

ILLINOIS POLLUTION CONTROL BOARD
August 15, 1985

CITY OF ARCOLA,)	
)	
Petitioner,)	
)	
v.)	PCB 85-116
)	
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

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

This provisional variance request comes before the Board on the August 13, 1985 Recommendation of the Illinois Environmental Protection Agency (Agency). The Agency recommends that a 45-day provisional variance be granted retroactively from August 8, 1985 to the City of Arcola (Arcola) from 35 Ill. Adm. Code 304.120(c) and 304.141(a) to allow necessary repairs to be made to the Petitioner's wastewater treatment facility's lagoon aeration system. (Rec. 1).

The City of Arcola owns and operates a wastewater treatment facility (WWTP) which has a design average flow of 0.5 million gallons per day (MGD) and consists of a raw sewage pumping station, two aerated lagoons, a stormwater retention lagoon, phosphorus removal, clarifier, intermittent sand filters, and chlorination. (Rec. 1). The Petitioner's WWTP discharges its effluent to the Embarras River via the Scattering Forks Drainage Ditch pursuant to NPDES Permit #IL0027499. (Rec. 1).

The Petitioner's NPDES Permit provides that the city's wastewater treatment facilities must meet effluent limitations of 10 milligrams per liter (mg/l) for biochemical oxygen demand (BOD) and 12 mg/l for total suspended solids (TSS) as monthly averages. (Rec. 1).

During the past year, the Petitioner's discharge monitoring reports to the Agency pertaining to BOD and TSS in its effluent have indicated the following concentrations:

<u>Month</u>	<u>BOD (mg/l)</u>	<u>TSS (mg/l)</u>
July, 1985	25	16
June, 1985	15	2
May, 1985	23	15
April, 1985	30	8
March, 1985	18	28
February, 1985	18	18

<u>Month</u>	<u>BOD (mg/l)</u>	<u>TSS (mg/l)</u>
January, 1985	28	13
December, 1984	30	23
November, 1984	28	23
October, 1984	35	2
September, 1984	19	2
August, 1984	29	--
Average	25	14

(Rec. 2)

The City of Arcola has detected a break in the air header near the southwest corner of Lagoon #1 and a break in the air header on the south side of the stormwater retention lagoon which need to be repaired. (Rec. 2). The maximum flow that can be put through the WWTP's intermittent sand filters is approximately 300,000 gallons per day and Arcola has been generally operating at this level. However, Arcola has been unable to lower the water levels in the lagoon to make the requisite repairs to the air headers because the influent to the WWTP has been greater than 300,000 gallons per day. (Rec. 2). In order to lower the lagoon level so that the necessary repairs can be made, the City of Arcola intends to bypass flow greater than 300,000 gallons per day around the intermittent sand filters. (Rec. 2). It is estimated that approximately nine to twelve million gallons of water need to be bypassed around the filters to enable the water level of the lagoon to be sufficiently lowered. (Rec. 2)

The Petitioner believes that there is no practical alternative to bypassing the intermittent sand filters so that the lagoon level can be lowered to allow vital repairs to be completed. (Rec. 2). The Agency agrees with the Petitioner that "there is no alternative to routing flows above 300,000 gallons per day around the intermittent sand filters to lower the lagoon levels so the necessary repairs can be made". (Rec. 2).

Although the City of Arcola's wastewater discharge is about thirty miles upstream of Lake Charleston (which is used as a public water supply), the Agency anticipates a minimal environmental impact on Lake Charleston because of the relatively short duration of the provisional variance, the distance of the discharge point from Lake Charleston, and the proportionately low volume of effluent discharged vis-à-vis the total volume of water of Lake Charleston. (Rec. 3).

The Agency believes that the summertime is the optimal season for the requisite repairs to be made since it is "conducive to a speedy and quality repair thus minimizing the time of intermittent sand filter bypassing and the necessity of further repairs in the future". (Rec. 3). Additionally, the Agency has determined that the repairs in question are "necessary to return the treatment facility to optimum operating capability". (Rec. 3). Furthermore, the environmental impact on

the receiving stream is expected to be minimal because of "the high water levels in the receiving stream and the dilution of the effluent with farm ground drainage" before reaching the receiving stream. (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 Arcola. Therefore, the Agency recommends that the Board grant the Petitioner a 45-day provisional variance from 35 Ill. Adm. Code 304.120(c) and 304.141(a) retroactively from August 8, 1985, subject to various specified conditions.

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 Arcola is hereby granted a provisional variance from 35 Ill. Adm. Code 304.120(c) and 35 Ill. Adm. Code 304.141(a) to allow repairs to be made to its wastewater treatment plant's lagoon aeration system, subject to the following conditions:

1. This provisional variance shall commence on August 8, 1985 and shall continue until September 22, 1985, or until the repairs to the aeration headers are completed, whichever occurs first.
2. During the period of this provisional variance, effluent shall be limited to 25 mg/l BOD and 35 mg/l TSS.
3. The Petitioner shall sample the effluent once per week and perform laboratory analyses as required in its NPDES Permit #IL0027499. The results of each sample collected shall be submitted to the Agency along with the Petitioner's discharge monitoring report.
4. The Petitioner shall notify Mr. John Applegate of the Agency's Champaign Regional Office via telephone at 217/333-8361 when routing of flows around the intermittent sand filters is begun and when repairs to the air headers are completed. Each telephone notification shall be confirmed in writing within 5 days. Such written notification shall be submitted to:

Mr. John Applegate
Illinois Environmental Protection Agency
2125 South First Street
Champaign, Illinois 61820

5. During the variance period, the Petitioner shall continue to put at least 300,000 gallons per day through the intermittent sand filters. This flow shall be blended with the flow which bypasses the intermittent sand filters at the chlorination facilities.
6. The Petitioner shall operate and maintain the wastewater treatment facility so as to produce the best effluent practicable.
7. 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 following address:

Mr. James Frost
Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, Illinois 62706

This certification shall have the following form:

I, (We) _____, having read the Order of the Illinois Pollution Control Board in PCB 85-116 dated August 15, 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 15th day of August, 1985 by a vote of 7-0.

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