

ILLINOIS POLLUTION CONTROL BOARD  
January 8, 1981

VILLAGE OF HOMEWOOD, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 80-103  
 )  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

WALTER D. CUMMINGS APPEARED ON BEHALF OF THE PETITIONER.  
PHILLIP R. VAN NESS APPEARED ON BEHALF OF THE RESPONDENT.

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

On May 12, 1980, the Village of Homewood (Homewood) filed a Variance Petition seeking variance from Rules 401, 402, 404, 405, 406 and 203(f) of the Illinois Pollution Control Board Rules and Regulations, Chapter 3: Water Pollution. On June 12, 1980, the Illinois Environmental Protection Agency (Agency) filed a Motion for Extension of Time to File Variance Recommendation, based upon difficulties in arranging discussions with individuals having authority to approve the Agency's recommendation. The Agency Recommendation was filed on July 10, 1980, recommending denial of variance, largely on the basis of Homewood's failure to adequately answer certain questions raised by the Board in PCB 79-133 (Village of Homewood v. IEPA, December 13, 1979, 37 PCB 17). These questions concerned the reasons for a five-year delay in compliance with the Board's 1972 Water Pollution Regulations and for failure to monitor ammonia nitrogen levels. On July 17, 1980, Homewood filed an Amended Petition which attempted to answer these questions. On August 21, 1980, the Agency again moved for an extension of time to file a recommendation, for the same reason as its first such motion. The Amended Recommendation was filed on August 27, 1980, recommending that the variance be granted subject to certain conditions. On September 19, 1980, a pre-hearing conference was held at which the parties identified and discussed the remaining issues: whether the 2,000 mg/l total dissolved solids (TDS) limitation requested would be too inflexible based upon high background TDS concentrations, whether variance is needed to raise present permit limitations on daily average flow (DAF), and the length of the variance. As a result of this conference, the Agency filed a Second Amended Petition on November 3, 1980, again recommending that the variance be granted subject to conditions.

Hearing was held on October 24, 1980. Two Homewood employees and one member of the public were present.

The Agency's June 12 and August 21, 1980 Motions for Extension of Time are hereby granted.

Homewood operates a wastewater treatment facility which receives domestic wastewater from most areas within the corporate limits and from a few surrounding areas. These wastes are treated in a 3.5 million gallon per day (MGD) facility. Flows of up to 4.5 MGD receive secondary treatment, are pumped to finishing ponds and are chlorinated. Flows over 4.5 MGD receive at least primary settling and chlorination. At 10.5 MGD pond treatment must be essentially bypassed and chlorine contact time becomes inadequate. The effluent is discharged into Butterfield Creek which empties into Thorn Creek, then to the Little Calumet River and is, apparently, ultimately received by the Des Plaines River (Pet. Ex. 2).

This facility went into operation in 1969 and was not designed for ammonia reduction. The ammonia nitrogen limitation became effective in 1972 and compliance was required by December 31, 1973, (Rule 203(f) of Chapter 3). It is only since 1977 that plant effluent has been checked for ammonia content. Homewood apparently cannot explain its failure to test for ammonia from 1972 to 1977, but does note that this occurred prior to the hiring of its present operator and that the turnover in key Homewood personnel may have contributed to it. Further, Homewood alleges that weather-related delays have slowed progress on completion of a Sewer System Evaluation Survey (SSES). The Agency is aware of no facts that contradict Homewood's account.

The history of the plant and the flow conditions of the sewer system demonstrate why permitted effluent limitations cannot presently be met. An Infiltration/Inflow (I/I) Analysis (Wastewater Management-facilities Planning Report, Baxter and Woodman, Inc., June, 1977, revised February, 1978) shows that the sewer system receives excessive amounts of I/I at times of moderate to excessive runoff from rain or melting snow. At these times effluent limitations are exceeded.

Compliance with the Environmental Protection Act (Act) and the Board's Regulations cannot be accomplished until Homewood can complete sewer rehabilitation and construction of wastewater treatment plant improvements or can connect to a regional wastewater treatment authority. Either of these events would constitute Step 3 work under the federal construction grant program. The cost of such improvements is estimated to be \$8.5 million.

