

ILLINOIS POLLUTION CONTROL BOARD

June 8, 1978

E. I. DU PONT DE NEMOURS AND COMPANY,)
)
) Petitioner,)
)
) vs.) PCB 76-30
)
) ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

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

This matter comes before the Board on the variance petition of E. I. du Pont de Nemours and Company (Du Pont) filed February 2, 1976 seeking relief for their Seneca Plant from Rule 406 of Chapter 3: Water Pollution Rules and Regulations of the Pollution Control Board which, in pertinent part, restricts ammonia nitrogen in effluents discharging into the Illinois River, inter alia, to not more than 3.0 mg/l if the total discharge of ammonia nitrogen exceeds 100 pounds per day. The said Petition was deemed inadequate by the Board and an Order, dated February 11, 1976, requested assurance that Du Pont would not be in violation of other regulations or rules and more specifically Rules 203(f), 402, and 401(c) of Chapter 3 and the Board's Procedural Rule 401(a)(6). A "Supplement to Petition for Variance" was filed with the Board on March 29, 1976. The Petitioner was asked in an Interim Order of the Board, dated May 6, 1976, to consider upgrading weak regenerating ammonium nitrate solutions to fertilizer grade. Du Pont responded to the Interim Order on July 12, 1976 and, in addition, had submitted to the Environmental Protection Agency (Agency) additional data which was received by the Board June 17, 1976. An open waiver from Procedural Rule 408 was received from Du Pont on May 6, 1976 allowing the Agency and the Board more time to consider the case. The Agency filed its recommendation, dated July 16, 1976, to deny or dismiss as inadequate the instant petition. In the March 29, 1976 filing and again in a separate August 5, 1976 filing entitled "Request for Standards Interpretation", Du Pont requested the Board determine the applicability of Rule 406 to Petitioner's discharges. Du Pont filed a "Response to EPA Recommendation" on August 30, 1976.

A hearing was authorized in this matter on November 10, 1976 in response to Petitioner's November 5, 1976 motion for oral argument or hearing authorization. A hearing was held (March 7, 1977) at Morris, Illinois in Grundy County. Both parties filed closing statements: Du Pont on March 28, 1977, titled "Hearing Closing Statement"; the Agency on March 29, 1977, titled "Agency's Final Argument". Du Pont's April 8, 1977

motion for oral argument was denied by the Board April 14, 1977, but filing of briefs was permitted. Subsequently Du Pont filed on May 2, 1977 a "Concluding Statement" and the Agency filed a response May 5, 1977. On March 6, 1978 Du Pont filed an amended petition and rescission of waiver. The Agency filed its recommendation May 2, 1978 to grant the variance subject to specified conditions.

The Du Pont plant is located in Grundy County near Seneca, Illinois and discharges its effluent into the Illinois River. Products manufactured include: nitric acid; ammonium nitrate (AN) prills for explosives; Elvace^R acetate/ethylene copolymer emulsions; and Tovex^R water gel explosives (aqueous solutions of organic and inorganic nitrates). Sulfuric acid is purchased and residual acid, dynamite blasting caps, and nitro-cellulose are transshipped from the plant.

Vapors from the neutralization reaction between anhydrous ammonia and nitric acid to form AN are scrubbed and constitute one of the works principal waste flows. The countercurrent air in the 200 foot high prilling tower passes the 95% AN spray and the very fine droplets are carried as particulate AN out of the tower and then to the ground. These emissions approximate 900 lbs./day (equivalent to 158 lbs.(NH₃-N)/day). Other waste products are generated primarily by leaks, spills and cleaning operations.

Du Pont states there are about 50 plants in the U.S. producing AN with capacities from 30 to 1,000 tons per day and that of the 7 x 10⁶ tons total production one half was sold as fertilizers and explosives accounting for most of the rest. In the original petition (Pet. at 9), Du Pont states that the yet unpublished Federal Guidelines will likely allow the following discharges for ammonia-N for the Seneca AN plant, nitric acid plant and water gel production:

Facility	Daily Avg. (lbs./day)	Daily Max. (lbs./day)
AN plant	400	800
Nitric acid	10	96
Water gels	42	84
TOTAL	452	980

These speculative figures are of interest, but do not state what actual discharges are being made either in extent or nature. "Petitioner requests . . . that he be allowed to discharge ammonia-N at the limits set by the federal guidelines for ammonium nitrate, nitric acid and water gel manufacture, until such time as technology has been developed and can be installed which will enable Petitioner to comply with Rule 406 in a safe and economically feasible manner." (Pet. at 10, 11). Using the above figures Du Pont calculates that their discharge would increase the ammonia-N concentration by less than 0.03 mg/l at the 10-year low flow and 0.01 mg/l at normal flows of the Illinois River.

