relationship with Petitioner's discharge. However, due to the sparsity of data available, we must proceed on the assumption that the emissions generated are indeed a significant amount.

Petitioner feels that the earliest possible compliance date would be April 15, 1974. In its compliance schedule a five-month period is allowed for installation and a one-month period for testing. There is no evidence as to why five months will be required for a filter installation and certainly no justification for a one-month testing period. The Board feels that due to the potential health hazard in the Cicero area all efforts must be made to expedite the compliance plan.

A shortened variance will be granted to demonstrate the Board's concern in the matter. Although it will not be an explicit order, Petitioner is reminded that all efforts should be employed to expedite the installation of the high energy air filter. This should include the use of overtime and Saturday work.

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

IT IS THE ORDER of the Pollution Control Board that a variance be granted to Barrett Varnish Company from Rule 203 (a) until January 15, 1974, subject to the following conditions:

- A) This variance shall terminate in 10 days following installation of a 95% efficient high energy air filter or January 15, 1974, whichever occurs first.
- B) Petitioner shall submit progress reports in writing to:
  - Environmental Protection Agency
  - Division of Air Pollution Control
  - Variance Section
  - 2200 Churchill Road
  - Springfield, Illinois 62706Said reports shall be submitted on the last day of each month until expiration of said variance, with a final report due upon completion and testing of installation. Said reports shall contain as a minimum:
  - 1) Progress made towards completion of the proposed control program.
  - 2) Estimated completion date.
  - 3) Steps taken to expedite completion.
- C) Petitioner shall apply for all necessary construction and operating permits.
- D) Respondent shall, within 35 days from the date of this order, post a performance bond in a form satisfactory to the Agency in the amount of \$4,000, guaranteeing compliance with the orders herein provided.

IT IS SO ORDERED.

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 25<sup>th</sup> day of October, 1973, by a vote of 5 to 0.

Christan L. Moffett