

ILLINOIS POLLUTION CONTROL BOARD
June 29, 1984

VILLAGE OF ATWOOD,)
 Petitioner,)
))
 v.) PCB 84-49
))
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,))
 Respondent.))

OPINION AND ORDER OF THE BOARD (by B. Forcade):

On April 19, 1984, the Village of Atwood ("Atwood") filed a Petition for Variance, and on May 14, 1984, an amended petition, seeking relief from Board regulations, 35 Ill. Adm. Code 304.120, 304.121 and 306.305, establishing effluent limitations for 5-day biochemical oxygen demand ("BOD₅"), total suspended solids, fecal coliform and precluding treatment plant bypass. Atwood seeks short-term relief, until December 31, 1984, intending to file for a long term variance at that time, once interim operational data is evaluated and a full compliance plan is finalized. On June 8, 1984, the Illinois Environmental Protection Agency ("Agency") recommended grant of variance, with conditions. No hearing was held, no comments were received.

Atwood is located in Douglas and Piatt counties in Central Illinois. Atwood's population is 1,464; the Village employs several full-time employees, one of whom is assigned to the care of the water and wastewater plant. The Atwood Wastewater Treatment Plant is a Walker Process activated sludge package plant. The plant is operated in the contact stabilization mode. The package plant is designed to provide contact aeration, clarification, chlorination, sludge re-aeration and aerobic digestion. Besides the package plant, the process consists of an influent pump station, a sludge lagoon for waste sludge, and a control building housing blowers, chlorination equipment, and a laboratory.

Dry weather flow to the wastewater treatment plant is raw sewage, primarily domestic in nature. Commercial establishments discharging to the sewers are typical establishments that serve a small Central Illinois rural town with a population between 1,000 and 2,000. A small volume locker plant also discharges its wastewater into the Village sewers.

Wet weather flows exceeding plant capacity are encountered frequently in the Atwood sewer system. Currently these excess flows are not quantified. High flows continue for days

following rainfall, creating hydraulic overloading and solids washout at the treatment plant.

Treated effluent from the plant is discharged into Lake Fork, a tributary of the Kaskaskia River. Lake Fork joins the Kaskaskia River approximately six miles southwest of Atwood upstream of Lake Shelbyville. The Kaskaskia River discharges into the Mississippi. The 7 day-10 year low flow of the Lake Fork is zero (Pet., pp. 2-3).

Atwood's present NPDES permit establishes the following interim effluent limitations for the treatment plant:

	Monthly Avg.	Weekly Avg.
BOD ₅	20 mg/l	40 mg/l
SS	25 mg/l	45 mg/l
Fecal Coliforms	Daily max. not to exceed 400/100 ml	
pH	6 to 9 std. units	

Discharge Monitoring results from Atwood show the following weekly data (Pet., p. 5):

Date	PLANT INFLENT		PLANT EFFLUENT			
	BOD ₅ mg/l	SS mg/l	BOD ₅ mg/l	SS mg/l	pH std. Units	Fecal Coliforms #/100ml
10-19-83	230	240	41	47	7.7	> 100,000
10-25-83	680	240	25	62	7.6	82,000
11-2-83	550	220	60	64	7.4	> 100,000
11-08-83	250	170	30	24	7.7	30,000
11-15-83	340	220	29	29	7.7	> 100,000
11-21-83	205	83	25	79	7.6	> 100,000
11-29-83	68	150	19	20	7.6	62,000
12-06-83	110	25	43	44	7.3	
12-13-83	11	41	10	6	7.3	25,000
12-20-83	54	100	8	20	7.5	15,000
12-28-83	120	27	12	9	7.5	25,000
01-04-84	220	250	60	22	7.6	> 100,000
01-20-84	125	130	22	23	8.1	45,000
01-27-84	140	170	24	8	7.5	35,000
01-24-84	210	230	27	18	7.7	40,000
01-31-84	130	140	25	20	7.7	40,000
02-07-84	102	110	21	15	7.6	500
02-14-84	91	76	17	67	7.6	> 100,000
02-21-84	71	82	41	62	7.7	> 100,000
02-28-84	61	46	40	26	7.7	10,000
03-06-84	92	52	40	19	7.9	4,000
03-13-84	124	140	24	24	7.9	3,000
03-20-84	25	20	20	40	7.6	22,000
03-27-84	64	49	20	20	7.6	> 100,000
Avg.	156	128	31	24		11,500 (Geo. Mean)
High	680	240	60	79	8.1	> 100,000
Low	61	25	6	6	7.3	600

Discharge Monitoring Reports were not submitted to the Agency for May through September of 1983 (Rec., p. 5). Presently, Atwood does not have a certified Class 2 operator, as required, nor an approved contractual arrangement with an appropriate operator (Rec., p. 6). Atwood has not made formal application for construction grant funding, although a preapplication has been submitted (Rec., p. 5). During a February 17, 1984 visit, the Agency cited 12 specific problems as evidence of poor operation and maintenance (Rec., p. 3). Atwood admits the plant has not been operated well in the recent past (Pet., p. 4).