Du Pont submitted five exhibits with their petition. Exhibit I supports the contention that recycling waste streams in the AN plant would subject Du Pont to unreasonable risks of explosions because of impurity sensitization of AN. The Board is aware of such risks and agrees that recycling does not present a viable abatement procedure.

Exhibit II is an affidavit from Clark, Dietz and Associates-Engineers, Inc. stating Du Pont had engaged them to study waste water treatment at the Seneca Works and that they had prepared a preliminary report and pages 19 and 20 of the report were attached. The two pages briefly discuss three treatment methods--overland flow, reverse osmosis and ion exchange. They state that reverse osmosis would reduce the pollutant volume to about 5% of the original flow which would be about 14,000 gallons; further reduction would require evaporation. In the "overland flow" method they state the anticipated ammonium nitrate concentration is 1.33 g/l. It was stated that based on rule of thumb figures of 1/4 inch water per acre (A) per dry day a minimum of 42 acres would be required. If the "assimilation rate" of the land is considered to be 300-600 lbs.N/A/year, a minimum of 340 A would be needed. Ion exchange was recommended as the system of choice.

The substance of Exhibits III and IV with the petition is that the overland flow and reverse osmosis methods are not appropriate methods: (1) the overland flow would require, even with very heavy loading (up to 3400 lbs.AN/acre per year), as a minimum 340 acres, and (2) available information indicates a membrane is not available to reject AN; thus, eliminating reverse osmosis. Exhibit V and VI are authorization, specification and expenditure documents relating to a proposed ion exchange unit to be supplied by Chemical Separations Corporation. These are limited to drawings, procurement of critical material. Authorized expenditures include \$140,000 for "Engineering and Design" and \$410,000 for "Cancellation Charges" or a total of \$550,000.

Du Pont's response to the Order of the Board of February 11, 1976 filed March 29, 1976 requested clarification of interpretation for Rule 406. The Board notes with interest Mr. Currie's opinion in this matter, 3 PCB 406 (1972), and his specific reference to the Illinois River and also Mr. Dumelle's opinion, 15 PCB 423 (1975). In the record concerning "In the Matter of Water Quality Standards Revisions" PCB R72-4, the testimony of Mr. Carl Blomgren taken September 13, 1972 (R. 21, 22) includes the following:

"In keeping with the Board's suggested amendment to Rule 406, we are concerned with this on the basis by the definition of population equivalent, we can very easily miss the impact from industrial discharges

and this computation of 100 pounds was based on the 2.5 milligram per litre, ammonium nitrogen standard times the five million gallons per day which was the cut-off of fifty thousand PE in the original regulation, times the conversion factor.

This ends up being something like 104 pounds per day and we concur with the 100 pounds or more, as we worded it, exceeds 100 pounds per day, shall not discharge an effluent of more than three!"

Mr. Blomgren's testimony reaffirms the plain meaning of the rule which is entitled "Nitrogen" and was promulgated to limit the amount of ammonia N in effluents discharged to specific waters. The difference in effective dates in Rule 406 is likewise explained in the aforementioned record by Mr. Dumelle (R. 26) in that the 1974 deadline would apply principally to industry and the 1977 deadline to local governments which have to depend on federal and state grants and bond issues.

It can readily be seen that the two parts are similar:

Permitted effluent concentration (Rule 406 or above) =
2.5 mg NH₃-N/l (ppm)

Weight of 1 ppm of a gallon of water = 8.35×10^{-6} lbs.

Thus:

$2.5 \text{ ppm} \times 8.35 \times 10^{-6} \text{ lbs.} = 20.88 \times 10^{-6} \text{ lbs. NH}_3\text{-N/US gal.}$

1 PE = 100 gal/day; 50,000 PE = 5,000,000 gal. (5×10^6)

$(20.88 \times 10^{-6}) \times (5 \times 10^6) = 104.4 \text{ lbs. NH}_3\text{-N/day.}$

In Du Pont's "Supplement to Petition for Variance", Petitioner contends that since its discharge contains both BOD₅ and suspended solids a PE equivalent can be computed using the Rule 104 definition. The Board recognizes that most industrial effluents will contain some BOD₅ and suspended solids, but under Rule 406, promulgated to control NH₃-N, the amount of NH₃-N should and will be the prime consideration.

