

ILLINOIS POLLUTION CONTROL BOARD

August 21, 1980

E. I. DU PONT DE NEMOURS & COMPANY,)
)
) Petitioner,)
)
) v.) PCB 79-106
)
) ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

MESSRS. RICHARD J. KISSEL AND THOMAS H. DONOHOE, MARTIN, CRAIG, CHESTER & SONNENSCHNEIN, AND CARL B. EVERETT, ATTORNEY AT LAW, APPEARED ON BEHALF OF THE PETITIONER.

MR. WILLIAM E. BLAKNEY, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by D. Satchell):

This matter comes before the Board upon a petition for variance filed May 14, 1979 by E. I. du Pont de Nemours and Company (Du Pont). The petition requests a variance from Rule 406 of Chapter 3: Water Pollution (Rules) and a declaration that the rule is applicable to Du Pont's Seneca Works. The petition was orally amended at the hearing so that it requests a variance for one year from the date of the Board Order (R. 8). On June 29, 1979 and February 14, 1980 the Environmental Protection Agency (Agency) recommended that the variance be denied. On May 9, 1980 a hearing was held in Morris. There is no indication of public participation in the hearing and the Board has received no public comment.

The requested variance is from the second sentence of Rule 406: "Sources discharging to [the Illinois River] and whose untreated wasteload cannot be computed on a population equivalent basis comparable to that used for municipal waste treatment plants and whose ammonia nitrogen discharge exceeds 100 pounds per day shall not discharge an effluent of more than 3.0 mg/l of ammonia nitrogen." The Board previously granted Du Pont a variance from Rule 406 (PCB 76-30, 30 PCB 353, June 8, 1978). The record in that variance proceeding is incorporated by reference (R. 9).

Du Pont operates a chemical plant known as the Seneca Works on a 1083 acre site four miles east of Seneca, largely in Secs. 29 and 30, T. 33 N., R. 6 E., 3 PM, Grundy County (Ex. 1). Du Pont originally purchased the facility in 1928. At that time a dynamite

factory existed on the site. The Seneca Works now primarily produces Elvace (an adhesive), nitric acid, Tovex (a water gel explosive) and industrial grade ammonium nitrate prills. During 1979 the Seneca Works produced over 700 million pounds of the named products (R. 18).

The plant is situated on bluffs south of the Illinois River. Various discharges from the plant are directed toward a ditch which follows the natural contour of the ground. This ditch flows about 4000 feet to the base of the bluffs (R. 19, 47). There it enters a system of five ponds prior to discharge into the Illinois River (R. 23). The following sources discharging to the ditch are identified (R. 63; Exs. 13, 14).

	<u>¹Ml/day</u>	<u>²MGD</u>	<u>Contaminants</u>
Prill manufacture area: runoff storage lagoon	0.05	0.012	Nitrogen
Prill plant: sewer treatment plant (STP)	0.02	0.004	-----
Nitric acid plant: cooling tower blowdown	2.04	0.540	Chromium, Nitrogen, Zinc
Elvace adhesive: equipment washings and cooling tower blowdown	0.76	0.200	Oxygen demand, suspended solids, chromium, zinc
Powerhouse: boiler blowdown, cooling water, reservoir overflow, water softener blowdown	0.83	0.220	Suspended solids
Tovex explosive plant: STP	³ ----	-----	-----
Tovex explosive plant: recycle system overflow	0.10	0.026	-----
Total	3.80	1.00	
Total Discharge (Ex. 13)	4.46	1.18	

¹Megaliters (10⁶ liters) per day

²Million gallons per day

³Volume not given

The details of the production processes are more fully discussed in the previous Opinion. In the two years before the previous variance, Du Pont had reduced its ammonia nitrogen discharges from 4700 to less than 500 pounds per day on a monthly average. As a condition of that variance, Du Pont was not to exceed 350 pounds per day on a monthly average nor more than 700 pounds of ammonia nitrogen on a daily maximum. Du Pont complied with this and the other terms and conditions of the variance with the exception of an ammonia nitrogen excursion during April 1979 (R. 82). The annual average during 1978-1979 was 135 pounds per day (R. 83). Du Pont now requests a one year variance with limitations of 200 pounds per day on a monthly average and 400 pounds per day on a daily maximum. After that Du Pont expects to meet the 100 pound per day limitation (R. 84).

Additional steps Du Pont proposes to take include the following:

1. Final selection of the prill north ditch pretreatment containment method.
2. Installation of additional diking to reduce backflow of the Illinois River into the lagoon outfall.
3. Improvement of spill containment facilities and procedures to provide additional diversion and retention of ammonia, nitrogen leaks in the prill plant nitric acid plant and water gel plant.

