

ILLINOIS POLLUTION CONTROL BOARD
October 9, 1986

VILLAGE OF PAWNEE,)
)
 Petitioner,)
)
 v.) PCB 86-73
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

MR. JOHN MYERS, PFEIFER & KELTY, P.C. APPEARED ON BEHALF OF
PETITIONER; AND,

MR. E. WILLIAM HUTTON APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J. Theodore Meyer):

This matter comes before the Board upon a June 19, 1986 Amended Petition for Variance filed on behalf of the Village of Pawnee (Village). The Village seeks variance from 35 Ill. Adm. Code 304.120(c) as it relates to the five-day biochemical oxygen demand (BOD₅) and total suspended solids (TSS) effluent standards. The Illinois Environmental Protection Agency (Agency) filed its recommendation on August 19, 1986 recommending that variance be granted, subject to conditions. Hearing was waived and none has been held.

Procedural History

The Village (pop. 2577) located in Sangamon County, owns and operates a sewage collection and treatment facility consisting of a three cell aerated lagoon system with a design flow of 0.3 million gallons per day (MGD). The effluent is discharged to an unnamed tributary of Horse Creek and thence to the South Fork of the Sangamon River. (Amend Pet. p. 1).

The Village has been involved in a prior enforcement action before the Board in PCB 81-183. This matter was settled by stipulation and the Board's approval thereof on December 16, 1982 which established a detailed compliance schedule that included, inter alia, that the Village install tertiary filters and modify its lagoon system to allow bypass of each lagoon cell for maintenance by a date certain. (Amend Pet. 1). The Agency contends that the Village failed to comply with the Board's Order and on July 15, 1985 a pre-enforcement conference was held at which an agreement was reached on a revised compliance schedule. (Ag. Rec. p. 3).

The Village was also granted provisional variance (PCB 85-90) the reason for which was to allow the Village to draw down its lagoons to make repairs to its aeration system. The provisional variance order also required that the Village consider and plan for the installation of bypassing piping around individual lagoon cells. (Ag. Rec. p. 3).

The Village stated that, "in order to comply with the Board's order" in PCB 81-183, the Village plans to install a tertiary rock filter and modify the lagoons to allow bypass of each cell for maintenance. The Village contends that it must interrupt the normal operation of its aerated lagoon facilities and drain the lagoons to obtain access to areas within the lagoon cells. This action, the Village asserts, will cause the discharge of inadequately treated sewage during certain phases of the work. (Amend Pet. pp. 1-2). The Agency granted a lagoon exemption to the Village with the governing effluent standards being 30 mg/l and 37 mg/l for BOD₅ and TSS, respectively. The Village contends that the discharge of inadequately treated sewage during construction work will cause violations of these standards. Thus, the Village seeks variance from the BOD₅ and TSS effluent standards cited above and, instead, proposes a 50 mg/l BOD₅ and 60 mg/l TSS effluent standard during the construction period. The issue before the Board is whether denying the Village variance would constitute an arbitrary or unreasonable hardship. For the following reasons, the Board finds that denying the Village variance would constitute an arbitrary or unreasonable hardship and, therefore, grants the Village variance, subject to conditions.

Environmental Impact

The Village does not provide any detailed analysis on the environmental impact of granting variance. The Village contends, however, that during construction on the lagoons, effluent which does not meet the lagoon exemption standards will be discharged approximately 19 days and that after construction, future effluents would be reduced to Board-prescribed levels and the lagoon will be in compliance with the Board's prior order in PCB 81-183 -- a long term benefit which should significantly outweigh any short term negative effects. (Amend Pet. p. 3). Lastly, the Village asserts that during a prior draw down of the lagoons in June, 1985, there was no observed adverse effect on aquatic life downstream from the lagoons (Amend Pet. p. 4).