Atwood has no present plan for compliance with existing permit limitations. Atwood has recently undertaken several steps to improve the operation and maintenance of its treatment plant. During the term of this variance, Atwood proposes to evaluate the changes in effluent quality resulting from these improvements, plan additional improvements to meet existing and future limitations, and apply for a long-term variance with a specific compliance program (Pet., p. 8). Atwood expects minimal environmental impact from grant of variance because recently completed plant changes should improve effluent quality compared to historical data, and average flows in the receiving stream provide dilution of effluent of 200 to 1 (Pet., p. 8).

The Agency asserts, however, that consideration should be given to impacts during low stream flow periods, noting that there were two 7-day periods of zero flow in Lake Fork in September, 1982. Nevertheless, the Agency feels that the potential environmental harm is best minimized by the imposition of the specific conditions recommended, which "provide a reasonable basis for expediting compliance from the current time forward" (Agency Rec. 7, 8).

In response to Atwood's claim that that immediate compliance would impose an arbitrary or unreasonable hardship on its limited financial resources, the Agency acknowledged the hardship associated with immediate compliance, but correctly points out that the Petitioner's failure to take earlier corrective action is largely a self-imposed hardship. The Board notes that had there been a prompt enforcement effort by the Agency, such a long record of non-compliance would not exist today. The Agency recommended as a condition that Atwood be required to file any further petition for variance by September 30, 1984. While the Board will not require this as a condition of this variance, the Board alerts Atwood to the potential exposure to enforcement if a variance petition is not timely filed.

The Board finds that, on balance, to require Atwood's immediate compliance would impose an arbitrary and unreasonable hardship. The Board will grant Atwood a variance, until December 31, 1984, from the relevant regulations. This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The Village of Atwood is hereby granted a variance for its wastewater treatment plant, from the provisions of 35 Ill. Adm. Code 304.120, 304.121 and 306.305 subject to the following conditions:

1. The variance from Section 304.121 will expire July 15, 1984.
2. The remainder of this variance will expire December 31, 1984.
3. During the term of this variance, Atwood shall comply with the following limitations:

	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>
BOD ₅	40 mg/l	60 mg/l
SS	45 mg/l	65 mg/l

4. Atwood shall begin routine process control testing, on at least a twice per week basis, by July 15, 1984. Those process control tests shall include the following: sludge volume index, mixed liquor suspended solids, 30-minute settleability, dissolved oxygen in the aeration basins and digester, sludge blanket depth in the clarifer, total suspended and volatile solids in the digester, and biochemical oxygen demand loading.
5. Atwood shall remove the source of infiltration/inflow into the plant bypass line by August 1, 1984.
6. A contractual agreement with a certified Class 1 or Class 2 wastewater treatment plant operator shall be submitted by Atwood for Agency review and approval by July 15, 1984. Such agreement shall be in conformity with the requirements of 35 Ill. Adm. Code 380.902.
7. Atwood shall submit a written interim sludge handling program, including detailed procedures for sludge handling, by September 1, 1984.
8. Atwood shall act by July 15, 1984 to stop any flow of blood to the wastewater treatment plant from the local slaughter house which is not in strict compliance with its sewer use ordinance.
9. Atwood shall begin chlorinating wastewater treatment plant effluent by July 15, 1984.

10. Atwood shall submit a written maintenance schedule for all plant equipment and begin implementation of the schedule by September 1, 1984.
11. If it is determined during the term of this variance that a long term variance is not required, then a facilities plan shall be submitted by December 1, 1984.
12. During the term of this variance, Atwood may bypass wet weather flows provided maximum practicable flows are given treatment without upsetting the wastewater treatment plant.
13. Submittals called for above in subparagraphs 6, 7, and 10 shall be sent to the attention of the Compliance Assurance Section and the facilities plan mentioned in subparagraph 11 shall be sent to the attention of the Grants Section at the following address.

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

14. Within forty-five (45) days of the adoption of the Board Order in this proceeding, Atwood 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 terms and conditions of this variance. This forty-five (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:

CERTIFICATE

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 84-49, dated June 29, 1984, understand and accept said order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

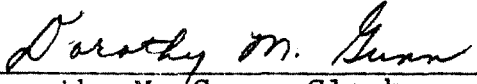
Petitioner

Authorized AGent

Title

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 29th day of June, 1984 by a vote of 5-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board