

ILLINOIS POLLUTION CONTROL BOARD
September 15, 1982

CITY OF DELAVAN,)
)
 Petitioner,)
)
 v.)
) PCB 82-86
 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 June 24, 1982 by the City of Delavan, Tazewell County, requesting a variance from 35 Ill. Adm. Code 309.241(a) * as applied to restricted status for its sanitary sewer system. The requested variance would allow discharge of public water supply filter backwash to the sanitary sewer. On July 30, 1982 the Illinois Environmental Protection Agency (Agency) recommended that the variance be granted with conditions. No public hearing was held and the Board has received no comments.

Delavan has a population of 1973. It operates a sanitary sewer system which discharges to the North Branch of Crane Creek, which is tributary to Quiver Creek and the Illinois River. The discharge was once pursuant to NPDES Permit No. IL 0028355 which expired on August 31, 1981. No renewal application was received by the Agency.

The sanitary sewer system was constructed in 1962. The treatment plant consists of a 16 acre stabilization pond. The design average flow is 0.25 million gallons per day (MGD). The expired permit allowed, as interim limitations, up to 60 mg/l 5-day biochemical oxygen demand (BOD) and 70 mg/l total suspended solids (TSS); however, the Agency believes any new permit will limit the discharge to 30/30 BOD/TSS [Section 304.120(a)].

According to discharge monitoring reports the plant has generally operated within the 60/70 interim limitations, but would violate the 30/30 limits frequently.

On December 14, 1979 the system was placed on restricted status (Section 306.105) because of surcharging of sewers and basement backups. The treatment plant is not overloaded hydraulically. However, the Agency has observed severely eroded berms and substantial accumulation of sludge in the pond.

*Prior to codification, Section 309.241(a) was Rule 962(a).

According to a study quoted by the Agency, Crane Creek is "unbalanced" above the Delavan outfall and "polluted" and "semi-polluted" for 2 miles downstream of the outfall. This is indicative of environmental damage from the discharge.

Delavan is in the process of upgrading its treatment plant. It has received a Step 2-3 grant. General obligation bonds have been issued to pay its share of the cost. A permit application was submitted in September, 1981, but rejected by the Agency, which requested additional data on flow and an inflow reduction program.*

Delavan has received a Farmers Home Administration loan for improvements to its public water supply. These include an iron removal filter which will require periodic backflushing at a rate of about 20,000 gallons per week. Delavan has two plans for disposing of the backflushed "red water": one involves construction of a filter and direct discharge; the other involves discharge to an overloaded sewer. To prevent surcharging downstream, Delavan proposes to construct a 20,000 gallon holding tank. The backflush would be discharged at suitable times at a sufficiently low rate to avoid backups.

Delavan claims that the direct discharge option is environmentally unfavorable because the filter would not remove ferric iron prior to direct discharge. The Agency disagrees concerning the ferric iron, but does not offer a separate opinion regarding the relative environmental impacts.

The Agency estimates that the 0.076 million liters (20,000 gallons) of backwash will contain about 10 kg (22 pounds) of iron per week at a concentration of 133 mg/l. The plant will have about 500 population equivalents of capacity remaining after addition of the backwash. The Agency believes that surcharging can be prevented if the discharge is at appropriate times, and limited to 10 gallons per minute.

The Board finds that Delavan has demonstrated adequate hardship to justify a variance with conditions adequate to avoid surcharging or the discharge of sewage with inadequate treatment.

*Delavan has been issued a Chapter 6 permit for improvements to its public water supply; it needs an NPDES permit to continue its wastewater discharge; it needs an NPDES construction authorization to upgrade its treatment plant; and, it needs a Section 309.202 construction permit for its proposed backwash holding tank and discharge to the sewer. This case is primarily involved with the last.

ORDER

Petitioner, the City of Delavan, is granted a variance from 35 Ill. Adm. Code 309.241(a), as applied to restricted status of its sanitary sewer system, subject to the following conditions:

1. This variance will allow the Illinois Environmental Protection Agency to issue a construction permit for a holding tank and discharge to the sanitary sewer for public water supply filter backwash.
2. This variance will expire on June 1, 1983, or upon issuance of such construction permit, whichever occurs first.
3. Within 105 days of the date of this Order the City of Delavan shall submit to the Illinois Environmental Protection Agency an application for an NPDES permit for its wastewater treatment plant discharge.
4. Petitioner shall expeditiously proceed with upgrading of its wastewater treatment plant and sewer system.
5. Petitioner shall provide sufficient retention to contain the entire volume of filter backwash for a one week period.
6. Petitioner shall limit discharges from the retention tank to a maximum of 10 gallons per minute.
7. Petitioner shall not allow discharge from the retention tank during times when sewers are surcharging, or so as to cause such surcharging.
8. Petitioner shall record each discharge from the retention tank as to time, date, duration, quantity and conditions of sewer system. Petitioner shall submit such records quarterly to the Compliance Assurance Section, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706.
9. The Illinois Environmental Protection Agency shall incorporate conditions 4, 5, 6, 7 and 8 into permit conditions.
10. 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 82-86, 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 18th day of September, 1982 by a vote of 5-0.

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