ILLINOIS POLLUTION CONTROL BOARD January 5, 1989

CITIZENS UTILITIES OF ILLINOIS,	COMPANY)	
	Petitioner,) }	
	٧.) PCB	85-140
ILLINOIS ENVIRONME PROTECTION AGENCY,)	
	Respondent.)	

DANIEL J. KUCERA, ESQ., OF CHAPMAN AND CUTLER, APPEARED ON BEHALF OF THE PETITIONER, CITIZENS UTILITIES COMPANY OF ILLINOIS

WAYNE L. WIEMERSLAGE, ESQ., APPEARED ON BEHALF OF THE RESPONDENT, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

OPINION AND ORDER OF THE BOARD (by M. Nardulli):

This matter comes before the Board on a petition for review filed on behalf of Citizens Utilities Company of Illinois (hereinafter "Citizens") on September 13, 1985. The Petitioner seeks the Board's review of certain conditions contained in reissued NPDES Permit No. IL00032735 issued to Citizens by the Illinois Environmental Protection Agency (hereinafter "Agency") on August 22, 1985. The permit is applicable to Citizens' West Suburban Treatment Plant No. 2 (hereinafter "Plant No. 2") located in Bolingbrook, Will County.

Public hearings were held on this matter in Joliet, Will County. A short hearing was held on November 2, 1987. A second hearing was held on December 4, 1987. At the December 4 hearing, the Petitioner called one witness while the Agency presented two witnesses. Citizens filed a Brief in Support of Petition for Review on January 25, 1988. The Agency filed a Brief in Opposition to the Permit Appeal on March 18, 1988 and Citizens responded with a Reply Brief on April 11, 1988. As a result of the open waiver filed by Citizens on October 2, 1985, there is no statutory decision deadline in this case.

In the Petition for Review, Citizens objected to two conditions to the permit. One of those items, requiring Citizens to supply the Agency with financial information on an annual basis, was resolved by the parties prior to hearing and is no longer at issue (R. at 6). The question before the Board involves the imposition of an effluent limitation for ammonia-nitrogen of 1.5 mg/l for the months of April through October and 4.0 mg/l for the months of November through March, when the downstream daily maximum ammonia-nitrogen concentration in the stream does not meet the requirement in 35 Ill. Adm. Code 302.212. Based on the record, the Board finds that the condition was properly

imposed by the Agency and may properly be enforced against a permittee.

BACKGROUND

Citizens is an Illinois corporation that provides public utility water service and sanitary sewer service to a number of areas in metropolitan Chicago. One of these service areas comprises a substantial portion of the Village of Bolingbrook in Will County, which is commonly referred to as Citizen's West Suburban service area. In 1985, Citizens provided both water and sanitary sewer service to 7,000 single-family residents, 800 apartment units and 200 commercial units in the West Suburban service area. Plant No. 2 is one of the two waste water treatment plants for the West Suburban service area. The plant provides secondary treatment by use of the activated sludge contact stabilization process with a design average flow of three-million gallons per day. Presently, the plant has no facilities for the treatment of ammonia-nitrogen. Plant No. 2 discharges directly to the East Branch of the DuPage River, approximately 2.5 miles upstream of its confluence with the West Branch of the DuPage River.

35 Ill. Adm. Code 312.212(a) and (b) establish the following standards for ammonia-nitrogen in Illinois waterways:

- a) Ammonia nitrogen (as N: Storet Number 00610) shall in no case exceed 15 mg/l.
- b) If ammonia nitrogen is less than 15 mg/l and greater than or equal to 1.5 mg/l, then un-ionized ammonia (as N) shall not exceed 0.04 mg/l.

Section 39 (b) of the Illinois Environmental Protection Act, Ill. Rev. Stat. 1985, ch. $11\frac{1}{2}$ (hereinafter "Act"), paragraph 1039(b) provides in relevant part that:

All NPDES permits shall contain those terms and conditions which may be required to accomplish the purposes and provisions of this Act, and The Agency may include, among such conditions, effluent limitations and other requirements established under this Act, [and] Board regulations....

Section 2(b) of the Act provides in relevant part:

It is the purpose of this Act.... to establish a unified, state-wide program....to restore, protect and enhance the quality of the environment, and to assure that adverse effects upon the environment are fully considered and borne by those who cause them.

Section 11(b) of the Act provides in relevant part:

It is the purpose of this Title to restore, maintain

and enhance the purity of the waters of this State in order to protect health, welfare, property, and the quality of life, and to assure that no contaminants are discharged into the waters of the State...without being given the degree of treatment or control necessary to prevent pollution....

ISSUES PRESENTED

Citizens presents three arguments against the imposition of the permit condition. The first is that the condition is not necessary to achieve the purposes of the Act and Board regulations. The second is that the cost of compliance with the condition makes compliance unreasonable. The third is that the construction time for the new nitrification plant required to comply with the permit condition renders nitrification pointless.

The major issue to be resolved in this permit appeal is whether the permit condition imposing the ammonia-nitrogen limitations is a condition necessary to comply with the Act or Board regulations. If a petitioner objects to conditions imposed by the Agency, the petitioner must show that conditions are not necessary to accomplish the purposes of the Act and therefore were unreasonably imposed. Section 40(a)(1) of the Act clearly puts the burden of proof on the petitioner to show that the condition is not necessary. The Board reviews the permit condition by considering the record compiled by the Agency. The Board reviews the evidence in the record without deference to the Agency's decision. The petitioner must show that the Agency's decision was in error because the evidence proves that no violation of the Act or Board regulations would result if the permit conditions were not imposed. City of East Moline v. Illinois Environmental Protection Agency, PCB 86-218, (Slip Op. September 8, 1988).

