

ILLINOIS POLLUTION CONTROL BOARD  
November 23, 1977

CITY OF CANTON, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 77-234  
 )  
 ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 Respondent. )

OPINION AND ORDER OF THE BOARD (by Mr. Young):

This matter comes before the Board on a variance petition filed on September 14, 1977, by the City of Canton seeking relief from certain provisions of Chapter III of the Water Pollution Regulations as applied to the effluent from the City's East Side Sewage Treatment Plant. Specifically, variance is requested from Rule 203(c), as that rule applies to phosphorus, and from Rule 203(f) insofar as that rule applies to ammonia nitrogen. On October 17, 1977, the Agency filed a Recommendation favorable to the grant of the variance after imposition of certain conditions; the City has waived hearing in this matter.

The Petition alleges that the variance is necessary to relieve the City from meeting the water quality standard of 1.5 mg/l for ammonia nitrogen and 0.05 mg/l for phosphorus. From this the Board must assume that those standards are not presently achieved either in Duck Creek, which receives the plant effluent, or in an unnamed strip mine lake of approximately 11 acres which receives the flow from Duck Creek.

Rule 203(c) provides that phosphorus as P shall not exceed 0.05 mg/l in any stream at the point where the stream enters any reservoir or lake. The effluent from current plant operation discharges phosphorus ranging in concentration from 3 to 8 mg/l (Pet. 1).

Rule 203(f) requires that a 1.5 mg/l concentration of ammonia nitrogen (as N) shall not be exceeded in the waters of the State, except for certain exceptions not applicable here. The effluent from current plant operation discharges ammonia nitrogen ranging in concentrations from 3 to 8 mg/l (Pet. 1).

Rule 402 of Chapter 3 requires that no effluent shall, alone or in combination with other sources, cause a violation of any applicable water quality standard. In those instances where the water quality standard for a particular constituent is exceeded in a receiving body of water, any discharge of that constituent to that body of water must meet the water quality standard, as an effluent limitation, unless a variance has been granted pursuant to Title 9 of the Environmental Protection Act.

The existing East Side Sewage Treatment Plant was improved during 1974 to 1976 to include a new package contact stabilization plant, new tertiary settling lagoons, aerobic digestion and sludge drying beds capable of treating a design flow of 0.5 MGD with an influent BOD<sub>5</sub> strength of 205 mg/l (Pet. 1, 2). These improvements do not provide the capability to remove ammonia nitrogen to a concentration of 1.5 mg/l or phosphorus to 0.05 mg/l and the City of Canton has submitted a plan of study to the Agency preparatory to a Step 1 grant to determine the nature and extent of further plant modifications necessary to meet existing standards (Pet. 2). Because regulatory changes which may result in modification of both the ammonia nitrogen (R77-6) and phosphorus (R76-1) water quality standard or effluent limitation are currently in hearing before the Board, the Petitioner (Pet. 3-5) and the Agency (Rec. 4) submit that requiring the Petitioner to meet the existing requirements during the pendency of the regulatory proposals would constitute an arbitrary and unreasonable hardship. The Petitioner further submits that the City is presently financially incapable of financing the additional facilities required without grant assistance (Pet. 3).

The Board has previously granted a number of petitions for variances in which relief was sought from the requirement to remove phosphorus to the 0.05 mg/l level finding that such practice is technically feasible but economically unreasonable. City of Hoopeston, PCB 76-234, 24 PCB 441; Southern Illinois University at Edwardsville, PCB 77-111, 25 PCB 775; Valley Water Company, Inc., PCB 77-146, 25 PCB 289; Village of Deland, PCB 77-193 (September 15, 1977); Village of Beecher City, PCB 77-194 (September 15, 1977). As in the cases cited, the Board finds here that the Petitioner would suffer an arbitrary or unreasonable hardship if required to meet the 0.05 mg/l phosphorus limitation and will therefore grant the relief requested.

The Agency Recommendation at page 4 states that the Petitioner's facilities are not currently capable of consistently achieving removal of ammonia nitrogen to a concentration of 1.5 mg/l. In support of the regulatory proposal (R77-6) to modify the ammonia nitrogen regulations, the Agency stated that they had found, during the past several years, no practical, environmentally acceptable method for ammonia reduction which will assure continuous compliance with the 1.5 mg/l ammonia nitrogen standard (Pet. 3). In view of the foregoing, the Board will grant the

relief requested finding that to require the Petitioner to demonstrate here what the Agency has undertaken to demonstrate in support of their proposal for modification of the regulations in R77-6 would be unreasonable, in view of the regulatory proceeding.

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

ORDER

1. The City of Canton is granted a variance for its East Side Sewage Treatment Plant from Rules 203(c) and 402 of Chapter 3: Water Pollution, of the Board's Rules and Regulations regarding phosphorus until November 23, 1982, subject to the following conditions:

- a) This variance will earlier terminate upon adoption by the Board of any modification of the existing phosphorus water quality standards and effluent limitations and the City shall comply with such revised regulations on adoption by the Board.

2. The City of Canton is granted a variance for its East Side Sewage Treatment Plant from Rules 203(f) and 402 of Chapter 3: Water Pollution, of the Board's Rules and Regulations regarding ammonia nitrogen until December 31, 1978, subject to the following conditions:

- a) This variance will earlier terminate upon adoption by the Board of any modification of the existing ammonia nitrogen water quality standards and effluent limitations and the City shall comply with such revised regulations on adoption by the Board.
- b) In the event that grant funds become available during the period of this variance, the City shall incorporate in any design and specification adequate provision for the installation of equipment for the removal of ammonia nitrogen which will provide the best practicable treatment technology for the removal of ammonia nitrogen over the life of the works.
- c) During the period of this variance, the City shall operate the East Side Sewage Treatment Plant to achieve the minimum discharge of ammonia nitrogen consistent with the capabilities of the existing equipment and process.

3. Within 35 days of the date of this Order, the Petitioner shall submit to the Manager, Variance Section, Division of Water Pollution Control, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois, 62706, an executed Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. The form of said certification shall be as follows:

CERTIFICATION

I, (We), \_\_\_\_\_ having read the Order of the Pollution Control Board in PCB 77-234, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
SIGNED

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 23<sup>RD</sup> day of November, 1977 by a vote of 5-0.

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