

ILLINOIS POLLUTION CONTROL BOARD  
October 10, 1974

E. I. DU PONT DE NEMOURS & COMPANY )  
PETITIONER )  
 )  
 )  
 v. ) PCB 74-142  
 )  
 )  
 ENVIRONMENTAL PROTECTION AGENCY )  
 RESPONDENT )  
 )

JAMES C. HILDREW, ATTORNEY, in behalf of E. I. DuPont de Nemours & Company  
RONALD LINICK, ATTORNEY, in behalf of the Environmental Protection Agency

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

This case comes to the Board on Petition of E. I. Du Pont de Nemours & Company, filed April 22, 1974, requesting variance from Rule 207 (d) (2) of Chapter 2 of the Board's Rules and Regulations for its weak nitric acid plants, No. 1 and No. 2, at Seneca, Illinois, until March 31, 1975.

On April 25 the Board issued an Order requiring Petitioner to submit more information on the data base used to conclude that there was no violation of the ambient air quality standards in 1973 and also to submit current monitoring data on ambient air quality in the period of time before the information was due.

On June 26, 1974, Petitioner filed its Amended Petition for Variance, containing the information requested.

The Agency filed its recommendation September 19, 1974. Its recommendation is to grant the variance until March 31, 1975.

Petitioner operates three weak nitric acid plants, which use the ammonia oxidation process. Plants 1 and 2 were operating under a variance granted in PCB 73-325 (Order dated October 18, 1973), until July 15, 1974. Plant #3 is in compliance with the Board regulations.

The plants make nitric acid which is used in the manufacture of ammonium nitrate prills for explosives. Each plant has a design capacity of 55 tons per day with a charge rate of 13,250 lbs. per hour, composed of 5% steam condensate, 5% anhydrous ammonia, and 90% compressed air. Unit #1 was built in 1930 and Unit #2 was built in 1952.

Petitioner at the present time does not have control equipment to reduce emissions, but has been using operating procedures to reduce emissions. At capacity these units emit 34 lbs. NO<sub>x</sub> expressed as NO<sub>2</sub> per ton of 100% HNO<sub>3</sub> produced.

Petitioner's compliance plan for Plants 1 and 2 is the same as it was

for the previous variance matter. Petitioner intends to install a Union Carbide Pura-Siv "N" molecular sieve control system. In the previous matter it was determined that this equipment would bring about compliance with Rule 207 (d)(2). The equipment is estimated to cost \$500,000 installed.

In the original variance matter, Petitioner requested variance through October 1, 1974. The Board granted the variance until July 15, 1974. At the present time, Petitioner does not expect Union Carbide to ship the equipment until December 31, 1974, and to have the system in operation until March 31, 1975. The Agency in its Recommendation does not dispute these allegations. The delay in shipment by Union Carbide is through no fault of Petitioner.

Hardship:

Petitioner alleges that failure to grant variance from Rule 207 (d)(2) will be an unreasonable and arbitrary hardship on Petitioner in that it has not been able to comply with the previous Board order through no fault of its own, and has been diligent in its attempt to bring the plants into compliance. Petitioner further alleges that if the variance is denied, the plants will be shut down, causing a loss to Petitioner of \$5,300,000 per year sales volume of nitric acid and associated products. Shut down would also pose hardship to Petitioner's customers who would have to find other sources of supply and pay for extra freight. Four to twelve jobs would be lost if the plants were to shut down.

Environmental Impact:

Petitioner alleges that in the area in which these plants are emitting, the National Ambient Air Quality Standards for nitrogen dioxide are not exceeded. In support of that statement, Du Pont contracted with ARRO Labs, Joliet, Illinois, to conduct a four-week monitoring program. The monitoring was done from May 27, 1974, through June 20, 1974. The national standard is 0.053 ppm (annual mean). The monitoring data revealed that beyond the perimeter of the plant site the average mean was 0.010 ppm.

It should be noted that the Agency has raised an issue as to the reliability of monitoring data for 28 days with no base line meteorological data. It is true that this data is subject to question, but the Board finds that Petitioner made a good faith effort to supply the information requested in our More Information Order.

The Board will grant the requested variance until March 31, 1975. Petitioner has carried forth its compliance program in good faith and the delay occurred through no fault of Petitioner.

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 variance from Rule 207 (d)(2) of Chapter 2 of the Board's Rules and Regulations for Petitioner's No. 1 and No. 2 weak nitric acid plants is granted until March 31, 1975, or the date when the Union Carbide Pura-Siv "N" controls are installed and operating, whichever is sooner, subject to the following conditions:

- 1) Petitioner shall continue to submit to the Environmental Protection Agency, Division of Air Pollution Control, 2200 Churchill Road, Springfield, Illinois, 62706, bi-monthly progress reports detailing:
  - a) Progress made on the installation of the molecular sieve on Plants #1 and #2;
  - b) Amount of acid produced by Plants #1, #2, and #3;
  - c) Amount of acid needed to meet Petitioner's external and internal needs.
- 2) Plants #1 and #2 shall only be operated when Plant #3 cannot meet demands.
- 3) The bond posted in compliance with the Order in PCB 73-325 shall remain in effect to guarantee construction and installation of equipment herein required.

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 10th day of October, 1974, by a vote of 5 to 0.