In Du Pont's original petition Exhibit III is an affidavit by a senior staff engineer from Du Pont, Stanley E. Bye, Jr., which states:

"That both Clark, Dietz and Du Pont considered other treatment methods for nitrogen removal, including overland flow irrigation, reverse osmosis or ultrafiltration, biological treatment and steam or air stripping and found ion exchange to be the only feasible treatment technique capable of achieving the ammonia nitrogen levels required

by Rule 406." And also, "That the major effluent treatment feature still to be resolved is the disposition of the ion exchanger weak ammonium nitrate regenerant solution."

Du Pont contracted with Centec Consultants, Inc. of Reston, Virginia, to make an independent assessment of the feasibility of preparing urea-ammonium nitrate (UAN) solutions from the regenerant solution. On page 5 Du Pont states, "The use of the more dilute 16% AN solution created by the ion exchange system instead of the 83% AN solution produced at the AN plant modifies the water balance to the point where evaporation is required to produce a commercially acceptable concentration of the final blended solution being produced."

The weak 16% AN solutions (5.6%N) that would be produced by ion regeneration present unique problems under Du Pont's conditions: (1) They are highly corrosive and therefore difficult to store or ship; (2) They are produced in too low a quantity to justify facilities to upgrade to AN, or UAN direct application grades or to fertilizer ammoniating solutions; and (3) They are produced in too large a quantity and too low a grade to dispose of locally. The Board is convinced that, at this time, Du Pont cannot economically dispose of the regenerant solutions as fertilizer.

In the Order of the Board dated February 11, 1976 Du Pont was asked for assurance that Rules 203(f), 402 and 401(c) of Chapter 3 would not be violated by granting the variance. Du Pont stated that the standard for ammonia-N of 1.5 mg/l is already being exceeded and their effluent would result in an insignificant increase of about 0.03 mg/l at low flow of the Illinois River. This is the same information that was submitted in the original petition and appeared to be based on a discharge of 452 lbs. NH₃-N/day. Later documents, filed with the Agency June 17, 1976, indicate higher discharge rates. Du Pont calculates the latter figures would result in concentrations caused by Du Pont's effluent at the edge of the mixing zone as follows:

<u>Condition</u>	<u>Ammonia-Nitrogen</u>		
	<u>Mass Loading</u> <u>lbs./day</u>	<u>Concentration, mg/l</u>	
		<u>Low Flow</u>	<u>Mean Flow</u>
a. Until July 1, 1976:			
1. Maximum Daily Load	9200	2.2	0.64
2. Average Daily Load	4300	1.0	0.30
b. After July 1, 1976, until Federal Guidelines achieved:			
1. Maximum Daily Load	6000	1.4	0.42
2. Average Daily Load	2500	0.59	0.17
c. Federal Guidelines			
1. Maximum Daily Load	980	0.23	0.068
2. Average Daily Load	450	0.11	0.031

Petitioner states that if its variance request is granted, that at no time, will the discharge exceed five times the value requested. Rule 402 would be violated but because of the high level of $\text{NH}_3\text{-N}$ already in the river might be subject to adjustment among other dischargers as provided in this Rule.

Apparently Du Pont has reconsidered the possibility of denitrification losses by overland flow or overhead irrigation as evidenced by data submitted to the Agency. (Letter from Donald M. Parmelee to H. T. Connors dated May 12, 1976 and Report entitled "Program Development - Overland Irrigation" by O. R. Buehler and D. M. Parmelee). The data in these reports properly stress the need for carbon energy sources, the necessity of keeping the salt content low in the soil solution and the soil type.

The Agency's recommendation, filed July 21, 1976, stated that Du Pont had failed to submit information sufficient to justify the grant of a variance. In particular, the following deficiencies were noted by the Agency.

