

ILLINOIS POLLUTION CONTROL BOARD
April 6, 1989

CITY OF CHARLESTON,)
(Coles County, IL0021644))
)
Petitioner,)
)
v.) PCB 89-62
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY,)
)
Respondent.)

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

This matter comes before the Board upon a Recommendation filed by the Illinois Environmental Protection Agency ("Agency") on April 6, 1989 recommending that the Board grant a 45-day provisional variance to the City of Charleston ("Charleston"). Charleston requests this variance to allow it to discharge from its excess storm water lagoons while a siphon pipe is being installed in the lagoons and thereby exceed its effluent limitations for five day biochemical oxygen demand (BOD) and total suspended solids (TSS).

Charleston's wastewater treatment facilities (WWTP) consist of a main pump station, aerated grit chamber, primary clarifiers, activated sludge aeration basins, secondary clarifiers, tertiary sand filters, effluent chlorination, flow measurement, anaerobic digesters, excess stormwater lagoons, and sludge handling facilities. The WWTP, which has a design average flow of 4.0 million gallons per day, discharges its effluents into Cassell Creek which then empties into Riley Creek, then into Kickapoo Creek, which empties into the Embarras River. Charleston's NPDES permit requires it to meet effluent limitations of 10 mg/l (monthly average) for BOD and 12 mg/l (monthly average) for TSS (both concentration limits).

According to the Agency, Charleston's wastewater treatment plant has been experiencing a problem with filamentous bacteria for the past several months. The filamentous bacteria has resulted in settling problems with the clarifiers at the facility, which reduces the hydraulic capability of the treatment plant. With this reduction in capability, partial flows have been directed to stormwater holding lagoons. These lagoons are designed to hold additional flows until such time as capacity is available at the facility. When capacity is available, the wastewater held in the lagoons can be bled back for complete treatment. The lagoons are designed only for bleed-back capabilities, not for discharging.

The Agency further explains that through the use of sodium hypochloride, the filamentous bacteria problem began to improve on April 3, 1989. However, in the process of getting this problem resolved, the stormwater lagoons were nearly filled to their capacity. On April 2-3, 1989, Charleston received approximately 2 1/2" of rain. This heavy rain resulted in the lagoons filling to the top and overflowing. As the structural stability of the lagoons was at question at this point, flows to the lagoon were stopped, resulting in a discharge at an emergency manhole.

Charleston is installing a siphon pipe in the lagoons to allow drawdown. Once the siphon is functional, flows beyond the capacity of the treatment plant can again be routed to the lagoons. The Agency states that this will result in no more discharge from the emergency manhold and that the discharge of the excess flows will at this point receive at least primary treatment in the lagoons prior to discharge. The Agency maintains that once the filamentous bacteria problem is totally resolved and the lagoons have the capacity to again receive stormwater flows only, this treatment scheme will no longer be necessary.

The Agency states that denial of the variance would result in an arbitrary and unreasonable hardship for the following reasons:

Petitioner has been dealing with an ongoing problem caused by filamentous bacteria. A denial of this variance could result in Petitioner increasing flows to the plant beyond its ability to meet effluent standards and prolong a problem that is currently being resolved. By allowing this variance, Petitioner can continue to resolve the filamentous bacteria problem and return the plant to its normal mode of operation.

(Agency Rec. at 3). The Agency further states that it believes that due to the high flow of the receiving stream, Cassell creek, at this time and the remaining treatment provided by Charleston, that the environmental impact will be minimal. The Agency also states that it does not believe that there will be any adverse impacts on any downstream public water supplies. The nearest downstream public water supply is the City of Newton. This supply is about 40-45 miles downstream from Charleston's discharge. According to the Agency, no adverse impact should occur to this supply. Finally, the Agency states that it is not aware of any federal regulations which would preclude the granting of this variance. The Agency recommends, therefore, that Charleston be granted a provisional variance,

subject to certain conditions.

The Board having received notification from the Agency that compliance on a short term basis with the effluent limitations imposed by 35 Ill. Adm. Code 304.120 and 304.141(a) (as they relate to BOD and TSS), would impose an arbitrary or unreasonable hardship upon Charleston, and the Board concurring in that notification, will grant Charleston's provisional variance, subject to the conditions suggested by the Agency.

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

ORDER

1. The City of Charleston is hereby granted provisional variance from 35 Ill. Adm. Code 304.120 and 304.141(a), as they relate to BOD and TSS, subject to the following conditions:

- a. This variance shall commence April 3, 1989 and shall terminate May 18, 1989 or when the treatment plant returns to its normal mode of operation with capacity available for stormwater flows, whichever occurs first.
- b. During the period of this variance, the effluent discharged by the mixture of the excess lagoons and the treatment plant shall be limited to 30 mg/l monthly average for both BOD and TSS.
- c. Charleston shall notify the Agency's Champaign Regional Office by telephone within twenty-four (24) hours when the plant returns to its normal mode of operation. Written confirmation shall be submitted within 5 days to the following address:

Illinois Environmental Protection
Agency
2125 South First Street
Champaign, Illinois 61820
Attn: Steve Baldwin

and

Illinois Environmental Protection
Agency
Division of Water Pollution Control

Compliance Assurance Section
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276
Attn: Pat Lindsey

- d. During this provisional variance, Charleston shall operate its wastewater treatment facility so as to produce the best effluent practicable. Additionally, Charleston shall return all influent flow through the treatment plant for complete treatment as soon as possible.

- e. During this provisional variance, Charleston shall monitor the effluent for the parameters as listed in their NPDES Permit IL0021644 from the point of where the lagoon discharge and plant effluent converge and mix prior to discharge.

2. Charleston shall, within ten (10) days of the date of this Order, execute a Certificate of Acceptance and Agreement agreeing to be bound to the terms and conditions of the variance and sent to the Springfield address above.

This variance shall be void if Petitioner fails to execute and forward the certificate within forty-five day period. The forty-five day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

CERTIFICATION

I, (We), City of Charleston, having read the Order of the Illinois Pollution Control Board, in PCB 89-62, dated April 6, 1989, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

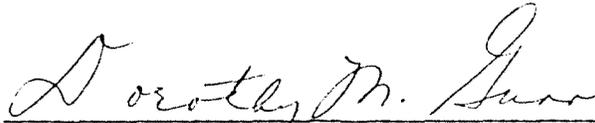
Title

Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1987, ch. 111^{1/2}, par. 1041, provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

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 6th day of April, 1989, by a vote of 7-0.



Dorothy M. Gunn, Clerk,
Illinois Pollution Control Board