The Agency believes that there will be little, if any, adverse environmental impact in granting the Village its requested variance. The Agency asserts that it is unaware of any complaints or fish kills resulting from the June, 1985 draw down and that the levels of contaminants which would be discharged under the requested variance should be comparable. Moreover, the unnamed tributary to which the Village's treatment plant

discharges is not known to be a stream used for fishing or swimming. On the other hand, Horse Creek is known to be used for fishing and is classified as a zero low-flow stream. The Agency asserts that the impact on Horse Creek should be minimal because of the high stream levels typical during the spring season, the season during which the Village will undertake the proposed construction. (Ag. Rec. 5).

In light of these facts, the Board finds that the environmental impact of granting the Village variance will be minimal. The variance is requested for a five-month period or until the work is completed on the lagoons, and effluent in excess of the lagoon exemption standards will be discharged for approximately 19 non-consecutive days. These facts in conjunction with the fact that a prior draw down of the lagoons did not result in any observable adverse effect on downstream aquatic life lead the Board to the conclusion that the environmental impact of granting this variance will be minimal.

Hardship

At the outset the Board notes that neither the Agency nor Pawnee explains why Pawnee failed to comply with the Board's December 16, 1982 enforcement Order. Had this Order been complied with, a request for variance at this late date would be unnecessary. The Board can only assume that Pawnee presented sufficiently compelling reasons to the Agency to cause the Agency to recommend grant of variance that includes a new construction schedule.

The Board is at a loss to understand why the Village and Agency have not commented fully on the circumstances regarding failure to comply with the prior order. The Board, given the situation it now faces, is persuaded that it is more environmentally beneficial at this point to give the petitioner the benefit of the doubt regarding the issue of self imposed hardship. In so saying, the Board emphasizes that it trusts that such deficiencies will not occur again.

The Village contends that there are no alternatives besides the discharge of inadequately treated sewage during the construction period and that the purpose of the construction is precisely to avoid in the future discharges of inadequately treated sewage while performing maintenance by allowing the Village to work on one lagoon at a time by bypassing it. (Amend. Pet. p. 3).

The Agency asserts that the hardship experienced by the Village if the Board denied variance would be both technical and economical. The technical hardship is that in order for the Village to comply with the Board's Order and consistently operate its plant in compliance, the lagoons must be lowered to make the

necessary improvements. The Agency contends that immediate compliance would require the construction of another lagoon on a permanent or temporary basis at a cost of between \$100,000 and \$200,000 including appropriate appurtenances. The Agency believes that the additional cost to the Village of this construction is unwarranted and would create an arbitrary or unreasonable hardship sufficient to allow the granting of variance. (Ag. Rec. p. 4).

The Board finds that denying the Village variance would constitute an arbitrary and unreasonable hardship. The only alternative to achieve immediate compliance with applicable standards would be to construct an additional lagoon. The Board believes that it would be unreasonable to require the Village to construct such a lagoon especially in light of the fact that the Village itself is funding the construction of the planned improvements. Such an action would nearly double the cost of the proposed construction without any measurable benefit to the surrounding environment. On balance, the Board believes that the hardship to the Village were the Board to deny variance outweighs any adverse environmental impact of granting the variance. Therefore, the Board will grant the Village variance, subject to conditions.

Concerning the BOD₅ and TSS effluent limitations during the variance period, the Board notes that the Agency collected samples of the Village's effluent on June 19 and June 26, 1985, when the Village was draining its lagoons. The Village's effluent measured 34 mg/l BOD and 45 mg/l TSS on June 19 and 27 mg/l BOD and 31 mg/l TSS on June 26. The Agency asserts that the effluent discharged during the variance period should approximate the effluent discharged during the June, 1985 lagoon draw down. Therefore, the Agency recommends effluent limitations of 40 mg/l BOD₅ and 50 mg/l TSS during the variance period.