- a) No statement has been made as to the total quantity and complete description of contaminants currently discharged;
- b) Insufficient data has been presented indicating the nature and extent of the present failure to meet Rule 406 of Chapter 3:
- c) An inadequate and incomplete description of proposed pollution control equipment has been presented;
- d) A time schedule to bring the entire facility into compliance has not been presented;
- e) A detailed description of the program to bring the entire facility into compliance has not been presented;
- f) Data concerning past efforts to achieve compliance has not been presented;
- g) Data concerning costs and feasibility of alternatives has not been submitted; and
- h) The environmental impact of the grant of the requested variance has not been adequately addressed.

The Agency noted that Du Pont's effluent contained floating debris, excess concentration of ammonia, cyanide (in violation of Rule 408(a)), and total dissolved solids

(in violation of Rule 408(b)). Attached data from Route 47 Bridge sampling point upstream of the Seneca plant and from Route 170 Bridge sampling point downstream disclose a possible environmental impact from the Seneca plant. While the samplings were taken over the same time periods (1975 to May 1976) relatively few were taken the same day.

In addition, the Board was not informed about other possible dischargers between the two sampling points. The following table reports the ranges of concentration (in mg/l) recorded:

	<u>Field D. O.</u>	<u>NH₃-N</u>	<u>TDS</u>	<u>NO₃-N</u>	<u>Total P</u>
Upstream*	7.0 to 12.8	0.26 to 3.8	320 to 530	1.8 to 7.5	0.26 to 0.8
Down- stream*	4.5 to 20.9	0.32 to 7.0	320 to 490	2.3 to 7.8	0.35 to 0.65

*Upstream, 14 samples; Downstream 9 samples.

The Agency also included Du Pont monitoring analyses from the lagoon system to the mouth of Hog Run Creek for the period June 1975 through February 1976. Part of the data is given below (in mg/l).

	<u>June</u>	<u>July</u>	<u>Aug.</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov.</u>	<u>Dec.</u>	<u>Jan.</u>	<u>Feb.</u>	
BOD ₅	Ave.	4.7	5.0	15	5.5	8.0	5.0	4	10	7
	Max.	6.0	8.0	31	11.*	14.0	17.0	11	16	13
TSS	Ave.	36	19	10	12.1	11.0	8.0	2	1	4
	Max.	52	38	40	23.*	15.0	20.0	12	4	11
NH ₃	Ave.	216	772	538	592*	552	556	711	749	385
	Max.	266	1185	1358	633*	832	668	1221	971	801
TDS	Ave.	1280	3534	3060	2431	2724	2678	3069	3614	1503
	Max.	1875	4423	4645	3314	4098	3550	4449	7783	3559
Cya- nide	Ave.	0.0	0.44	N.A.	.018	.014	0.001	.014	.010	.006
	Max.	0.0	1.17	N.A.	.04*	.020	N.A.	.030	.013	.018
Flow (MGD)	Ave.	1.07	0.721	0.767	0.984*	0.784	0.714	0.835	0.891	1.096
	Max.	N.A.	0.811	1.441	1.548	1.542	0.832	1.172	1.172	1.567

*Numbers barely legible and may be in error.

The Agency stated it believed the current state of the record to be insufficient to justify favorable review of the requested variance and recommended that the variance be denied or dismissed as inadequate.

The Board's decision on its Opinion and Order denying Petitioner's request was stayed to grant Du Pont's motion for a hearing at the Board's November 10, 1976 meeting. The aforementioned hearing was held March 7, 1977 at which time Mr. John L. Kvochak, plant manager at the Seneca Works, testified that the works employs about 300 people to produce the previously mentioned products. The AN prill plant was stated to be the major source of $\text{NH}_3\text{-N}$ and that its production capability was 400 million pounds of AN (R. 15) [assumed to be annual]. Efforts over the past three years were stated to have made significant reductions in $\text{NH}_3\text{-N}$ in plant effluents; so that, recently the average discharge was less than 1000 lbs./day, but that time was needed to complete an optimum system including operational control, containment and removal by overland flow--a test method stated to have given encouraging results the previous fall (R. 18). The compliance schedule submitted (Pet. Ex. 1B) and other data indicate the progress made and projection if everything goes well:

	Plant Effluent $\text{NH}_3\text{-N}$ (lbs./day)	
	Average	Maximum
January 1976 (R. 51)	4700	-
Predicted July 1, 1976	2500	6000
March - June (1977)	1500	2500
July 1977 - December (1978)	510	1040
After December 1978	Requirements Rule 406	

The Board's understanding of the overland flow system as used at the Seneca works is briefly: The system applies the weak ammonium nitrate solution to gently sloping, relatively impervious soil which supports a stand of cool season grasses.

