ILLINOIS POLLUTION CONTROL BOARD July 11, 1985

CITY OF DIXON,)		
Petit	ioner,)		
v.)	PCB	85-103
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)		
Respo	ndent.)		

OPINION AND ORDER OF THE BOARD (by W.J. Nega):

This provisional variance request comes before the Board upon a July 11, 1985 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 20-day provisional variance be granted to the City of Dixon (Dixon) from 35 Ill. Adm. Code 304.141(a) to allow necessary repairs and modifications to its wastewater treatment facility's chlorine contact tank and chlorination system. (Rec. 1).

The City of Dixon owns and operates a wastewater treatment facility (WWTP) which has a design average flow of 3.4 million gallons per day (MGD) and consists of raw sewage pumps, comminutors, primary sedimentation, aeration tanks, grit removal, final sedimentation, disinfection, anaerobic sludge digestion, sludge storage, and sludge drying beds. (Rec. 1). The Petitioner's WWTP discharges its effluent to the Rock River pursuant to its NPDES Permit No. IL 0026450.

The Petitioner's NPDES Permit provides that the city's wastewater treatment facilities must meet final effluent limits for its main outfall 001 and is required to meet effluent limits of 20 mg/l for biochemical oxygen demand (BOD); 25 mg/l for total suspended solids (TSS), and a fecal coliform standard of 400/100 ml. (Rec. 1).

During the past year, the Petitioner's discharge monitoring reports to the Agency pertaining to fecal coliform and chlorine residual in its effluent have indicated the following concentrations:

Month	Flow (MGD)	Chlorine Residual (mg/1)	Fecal Coliform (#100 ml)
May, 1985	3.101	0.35	14
April, 1985	3.197	0.25	278
March, 1985	4.373	0.20	3,000
February, 1985	3.156	0.30	142

Month	Flow (MGD)	Chlorine Residual (mg/l)	Fecal Coliform (#100 ml)
January, 1985	4.046		
December, 1984	3.255	0.40	223
November, 1984	3.114	0.40	313
October, 1984	3.124	0.30	166
September, 1984	2.588		
August, 1984	2.727		
July, 1984	2.918		
June, 1984	3.164	0.40	7
Average	3.230	0.33	138*

*Geometric Mean

(Rec. 2)

Although the Petitioner added chlorination facilities to its WWTP in 1967, no major repair work was done to these chlorination facilities since their installation. However, the Petitioner has indicated that, as an interim measure, some repairs were undertaken in 1984 when they became necessary. (Rec. 2). The City of Dixon intends to discharge effluent from the final sedimentation tanks to the Rock River via its old outfall while its chlorination facilities are out of service. The outfall in question is a 20 to 30 foot long open channel which runs from the final sedimentation tanks to the Rock River. (Rec. 2).

Because there is no feasible way that chlorine can be added to the point where the Petitioner's effluent leaves the final sedimentation tanks and since the open channel which will be utilized "does not allow for sufficient contact time before the effluent reaches the river", there appears to be no practical alternative to discontinuing disinfection while the Petitioner's chlorination facilities are out of service. (Rec. 2-3). However, the Agency anticipates minimal environmental impact during the time period of the requested provisional variance due to the high dilution ratio of greater than 200 to 1 of river water to effluent. Additionally, the environmental impact will be minimized because there are no public bathing beaches or potable water supply intakes downstream from Dixon's discharge point to the Quad Cities. (Rec. 3).

The Agency has noted that the City of Dixon has applied for a standard variance in PCB 85-47 for relief from the provisions of 35 Ill. Adm. Code 304.120 (deoxygenating wastes) until it installs new clarifiers at its WWTP, but emphasizes that the repair work that will be done on the Petitioner's chlorination facilities is entirely separate and distinct from the repair work delineated in Dixon's regular variance petition in PCB 85-47. (Rec. 3).

In reference to the instant provisional variance request in PCB 85-103, the City of Dixon has indicated that: (1) it has the necessary materials and manpower to expeditiously repair and restore the chlorination facilities at this time; (2) the chlorination facilities do not presently provide adequate contact

time; (3) the condition of its chlorination facilities is becoming worse; and (4) if the requisite repair work is not promptly completed, the chlorination facilities may fail completely at a time when weather conditions might be unfavorable or when the appropriate manpower is unavailable, thereby resulting in the chlorination facilities being out of service for a longer period of time. (Rec. 3).

Accordingly, the Agency has concluded that compliance on a short-term basis with the requisite NPDES Permit standards would impose an arbitrary or unreasonable hardship upon the City of Dixon. Therefore, the Agency recommends that the Board grant the Petitioner a provisional variance until July 31, 1985, or until the chlorination facilities are returned to service, whichever occurs first. Although the Agency was informed in a telephone conversation that the Petitioner began repair work on the chlorination facilities on July 1, 1985, the Agency has recommended that the provisional variance shall commence as of the date of the Board's Order in the present case.

Pursuant to Section 35(b) of the Illinois Environmental Protection Act, the Board hereby grants the provisional variance as recommended.

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

ORDER

The City of Dixon is hereby granted a provisional variance from 35 Ill. Adm. Code 304.141(a), subject to the following conditions:

- This provisional variance shall commence on July 11, 1985 and shall continue until July 31, 1985, or until the Petitioner's chlorination facilities are returned to service, whichever occurs first.
- 2. The Petitioner shall contact Mr. Gary Reside of the Agency's Compliance Assurance Unit via telephone at 217/782-9720 when the chlorination facilities are returned to service. This telephone notification shall be followed-up within 5 days with a written notification sent to Mr. Gary Reside at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Compliance Assurance Section 2200 Churchill Road Springfield, Illinois 62706 Attention: Mr. Gary Reside 3. Within 10 days of the date of the Board's Order, the Petitioner shall execute a Certificate of Acceptance and Agreement which shall be sent to Mr. James Frost of the Agency at the address specified in item #2 of this Order.

This certification shall have the following form:

I, (We) ______, having read the Order of the Illinois Pollution Control Board in PCB 85-103 dated July 11, 1985, understand and accept 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 1/2 day of 9 uly , 1985 by a vote of 7-0.

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Dorothy M. Gunn, Clerk Illinois Pollution Control Board