The Village, on the other hand, estimates that effluent will be discharged during the variance period measuring 50 mg/l BOD₅ and 60 mg/l TSS and, therefore, requests these limits during the variance period. However, the Board notes that the Village has not provided the Board an explanation as to why the estimated effluent concentrations will be greater than those experienced during the June, 1985 draw down of the lagoons. Absent such an explanation, the Board believes that the Agency's samples of the lagoons' effluent during the June, 1985 draw down are indicative of the effluent concentrations which can be expected during the variance period. Therefore, the Board will include as a variance condition that the Village's effluent shall not exceed 40 mg/l BOD₅ or 50 mg/l TSS on a monthly average.

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

ORDER

The Village of Pawnee, Sangamon County, Illinois, is hereby granted variance from 35 Ill. Adm. Code 304.120(c) as it relates to five-day biochemical oxygen demand (BOD₅) and Total Suspended Solids (TSS), subject to the following conditions:

1. The variance shall begin on March 1, 1987 and terminate upon completion of the proposed construction or on July 31, 1987, whichever occurs first.
2. The Village shall comply with the construction schedule presented in Attachment A, of the Agency's August 19, 1986 Recommendation, which is attached to this Order unless for reasons of unavoidable delay due to adverse weather conditions.
3. The Village shall notify the Agency's Springfield Regional Office when draw down of the lagoons begins and when the construction work is completed.
4. There shall be no discharge of sludge or bottom deposits while the lagoons are being lowered.
5. During the variance period the Village's effluent shall not exceed 40 mg/l BOD₅ or 50 mg/l TSS on a monthly average.
6. During the variance period when discharges from the lagoons are occurring, the Village shall monitor its effluent on a weekly basis and analyze it for BOD₅, TSS, pH, flow, fecal coliform and ammonia nitrogen. This data shall be submitted to the Agency on a monthly basis attached to the Village's discharge monitoring reports.
7. The Village shall operate and maintain its treatment plant during the period of construction so as to produce the best effluent possible.
8. Within 45 days of the date of this Order, the Village shall execute and forward to the Illinois Environmental Protection Agency, Division of Water Pollution Control, Compliance Assurance Section, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound by all the terms and conditions of this variance. This 45 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 the Order of the Illinois Pollution Control Board, in PCB 86-73, dated October 9, 1986, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 9th day of October, 1986, by a vote of 6-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board

REVISED PER 7/11/86 MEETING

CONSTRUCTION SEQUENCE	DATE OF ACTIVITIES		ESTIMATED PLANT DISCHARGE		ESTIMATED EFFLUENT STRENGTHS	
	START	COMPLETE			BOD ₅	TSS
1. Pump or syphon all lagoon cells to a 6 ft water depth (normal depth is 11ft.)	March 1	March 15	1	MGD	30	37
2. Install 12-inch bypass line from the proposed transfer structure between cells 1 & 2 to the chlorine structure	April 1	April 15	0		0	0
3. Modify the chlorine structure	April 1	April 15	0		0	0
4. Plug 10-inch transfer pipe between cells 2 & 3	April 1		0		0	0
5. Pump out contents from cell 3 (transfer to cell 2)	April 1	April 15	0		0	0
6. Remove sludge in cell 3 from area of rock filter, modify air piping, install transfer (outlet) structure install rock filter, place riprap, and install pad for erosion control at end of 10" transfer pipe	April 15	May 15	0		0	0
7. Remove plug from 10" transfer pipe and lower W.L. to 6' depth in all cells	May 15	May 25	1.5	MGD	30	37
8. Plug 10" transfer line between cells 1 & 2 and lower W.L. in cells 2 & 3 to below transfer pipe	May 25	June 1	1.4	MGD	50	60
9. Install transfer structure for cell 2, connect outlet piping and valves, and install erosion control pad at end of 10" transfer pipe from cell 1	June 1	June 18	0		0	0
10. Remove transfer plug & lower all cells to 6' depth	June 18	June 22	1.5	MGD	30	37
11. Plug 10" transfer pipe from cell 1 at both ends & construct transfer structure & connect 12" outlet pipe	June 22	July 10	.4	MGD	50	60

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ATTACHMENT A