In balance, the system is maintained at a nearly neutral pH to favor nitrification of the ammonium ion to the nitrate ion. Application rates are pulsed to achieve aerobic and anaerobic conditions. Under anaerobic conditions in the presence of a readily biodegradable substrate (in this case -- grass clippings) the nitrate ion is reduced primarily to nitrogen gas which is lost to the atmosphere.

Mr. Harold T. Connors, Jr., Plant Technical Superintendent, testified that the presently defined containment and control programs are expected to reduce ammonia discharge by about 4,000 lbs./day at a cost of about \$1,000,000. "To date, we have achieved a reduction of 3,100 lbs./day and spent about \$500,000" (R. 52). The expected reduction by overland flow is 500 lbs. $\text{NH}_3\text{-N}$ per operating day. The experimental eight acre test plot took four months to install at a cost of about \$380,000. It was operated for an eight week period -- September to mid-November 1976 (R. 53). If data remains favorable, the full 64 acres would be developed at an estimated cost of \$2,000,000 (R. 54).

Dr. Larry L. Russell, Senior Engineer for James M. Montgomery Consulting Engineers, Inc., testified on their report to Du Pont titled "Ammonia Treatment Alternatives" which was admitted as Petitioner's Exhibit #3 and stated that an additional report was in preparation (R. 81). The report (Pet. Ex. 3)

discusses the biological and physical chemical alternatives of NH₃-N removal (R. 66), but does not recommend a "best" method for Petitioner.

Donald M. Parmelee, President and Principal Scientist, of Parmelee, Inc. and Robbin M. Ashmead, Du Pont Environmental Engineer, testified on the "overland flow" method and results from the eight-acre test plots, respectively.

Robbin Ashmead stated the ammonia nitrogen removal ranged from 42 to 88 percent in October and from 58 to 70 percent in November (R. 121). Maximum total nitrogen loadings were 11.8 lbs. N per acre per day. Optimum warm weather loading rates were estimated to be as high as 21 pounds total N/A/day with 90% NH₃-N removal (R. 122). It is estimated the system would have 135 days of down time per year at that location (R. 123). Groundwater monitoring wells were installed and were believed necessary in the final installation. However, results to date show no correlation between applied N and groundwater N (R. 124). It is estimated, at this time, that an impoundment of at least 6.8 millions gallons capacity would be required to offset the 135-day down time period (R. 127).

Mr. William E. White, Seneca Works Site Environmental Coordinator, testified that Du Pont expected to proceed with development of the large scale facility by the second quarter of 1977 (R. 134).

Dr. Lloyd L. Falk, Principal Consultant in the Engineering Department of Du Pont, reaffirmed the effect of Du Pont's effluent NH₃-N on the Illinois River (See Op. at 2, 5). The Board disagrees with Mr. Falk's apparent conclusion that Board rules do not give a guideline to ammonia nitrogen population equivalency in Petitioner's situation (R. 152). Rule 104 and Rule 406 when read together should have clarified the Board's position with regard to NH₃-N effluents to the Illinois River (See Op. at 3, 4).

Edward L. Marek, Supervisor Region 2A Field Operations Sec. DWPC of IEPA, presented summaries of: (1) IEPA samplings of Du Pont's lagoon prior to discharge to Hog River Creek (Res. Ex. 1); (2) Du Pont's DMR's (Res. Ex. 2); (3) Sampling of Illinois River at Morris which is about ten miles upstream from the plant (Res. Ex. 3); and (4) Similar Illinois River samples taken at the Route 170 Bridge which is about two miles downstream (Res. Ex. 4).

The lagoon samples show a marked reduction in NH₃-N:
(Res. Ex. 1)

Dates:	4/15/76	7/15/76	9/10/76	12/14/76
NH ₃ -N (mg/l)	160	320	29	23

The discharge monitoring reports (see Op. at 7) show the same desirable trend: (Res. Ex. 2)

Dates (1976):	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NH ₃ -N (mg/l)										
Ave.	437	241	248	272	325	176	132	48	64	36
Max.	749	424	462	611	480	374	256	84	110	62

Water quality samples from the Illinois River (Res. Ex. 3, 4) again show (see Op. at 7) NH₃-N levels above the 1.5 mg/l water quality standard much of the time and DO levels quite low during the warmer months. The Board again finds it difficult to draw any valid conclusion about the impact of the Seneca plant on water quality from these samples.

