

ILLINOIS POLLUTION CONTROL BOARD  
June 28, 1973

JOHNS-MANVILLE PERLITE CORPORATION, )  
ROCKDALE PLANT )  
 ) #73-60  
v. )  
 )  
ENVIRONMENTAL PROTECTION AGENCY )

ROBERT JOYCE, APPEARED ON BEHALF OF PETITIONER  
STEVEN G. BONAGUIDI, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF  
OF ENVIRONMENTAL PROTECTION AGENCY

OPINION AND ORDER OF THE BOARD (BY SAMUEL T. LAWTON, JR.):

Petition filed by Johns-Manville Perlite Corporation seeks variance from the provisions of Rules 203(b), 205(f) and 206(a) of Chapter 2: Air Pollution, of the Illinois Pollution Control Board Rules and Regulations, until September 28, 1973. The foregoing Rules are not presently in effect nor will they be by September 28, 1973. Accordingly, we construe the foregoing petition as one seeking relief from the requirements of Rule 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution, which presently limit the amount of particulates that may be emitted into the air. The difficulty with the present application for variance is that petitioner makes no representation that it will be in compliance by September 28, 1973, but only that it will submit a compliance program by June 30, 1973, which will delineate a program as yet unascertained that will, at some unspecified date, bring the operation into compliance.

Petitioner represents that prior to June 30, 1973, it will submit an application for extension of variance should this appear necessary in light of its compliance program. As of the date of this opinion, no compliance program nor application for extension of variance has been received.

We further note that while the hearing on the amended petition was held on April 26, 1973, the transcript was not received by the Board until May 31, 1973.

Petitioner's plant is located south of Joliet and is engaged in the manufacture of mineral-type roof insulation board, decorative ceiling tile and ground perlite filter aids. Its 1973 sales are anticipated in the amount of \$13,000,000. The plant employs approximately 276 personnel in production, administration and sales. The specific variance petition relates to the Fesco roofing board insulation department. Fesco is a mineral type fire-resistant roof insulation which is applied to dead level roofs in industrial and

commercial construction. The Fesco production process is described as follows: perlite ore is received in bulk rail cars. The ore is unloaded and transferred to nine perlite expanders where the ore is expanded to useable form. Waste newspaper is recycled by returning the waste paper to pulp form through the use of a hydro-pulper. Bags of starch are mixed with water to form a starch slurry. The expanded perlite, news pulp, starch slurry and asphalt water emulsion are wet mixed in a series of headboxes and deposited on a four-drinier wire where the product is formed, pressed to desired thickness and partially dewatered. The board is then cut into large sheets and loaded into a five zone, eight deck Coe dryer, where the water remaining in the product is driven off. The board is then trimmed to final size and packaged for shipment.

Stack tests conducted by an independent testing laboratory disclose that the dryer stacks were emitting particulates that conceivably would violate the existing regulations. While the original computation indicated emissions in the amount of 73.4 pounds per hour of particulates based on a process weight rate of 93,000 pounds per hour, subsequent analysis indicates emissions of only 49.6 pounds per hour against an allowable emission rate of 47.2 pounds per hour. While part of this difficulty is attributable to what the Company construes to be non-particulate emissions, it is noted that the difference between the permissible limits and the computed limits is not particularly great and we will assume for purposes of this proceeding that the 49.6 pounds per hour is, in fact, a particulate emission rate. In the event it is determined that the particulate emission rate is not exceeded then, of course, no variance would be needed or appropriate.

The original measurements likewise reflected emissions of contaminants in addition to particulates, as follows:

CO	221.74 lb/hr
SO <sub>2</sub>	.07 lb/hr
NO <sub>2</sub>	17.6 lb/hr
CH <sub>4</sub>	35.2 lb/hr

The foregoing emissions were attributed to incomplete combustion at the time the stack tests were conducted, which the Company felt could be eliminated by adjustment and re-balancing of the dryer. To further explore, the dryer was removed from service between December 4 and December 14, 1972, and a task team created to study the problem. During the shut-down new burners were installed in zones 1 and 2, which are believed to have lessened the emissions both in zones 1 and 2 and zones 3, 4 and 5 because of interaction between the zones. Other correction work was made during the shut-down, including the installation of new burner parts in zone 3 and the installation of new baffles in zones 1 and 2. New stack tests were conducted on all dryer zones during the week of February 12, 1973.

While at the hearing, the Company represented that the most recent stack tests indicated a situation of possible compliance with the particulate regulations, it still is desirous of taking all necessary steps to assure that compliance has been met. There is a possibility that the emissions may still be in violation, despite the corrective action taken.

The Company proposes to conduct a pilot test program with a high energy air filter system known as HEAF, which has been developed and marketed by the Company for control of air contaminants. A pilot installation will be made on one of the five dryer stacks to estimate if the HEAF system will be able to conform with the regulations. Although the petition indicates that this testing would be done in March, at the April 26, 1973 hearing it appears that this testing has not been finalized so that as of the date of the hearing, we are not informed whether the HEAF system would be adequate and must assume, for the purpose of this variance, that other systems must be explored. These include a wet-electrostatic precipitator, a high energy scrubber and a cloth collector. While these presumably will be conducted simultaneously with the HEAF pilot test, it is estimated that a minimum of 2-1/2 months will be needed to complete the technical feasibility studies described.

Based upon the foregoing tests, the Company anticipates that it will conclude by June 30, 1973, its determination as to what system will be the most appropriate and will file such further petitions as are necessary to enable an extension of variance to provide adequate time for the installation of the abatement program selected to achieve full compliance. Following completion of the studies, the abatement system will be selected, lay-outs prepared, specifications drawn up and ordered and the variance petition submitted. The variance request to September 28, 1973 is in contemplation of a further extension being submitted no later than June 30, 1973, which would be acted on within 90 days pursuant to statutory requirement or before September 28, 1973, which would eliminate any gap in the protective shield granted by a variance in the event the emissions do, in fact, violate the relevant regulations. While we are not normally disposed to grant a variance in the absence of a definitive plan of compliance, we believe that the relatively small amount of particulate emissions in excess of the applicable limits, justifies the allowance, in consideration of the Company's represented program for developing and installing an abatement system. The hardship imposed on the community in the event the variance is granted does not appear significant, as compared to the hardship on the Company in the event the variance is denied, requiring either the imposition of a penalty or the curtailment of production.

We grant petitioner variance until September 28, 1973, from the provisions of Rule 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution.

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

IT IS THE ORDER of the Pollution Control Board that:

1. Petitioner, Johns-Manville Perlite Corporation, be granted a variance from the provisions of Rule 3-3.111 of the Rules and Regulations Governing the Control of Air Pollution until September 28, 1973, to enable petitioner to submit to the Board and the Agency a definitive plan for the installation of abatement equipment to bring its operation into compliance with the relevant regulations.
2. The Board retains jurisdiction of this matter for such other and further order as may be appropriate based on submissions made by petitioner.

I, Christan Moffett, Clerk of the Pollution Control Board, certify that the above Opinion and Order was adopted on the 28<sup>th</sup> day of June, 1973, by a vote of 3 to 0.

Christan D. Moffett