The Seneca Works operates under an NPDES permit (R. 6). At the time of the hearing the renewed permit was in the draft stage. This permit provides for seven outfalls to the lagoon system rather than a single outfall from the lagoons to the Illinois River. The draft permit would require that Du Pont meet the water quality standards within the lagoon system. Rule 406 is applicable only to discharges to the Illinois and certain other rivers. The Agency therefore opposes a declaration that Rule 406 is applicable and recommends denial of the variance.

The record is clear that in 1973 through 1975 the Agency regarded the lagoons and ditch as an "industrial ditch" and not as waters of the State (R. 94). The original NPDES permit and the variance in PCB 76-30 were based on this assumption. In 1978 the Agency decided that the lagoons and ditch were waters of the State (R. 95). This was not brought about by any change in the law or the physical condition of the lagoons (R. 99). There was instead a reinterpretation of the topography. The original Agency decision was based on the assumption that the ditch and lagoons were man-made. The Agency decided that they were rather a natural drainage

course and depressions in the ground which had been modified to form a ditch and lagoon system (R. 97). There was also a change in Agency policy toward broadening the definition of waters of the State (R. 99). The Agency is not in a position to say whether the reclassification would improve water quality in the Illinois River (R. 100).

The Board has held that reclassification of streams as secondary contact rather than general use water under Rule 302 of Chapter 3 must proceed by way of regulatory change (Olin Corporation v. EPA, PCB 73-509, 510; 22 PCB 3, June 3, 1976; 5th Dist., 54 Ill. App. 3d 481, October 18, 1977).

Du Pont requests not a reclassification of its system, but a finding that it is and always has been an "industrial ditch." In a recent permit appeal the Board declined to broaden the "industrial ditch" exception (Armak Company v. EPA, PCB 79-153, March 20, 1980; Allied Chemical Corporation v. EPA, PCB 73-382, 11 PCB 379, February 28, 1973).

Du Pont contends that its facility meets the "industrial ditch" exception of the Allied Chemical and Armak Cases. The Board will not reach this issue but instead will address the argument that the Agency is precluded from reclassifying the stream where the permittee has expended money in reliance on the Agency's previous classification.

The earlier classification of this stream was unequivocal and was communicated to Du Pont. Since that time Du Pont has spend \$2.3 million on pollution control (R. 39). Had the ditch and lagoons been classified as waters of the State in 1972, Du Pont would have built a single large treatment facility and routed all the discharges to that facility. Only two projects representing \$500,000 of the \$2.3 million would have been undertaken had this option been followed. \$1.8 million of that money would be wasted if the waters were now classified as waters of the State. Du Pont contends that it would cost \$7 million to come into compliance with the water quality standards in the lagoons and that no environmental improvement would ensue. In addition Du Pont states it will close the Seneca Works, thus removing some 300 employees from employment in Illinois (R. 13).

The Board finds that Du Pont invested a substantial amount of money in reliance on the Agency's earlier classification that the ditch and lagoons were not waters of the State. The Board holds that the Agency is precluded in this case from making such a reclassification where no environmental improvement will result, where there has been no change in the facility or regulations and where the permittee has expended money in reliance on the previous classification.

The Agency does not contend that Du Pont has failed to comply with the terms of the previous variance. The Board finds Du Pont's performance satisfactory and further finds that Du Pont would suffer arbitrary or unreasonable hardship if not given another year to come into complete compliance with Rule 406. The variance will be granted subject to conditions.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

Petitioner E. I. du Pont de Nemours and Company is granted a variance from Rule 406 of Chapter 3: Water Pollution, subject to the following conditions:

1. This variance will expire on August 21, 1981.
2. Petitioner's discharge of ammonia nitrogen into the Illinois River shall not exceed 200 pounds per day on a monthly average.
3. Petitioner's discharge of ammonia nitrogen into the Illinois River shall not exceed 400 pounds on a given day.
4. Petitioner shall record daily and report monthly to the Environmental Protection Agency the volume of flow generated in the north prill ditch as runoff from the ammonia-nitrate production area. That report shall also contain measurements of the ammonia concentration of that flow.
5. Petitioner's August 1, 1980 motion to strike is denied.
6. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Variance Section, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the Certificate shall be as follows:

CERTIFICATION

I, (We), _____, having read and fully understanding the Order in PCB 79-106, hereby accept that Order and agree to be bound by all of its terms and conditions.

SIGNED _____

TITLE _____

DATE _____

6. The motion to amend the variance petition found on page eight of the transcript is granted.
7. The entire record in PCB 76-30 is incorporated by reference.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 21st day of August, 1980 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board