Pleadings subsequent to the hearing restated both party's positions and arguments. On March 6, 1978, Petitioner filed an amended petition seeking a variance until May 31, 1979. Based on results from the experimental program, Du Pont now estimates an investment of four to five million with operating costs of \$100,000 to \$140,000 for commercial facilities to achieve Rule 406 compliance. Du Pont has investigated other methods for control of NH₃-N: (Amended Pet. 3, Att. B)

Estimated Costs of Treatment Facilities (\$ million)

<u>Method</u>	<u>Installation Cost</u>	<u>Operating Cost</u>
Overland Flow	4 - 5	0.1 - 0.14
Double Effect Evaporation	2.3	0.04
Caustic - Air Stripping	0.8	0.1 - 0.16
- Steam Stripping	0.8	0.1 - 0.16
Single Effect Evaporation	1 - 1.4	0.02 - 0.4

During the past two years, Du Pont has reduced its plant NH₃-N discharges with a continuing site containment program from about a daily maximum of 7,200 to less than 1,000 pounds per day and monthly averages from 4,700 to less than 500 pounds per day at a cost of about \$1.8 million. There is one major containment facility providing more efficient recovery of rail car heels to come into operation on June 1, 1978 (additional cost \$250,000). Du Pont states if the railcar heels facilities are fully successful, compliance with Rule 406 will be achieved. During the full year alleged to be needed for evaluation, Du Pont states it will limit monthly average NH₃-N discharges to a monthly average of 350 lbs./day with no one day exceeding 700 pounds. Du Pont states the contribution to NH₃-N in the Illinois River of this discharge will be as follows: (Amended Pet. Att. C)

Discharge NH ₃ -N (lbs./day)	Average NH ₃ -N Concentration (mg/l)			
	Within Mixing Zone		Complete Mixing	
	Low Flow	Mean Flow	Low Flow	Mean Flow
700	0.16	0.049	0.042	0.012
350	0.082	0.025	0.021	0.005
100	0.023	0.007	0.006	0.002

In view of the progress Du Pont has made, it believes a variance is warranted to evaluate the effect of its continuing containment program on NH₃-N discharge before commitment to costly (\$1-5 million) abatement program(s).

The Agency's recommendation is favorable under certain specified conditions.

The Board finds that Du Pont would be subjected to arbitrary and unreasonable hardship if required to make costly expenditures prior to evaluating its present compliance program and that the environmental impact of its discharges during the variance period will be minimal.

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

ORDER

It is the Order of the Pollution Control Board that a variance is granted to Du Pont for its Seneca Plant works from Rule 406 of Chapter 3: Water Pollution Regulations until May 31, 1979 subject to the following conditions:

1. That Petitioner's discharge of ammonia-nitrogen not exceed 350 pounds per day as a monthly average;
2. That Petitioner's discharge of ammonia-nitrogen not exceed 700 pounds on any given day;
3. That Petitioner record daily and report monthly to the Agency the volume of flow generated in the north prill ditch as runoff from the ammonia-nitrate production area. That the report also contain measurements of the ammonia concentration of that flow;
4. That Petitioner complete construction of the railcar heels unloading facilities described in the Petition;
5. That Petitioner continue to operate the experimental overland flow treatment system. That Petitioner shall prepare and submit to the Agency a report during November of 1978 summarizing the results of the overland flow system operation;

- 6. Within 45 days after the date of the Board herein the Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Variance Section, 2200 Churchill Road, Springfield, Illinois 62706, a Certification of Acceptance and Agreement to be bound to all terms and conditions of the variance. This 45 day period shall be held in abeyance for any period during which this matter is appealed. The form of said Certification shall be as follows:

CERTIFICATION

I, (We), _____, having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 76-30 hereby accept said Order and agree to be bound by all terms and conditions thereof.

Title

Date

The Agency, pursuant to Rule 914 of Chapter 3, shall modify the Petitioner's NPDES permit consistent with the conditions set forth in this order including such interim effluent limitations as may reasonably be achieved through the application of best practicable operation and maintenance practices in the existing facility.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 8th day of June, 1978 by a vote of 5-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board