

ILLINOIS POLLUTION CONTROL BOARD
December 14, 1978

VILLAGE OF ROSELLE,)
)
 Petitioner,)
)
 v.) PCB 78-244
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

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

This matter comes before the Board on a Petition for Variance filed by the Village of Roselle on September 11, 1978, seeking relief for the Roselle Main STP from Rules 203(c), 402, 404(f)(ii)(A) and 404(f)(ii)(D) of Chapter 3 of the Board's Rules and Regulations as each rule applies to phosphorus. On November 13, 1978, the Environmental Protection Agency filed its recommendation in favor of the requested relief provided that Petitioner adhere to certain conditions. No hearing was held in this matter; the Village of Roselle properly waived hearing in its Amended Petition filed on October 11, 1978.

The Village of Roselle owns and operates the Roselle Main sewage treatment plant which handles an average flow of 1.3 MGD, 86.7% of design capacity, and discharges its effluent to Spring Brook Creek tributary to Lake Kadajah and approximately 13,000 feet from the Roselle outfall. Waters from Lake Kadajah flow into the DesPlaines River. The Roselle treatment facility is subject to the requirements of Rule 203(c) and 402 for phosphorus which, in combination, prohibit any discharge from causing or contributing to a violation of the 0.05 mg/l phosphorus water quality standard in any lake or in any stream at the point of entry of the lake. Petitioner would not need a variance from the phosphorus requirements in Rules 404(f)(ii)(A) and 404(f)(ii)(D) of Chapter 3 unless the Roselle Main STP does not qualify for the relief granted to it and other parties joined in the variance petition designated PCB 78-124, Bloomington v. EPA. According to the revised Board Order in this matter, Roselle is exempt from the Rule 404(f) BOD/suspended solids requirements provided that their discharge does not exceed the 10 mg/l BOD and the 12 mg/l suspended solids limitations and if granted a variance from the phosphorus limitations imposed by 203(c) and 402.

The Roselle Main STP is an activated sludge facility consisting of an influent pump, a grit tank, two primary clarifiers, two trickling filters, a gravel-lined aeration basin, a final clarifier and a chlorination system. Originally constructed in 1928, this treatment facility was expanded in 1961 and in 1972. According to the Petition, the Village of Roselle does not plan to further expand the capacity of the Roselle Main STP. Increased wastewater loads will be treated at the new plant in the Village, the Jerry A. Botterman Wastewater Reclamation Facility (Pet. 3, 4).

In April, 1977, the Village of Roselle participated in a Facilities Plan with the Villages of Bloomingdale and Glendale Heights which was submitted to the Agency on June 8, 1977, by Glendale Heights. The Facilities Plan proposed to eliminate the discharge to the Roselle Main STP and divert all flows to a regional treatment plant within the Glendale Heights Facilities Planning Area. However, the plan also analyzed seven alternatives to meet the treatment needs of the three communities. Alternative #2 which called for the retention and the expansion of separate treatment facilities was found to be most acceptable among the participants (Pet. 2; Rec. 3).

Under this treatment alternative, the Village of Roselle has proposed to upgrade both sewage treatment plants as well as to expand the capacity at the Botterman plant. Anticipated improvements at the Roselle Main STP, consist of general rehabilitation of the facilities and also the addition of chemical storage, a feed system and a second final clarifier to provide the facility with the capability of removing phosphorus to an effluent concentration of 1.0 mg/l. Petitioner claims that removal of phosphorus to 1.0 mg/l will contribute a 2070 kg/year load of phosphorus to Lake Kadajah (Pet. 2, 4, 6).

Petitioner's NPDES Permit (No. IL0030813) issued May 11, 1977, eventually contained interim conditions requiring that the effluent not exceed 10 mg/l BOD and 12 mg/l suspended solids on a 30-day average. This Roselle plant qualifies for the variance from Rule 404(f) as provided for Petitioner and 287 additional dischargers in PCB 78-124, Bloomingdale v. EPA. If granted a variance from Rules 203(c) and 402, Petitioner will be permitted to upgrade the Roselle Main STP pursuant to Step II and Step III funding under the construction grants program, while discharging at the interim effluent limitations established by the variances.

The Village of Roselle stated that strict adherence to the 0.05 mg/l phosphorus water quality standard is technically infeasible. In evaluating alternative methods, the Petitioner alleges that land application and diversion of treated effluent to an alternate basin was economically unreasonable and that control technology for phosphorus to a 0.05 mg/l level was not technically feasible, but that treatment to a 1.0 mg/l phosphorus effluent concentration is currently possible. The Agency also recommended that the Village of Roselle consider the construction of an outfall to bypass Lake Kadajah and to discharge directly into Spring Brook Creek, a tributary of the DesPlaines River (Pet. 1, 5; Rec. 6).

The Board is familiar with the problems facing municipal dischargers in meeting phosphorus standards. 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.

In those and other cases, the Agency and the Board have recognized that it is economically impractical for the Petitioner to comply with the current phosphorus limitations of Chapter 3. In addition, the Agency has petitioned the Board in regulatory proposal R76-1 for appropriate amendments to the phosphorus effluent and water quality standards of the Water Pollution Regulations. If regulatory proposal R76-1 were adopted as proposed, the Roselle Main STP would be required to treat phosphorus to a level of 1.0 mg/l (Rec. 6).

The Board will grant a variance to the Roselle Main STP from the phosphorus requirements of Rules 203(c) and 402 for five years or until the Board adopts a regulation change under R76-1, whichever occurs first. Before final submission of the Glendale Heights Facilities Plan, the Petitioner should further investigate the feasibility of diverting the effluent of the Roselle Main STP outfall from Lake Kadajah.

The Board will direct the Agency to modify Petitioner's NPDES permit consistent with this Opinion and Order. The Agency shall also incorporate in the new NPDES permit such interim effluent limitations as may be reasonably achieved through the application of best practicable operation and maintenance practices in the existing facility.

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

ORDER

1. The Village of Roselle is granted a variance for the operation of the Roselle Main STP from Rules 203(c) and 402 of Chapter 3: Water Pollution Rules and Regulations regarding phosphorus until January 4, 1983, subject to the following condition:

- 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 Village shall comply with such revised regulations when adopted by the Board.

2. The Petition for Variance from the phosphorus requirements of Rules 404(f)(ii)(A) and 404(f)(ii)(D) of Chapter 3: Water Pollution Regulations is hereby dismissed.

3. Petitioner shall within 30 days of this Order request Agency for NPDES permit to incorporate all conditions of the variance set forth herein.

4. The Agency, pursuant to Rule 914 of Chapter 3, shall issue a new NPDES permit consistent with the conditions set forth in this Order including appropriate monitoring requirements and such interim effluent limitations as may reasonably be achieved through the application of best practicable operation and maintenance practices in the existing facilities.

5. Within forty-five (45) 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 the variance. The forty-five day period herein shall be suspended in the event of judicial review of this variance pursuant to Section 31 of the Environmental Protection Act. The form of said certification shall be as follows:

CERTIFICATION

I, (We), _____ having read the Order of the Pollution Control Board in PCB 78-244, 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 14th day of December, 1978 by a vote of 3-0.

Christan L. Moffett

Christan L. Moffett, Clerk
Illinois Pollution Control Board