While compliance cannot be attained prior to the completion of Step 3 work, Homewood has taken some steps to improve the plant's effectiveness. These include the cleaning of the primary aerated pond in August, 1977 (\$42,000), the modification of the

aerobic digester, air lines and sludge handling in 1977 and 1978 (\$60,000), the initiation of a sludge disposal program (\$60,000/year), the hiring of a Class I operator in August, 1977, and the addition of a staff position in June, 1977. \$140,000 in additional funds have been allocated for additional pond cleaning and improvements to drying beds. As a result, initiated modifications show definite improvements in effluent quality since August, 1977.

It is alleged that the ammonia limitation could be met in the short term with break-point chlorination. However, this would allegedly cost \$600,000. TDS limitations can be met by Homewood obtaining its water supply from Lake Michigan. Its Lake Michigan water allocation has now been set. Meeting the fecal coliform limitation could be accomplished by building larger tanks for chlorine contact or by moving the chlorine application point to the secondary pond. However, chlorine addition is presently under consideration by the Board in R77-12 (Docket D) and Homewood alleges that present investment in this area would be unwise. While the mere pendency of a regulatory proceeding is insufficient evidence of hardship, the other factors are persuasive.

The Board notes that the only allegation concerning environmental impact is that, based upon the effluent improvement over the last few years, it will be less than it has been. However, neither Homewood nor the Agency alleges what the past impact has been.

Local funding of the \$8.5 million improvements would be unreasonable. The Board, therefore, finds that immediate compliance would be an unreasonable hardship upon Homewood and that there will be no significant adverse environmental impact. Although a five year variance was originally requested, the parties have agreed that the variance shall extend to January 1, 1982, or until 60 days after the completion of the SSES, whichever occurs first. This will allow for review of this variance after the costs and methods of compliance have become clearer. Any future variance request should include a full discussion of the environmental impact.

The limitations to be set for the effluent from the treatment facility have been agreed to and are based upon present discharges. Although quantity limitations were also requested, the Board declines to order them since variance is given from Board regulations which are expressed in terms of concentration. The requested chlorine limitation has also not been ordered since there is presently no such limitations in the Board's rules or regulations. Further, variance from Rule 406 is not required since the Homewood facility has an untreated waste load of less than 50,000 population equivalents and, therefore, is not covered by that rule.

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

ORDER

1. The Village of Homewood is hereby granted a variance from Rules 203(f) as it relates to Ammonia Nitrogen and total dissolved solids, 401(c), 402 as it relates to those limitations for which variance has been given, 404 and 405 of Chapter 3: Water Pollution, until January 1, 1982 or until 60 days after completion of the SSES, whichever occurs first, subject to the conditions that the effluent from the treatment facility not exceed the following limitations:

BOD (concentration)	20 mg/l	30 day average
	30 mg/l	7 day average
TSS (concentration)	20 mg/l	30 day average
	30 mg/l	7 day average
Fecal Coliform	unlimited on days when flow exceeds 4.5 MGD, 400/100 ml at all other times	
Ammonia Nitrogen	17.5 mg/l	daily maximum
TDS	2,000 mg/l	

2. Petitioner shall report to the Agency in writing not later than August 1, 1981, when and how a conversion to the use of Lake Michigan water will take place.
3. Pursuant to Rule 914 of Chapter 3, the Agency is directed to modify Homewood's NPDES permit to reflect these limitations.
4. Within 45 days after the date of this Order Peititoner shall execute and forward to the Illinois Environmental Protection Agency, Variance Section, 2200 Churchill Road, Springfield, Illinois 62706 and to the Pollution Control Board a Certification of Acceptance and Agreement to be bound to all terms and conditions of the variance. The form of said Certification shall be as follows:

CERTIFICATION

The Village of Homewood, having read and fully understanding the Order of the Illinois Pollution Control Board in PCB 80-103 hereby accepts said Order and agrees to be bound by all terms and conditions thereof.

\_\_\_\_\_  
Signed

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the \_\_\_\_\_ day of \_\_\_\_\_, 1980 by a vote of \_\_\_\_\_. \_.

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