ILLINOIS POLLUTION CONTROL BOARD August 24, 1978

VILLAGE OF HANOVER PARK,)
Petitioner,)
v.) PCB 78-122
ENVIRONMENTAL PROTECTION AGENCY,)
Respondent.))

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

This matter comes before the Board on an Amended Petition for Variance filed on June 16, 1978, by the Village of Hanover Park for relief from the Water Quality Standards in Chapter 3: Water Pollution Rules and Regulations. After reviewing this Petition, the Environmental Protection Agency recommended that Petitioner be granted a variance from Rules 203(d), 203(f) (ammonia nitrogen), 402 and 962 of Chapter 3. No hearing was held in this matter; hearing was properly waived by Petitioner.

The Village of Hanover Park owns and operates a sewage treatment plant with a design flow of 0.4 MGD which discharges to the West Branch of the DuPage River. The existing plant #2 constructed under Agency Permit #1971-AA-1164 is required to meet effluent limitations of 10 mg/l BOD5, 12 mg/l suspended solids, a pH range of 6 to 9, and a fecal coliform limitation of 200 per 100 ml in accordance with its NPDES Permit #IL 0034487 (Rec. 2).

The Village of Hanover Park is presently considering measures for upgrading this treatment plant. The expansion will increase treatment capacity to 1.2 MGD and improve effluent quality by the addition of grit chambers, biological nitrification, tertiary filters, and chlorination facilities. Presently, Petitioner's discharge monitoring reports indicate general compliance with the effluent limitations of its NPDES permit. Upon completion the plant improvements are expected to meet 10/12 BOD5/suspended solids effluent standards which with biological nitrification is considered by the Agency to be the most effective control measures for BOD5/SS and ammonia nitrogen in municipal wastewater (Rec. 4).

The Agency claims that a variance is necessary from the Rule 203(d) dissolved oxygen and the Rule 203(f) ammonia nitrogen water quality standards. Model studies conducted by the Northeastern Illinois Planning Commission (NIPC) pursuant to Section 208 of P.L. 92-500 indicates efforts to improve quality of point-source discharges to the DuPage River will fall short of attaining compliance with the Board's water quality standards. The study concludes that the DuPage River basin will experience periodic violations of dissolved oxygen and ammonia nitrogen water quality standards despite the efforts of this Petitioner and others who treat municipal sewage entering the DuPage River basin to tertiary levels (10/12 BOD5/SS) and by the incorporation of biological nitrification treatment (Rec. 3).

Under Rule 203(d) of Chapter 3 the Board requires that dissolved oxygen in Illinois waters shall not fall below 5.0 mg/l at any time or 6.0 mg/l during 16 hours of any 24-hour period. Rule 203(f) provides that a 1.5 mg/l concentration of ammonia nitrogen not be exceeded in certain waters of Illinois and the rule is applicable to the West Branch of the DuPage River. In addition, where the downstream dissolved oxygen and ammonia nitrogen water quality standards will continually be violated, the Village of Hanover Park would be required to meet the water quality standards as an effluent limitation unless Petitioner is granted a variance from Rule 402 in addition to Rules 203(d) and 203(f) (ammonia nitrogen) of Chapter 3.

In a number of cases involving the ammonia nitrogen requirement, the Board has granted a variance provided that Petitioner agree to achieve the minimum discharge of ammonia nitrogen consistent with best practicable control measures. City of Canton, PCB 77-234 (November 23, 1977); Village of Arthur, PCB 77-266 (December 20, 1977); Village of Lake Zurich, PCB 78-89 (June 8, 1978). Since then, the Board has adopted a new Rule 402.1 effective July 27, 1978, as an exception to Rule 402 which establishes an interim ammonia nitrogen effluent limitation for discharges to streams of this State. Without a variance from Rules 203(f) (ammonia nitrogen) and 402, Petitioner's discharge from its treatment plant #2 would be required to meet 1.5 mg/l ammonia nitrogen effluent limitation in the summer (April through October) and 4.0 mg/l for the remainder of the year provided that Petitioner does not cause or contribute to a breach of the ammonia nitrogen water quality standard.

