

ILLINOIS POLLUTION CONTROL BOARD
October 27, 1982

CITY OF CENTRALIA,)
)
 Petitioner,)
)
 v.) PCB 82-98
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

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

This matter comes before the Board upon a petition for variance filed August 12, 1982 by the City of Centralia requesting for its wastewater treatment plant a variance from certain effluent and water quality standards of 35 Ill. Adm. Code: Subtitle C: Water Pollution. On September 16 the Illinois Environmental Protection Agency (Agency) recommended that the variance be granted with conditions. No hearing was held and the Board has received no public comment.

Centralia operates a wastewater treatment plant serving 16,000 persons and some industry. It has a design average flow of 3.0 million gallons per day (MGD). It discharges pursuant to NPDES permit IL 0027979 to Sewer Creek, a tributary of Grand Point Creek, Crooked Creek and the Kaskaskia River. This permit has continued in force beyond its expiration date because of a timely reapplication.

The plant was upgraded under the federal construction grants program in 1977 and 1980. The current plant includes grit removal, grease removal, an activated sludge unit, clarification, chemical addition, filtration and disinfection.

About three weeks after initial startup in May, 1980, the underdrains in one of three tertiary sand filters failed. During backwashing filter media lodged in nozzle caps. This caused a pressure buildup which led to uplifting of a concrete slab in the filter cell. After this failure, the other two filters were removed from service. Since the plant had no provision for bypassing the filters to the chlorinator, it was also taken out of service. The plant is thus bypassing an unchlorinated, secondary effluent.

Centralia commissioned a study which determined that the failure was caused by a design error. It has initiated an action against Zurn Industries, Inc., the designer and manufacturer of the defective units, and others. Centralia has

indicated that it does not wish to repair the sand filters pending completion of litigation in order to preserve evidence. Repairs would cost about \$60,000, of which Centralia has spent \$10,000.

Centralia has also concluded that the original design of the sand filters was not compatible with its proposed, upgraded plant. Centralia prefers to upgrade the sand filters at a cost of \$300,000 to \$350,000. The Agency agrees with this.

The NPDES permit expired July 31, 1981 and has not been reissued. The Agency indicates that Centralia will be required to meet effluent limitations of 10/12 5-day biochemical oxygen demand/total suspended solids (BOD/TSS).

The following is a summary of regulations involved:

<u>35 Ill.</u> <u>Adm. Code</u>	<u>Chapter 3</u>	<u>Summary</u>
302.209	203(g)	Fecal coliform water quality standard of 200 counts/100 ml
304.120	404(c)	Effluent standard of 10/12 mg/l BOD/TSS
304.121	405	Fecal coliform effluent standard of 400 counts/100 ml

The plant is currently operating at a level of about 30/30 mg/l BOD/TSS. Fecal coliform levels are estimated at 454,000/100 ml. Daily flow is around 1.73 MGD.

Recent Agency inspections of Sewer Creek indicated polluted conditions downstream of the discharge. The water was turbid with a strong sewage odor. Black sludge deposits were present about 200 yards downstream of the discharge. In 1978, the Agency found violations of water quality standards for iron, ammonia nitrogen and dissolved oxygen, as well as fecal coliform. Sediments contained increased levels of chlorinated pesticides and organics, and lead. It is not clear whether these later conditions still obtain.

Besides the non-use of the sand filters, the stream degradation may be caused in part by occasional by-passes due to excessive infiltration and inflow and pump failures. Centralia is in the process of upgrading to reduce infiltration and inflow, and is "negotiating" the rehabilitation of the lift station which causes overflows.

The Board rejects Centralia's claims of hardship arising from possible destruction of evidence through repair of the sand filters. As operator, Centralia's primary responsibility

is to meet the effluent standards and avoid pollution of the waters of the State. In addition, the Board notes that no Streeter-Phelps computation was performed.

The Board accepts as arbitrary or unreasonable hardship the impossibility of immediate compliance without repair of the sand filters. Considering that Centralia has offered to undertake improvements to the system which will result in better environmental results, the Board will grant a variance beyond the time required to merely repair the filters.

The variance will be granted with conditions similar to those recommended by the Agency. It is the Board's intention that the Agency issue an NPDES permit and a construction authorization consistent with this variance.

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

ORDER

Petitioner, the City of Centralia, is hereby granted for its wastewater treatment plant a variance from 35 Ill. Adm. Code 302.209, 304.120(c) and 304.121, subject to the following conditions:

1. This variance will expire on October 31, 1985.
2. Petitioner shall meet the following interim effluent limitations:

	<u>Daily Composite</u>	<u>Grab Sample</u>
Biochemical oxygen demand (5 day)	30 mg/l	45 mg/l
Total suspended solids	30 mg/l	45 mg/l

3. Petitioner shall timely meet the following schedule:
Complete design - July 31, 1983
Complete construction - September 30, 1985
Begin operation - October 31, 1985
4. Petitioner shall maintain the pumps at the terminal lift station in working order.

5. Petitioner shall provide the best degree of operation and maintenance as practicable both at the wastewater treatment plant and on the sewer system in order to keep the pollutant load to the receiving stream at a minimum.
6. The Illinois Environmental Protection Agency shall issue an NPDES permit and construction authorizations consistent with this variance.
7. 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 by 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 82-98, hereby accept that Order and agree to be bound by all of its terms and conditions.


SIGNED _____

TITLE _____

DATE _____

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 27th day of October, 1982 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board