In view of the foregoing, the Board will grant a variance to the Hanover Park sewage treatment plant #2 from Rule 203(f) as it applies to ammonia nitrogen and from Rule 402 for three years or until designed improvements are completed.

The Agency recommends that a variance from Rule 203(d) and Rule 402 is necessary based on the dissolved oxygen conditions in the West Branch of the DuPage River downstream from Petitioner's discharge. Although the record indicates that the proposed improvements to the Hanover Park plant #2 are expected to improve downstream water quality conditions, the NIPC study indicates that dissolved oxygen violations will not be eliminated (Rec. 3).

The Board is concerned with the dissolved oxygen conditions that apparently will continue to occur in the DuPage River basin after concerted efforts to improve point-source discharges to these waters. In view of these conditions, the Board finds that a variance from Rule 203(d) dissolved oxygen water quality standard is necessary. A variance will be granted to Petitioner from Rules 203(d) and 402 for five years on the condition that the Village of Hanover Park consider all reasonable methods for improving dissolved oxygen levels in its effluent from its sewage treatment plant #2. The Board will not require Petitioner to monitor dissolved oxygen levels in the receiving waters since the Agency maintains two water quality monitoring stations in the vicinity of Petitioner's discharge.

The Agency also claims that Petitioner requires a variance from the standards of issuance requirements of Rule 962 in Chapter 3 before the Agency may issue the necessary permits. The Board disagrees. A variance from the standards of issuance requirements for permits is applicable where Petitioner is not afforded relief from the water quality standards subject to violation. In this matter, the Board finds that a variance from Rule 402 in addition to the Rule 203(d) and the Rule 203(f) (ammonia nitrogen) water quality standards is sufficient to preclude the need for relief from Rule 962 of Chapter 3.

The Board will direct the Agency to modify Petitioner's NPDES Permit IL 0034487 consistent with this Order pursuant to Rule 914 of Chapter 3 to include interim effluent limitations as may reasonably be achieved through application of best practicable operation and maintenance practices in the existing facilities.

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

ORDER

1. The Village of Hanover Park is granted a variance for the operation of its sewage treatment plant #2 from Rules 203(f) and 402 of Chapter 3: Water Pollution Rules and Regulations regarding ammonia nitrogen until September 7, 1981, or until the sewage treatment plant's facility improvements become operational, whichever occurs first, subject to the following condition:

- (a) During the period of this variance the Village shall operate this treatment plant to achieve the minimum discharge of ammonia nitrogen consistent with the capabilities of existing equipment and process.
- 2. The Village of Hanover Park is granted a variance for its sewage treatment plant #2 from Rules 203(d) and 402 of Chapter 3: Water Pollution Rules and Regulations until September 7, 1983, subject to the following condition:
 - (a) During the period of this variance the Village shall implement all reasonable measures to increase dissolved oxygen levels in the treatment plant's effluent and in the waters downstream from its discharge.
- 3. Petitioner, within 30 days of the date of this Order, shall request Agency modification of NPDES Permit IL 0034487 to incorporate all conditions of the variance set forth herein.
- 4. The Agency pursuant to Rule 914 of Chapter 3 shall modify NPDES Permit IL 0034487 consistent with the conditions set forth in this Order including such interim effluent limitations as may reasonably be achieved through 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 stayed during judicial review of this variance pursuant to Section 41 of the Environmental Protection Act. The form of said certification shall be as follows:

CERTIFICATION

the Order of the Pollution Control Board in PCB 78-122, 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.

Mr. Goodman abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 24th day of the control by the above Opinion and Order were of 40.

Christan L. Moffett, Glerk

Illinois Pollution Control Board