In this case the Petitioner argues that the effluent limitation of 1.5 mg/l for April through October is not contained in the Board's regulations (R. at 98). While this statement is true, it is not conclusive proof that the condition is not necessary or unreasonable. The condition will be upheld unless Citizens can show that the condition is unnecessary to ensure compliance with the water quality standards.

The Petitioner introduced an engineering study, prepared by its project manager, Mr. William Brink, in an attempt to prove that the condition in the permit is unnecessary. The Agency argues that by introducing the engineering study, the Petitioner is attempting to go outside the record to establish the levels of ammonia-nitrogen concentration upstream of the plant and therefore this information should not be considered by the Board. After a review of the record compiled by the Agency, the Board has determined that Mr. Brink's study does not contain material outside the record, but instead represents a reformulation of the information from the record together with information that was generally available to the Agency. As such, the study should be considered in the review of the condition.

In his testimony concerning the engineering study, Mr. Brink maintained that the permit condition concerning ammonia-nitrogen effluent from Plant No.

2 is unnecessary. For purposes of his study, Mr. Brink assumed a concentration upstream dilution ratio of 19.1 (R. 47) and assume that all seven of the upstream treatment plants had completed installation of nitrification facilities and were complying with their permits (R. 30). The study states that when a plant is operating its nitification facility it should be able to achieve a concentration of 0.2 mg/l. Therefore, the study concludes that the upstream concentration should be below 1.0 mg/l. With this upstream ammonia-nitrogen concentration, Plant No. 2 could discharge effluent well above its present concentrations and still not cause a violation of the water quality standard.

At hearing, Mr. Brink attempted to dismiss the impact of an upstream treatment plant discharging above its average by stating that if one plant is above average, it is reasonable to assume that one of the remaining six will be simultaneously discharging at below its average, so that you have an averaging effect upstream (R. 48). Further, he states that the study allows enough of a safety factor to protect against higher concentrations upstream (R. 48-49).

The Agency maintains that the NPDES permit for all of the sewage treatment plants upstream allow maximum effluent at 4.0 mg/l of ammonianitrogen. Therefore, Citizens must show that the standard will be met when all of the upstream plants are discharging at 4.0 mg/l of ammonia-nitrogen. The Agency contends that Mr. Brink's study fails to address this possibility. Further, in its Brief in Opposition to the Permit Appeal, the Agency gave the following justifications for the limitation it imposed:

The Agency imposed the less strict ammonia nitrogen effluent limitation of 4.0 mg/l for the months of November through March because 35 Ill. Adm. Code 304.301(b) provides for that less strict limit during those months for discharges causing or contributing to water quality violations. That section states that 35 Ill. Adm. Code 304.105 does not apply for the months of November through March, but it imposes an effluent limitation of 4.0 mg/l on discharges causing or contributing to a water quality violation. 35 Ill. Adm. Code 304.105 does apply for the months of April through October, so effluent must not violate water quality standards and the stricter effluent limit of 1.5 mg/l is imposed.

Hence, the effluent limits of 1.5 mg/l for October through April, and 4.0 mg/l for November through April, are required by the interaction of 35 Ill. Adm. Code 302.212(c), 35 Ill. Adm. Code 304.105 and 35 Ill. Adm. Code 304.301(b).

The Agency agrees with the Company that the effluent limitation of 4.0 mg/l for the months of November through March is a temporary limit that terminates after July 1, 1988 pursuant to 35 Ill. Adm. Code 304.301(d). This means that any permit issued to the Company after July 1, 1988 will not have the relaxed effluent limitation of 4.0 mg/l for the months of November through March, but would have to have the effluent limit of 1.5 mg/l as long as there were ammonia nitrogen water

quality violations. This termination of the less strict standard demonstrates a public policy to "tighten up" on dischargers who cause or may cause ammonia nitrogen water quality violations, such as the Company.

As argued by the Agency, Mr. Brink's study fails to address the possible scenario of all of the upstream treatment plants discharging effluent at 4.0 mg/l. Further, the study fails to present any evidence that this stream situation could not possibly occur. The Agency points out that during periods of extremely cold weather it is conceivable that all of the upstream plants will suffer equipment failure and not be able to operate their nitrification facilities. Under these circumstances, it is conceivable that all of the plants would discharge at 4.0 mg/l of ammonia-nitrogen. The Illinois State Water Survey estimates indicate that essentially the entire flow of the East Branch is attributable to sewage discharge under low flow conditions. Twenty five to thirty percent of the occurrences of low flow can be expected in January and February when domestic use of water decreases substantially (R. at 81). By failing to show that this situation could never occur, or that the water quality standard could still be met without Citizens adhering to the condition proposed by the Agency, Citizens has failed in its burden of proving that the proposed condition is not necessary.

In its petition, Citizens introduces information concerning the cost of compliance with the permit condition and argues that the expense of compliance makes the imposition of the condition unreasonable and would result in an undue hardship on the Petitioner. In a permit appeal case, the standard of review is the issue of whether or not compliance with the Act or Board regulations is advanced by the Agency's action. An arbitrary or unreasonable hardship is not an issue. Peabody Coal Company v. Illinois Environmental Protection Agency, PCB 78-296, 38-131, 132 (May 1, 1980). Therefore, information concerning the cost of compliance and hardship on the Petitioner will not be considered by the Board in this opinion.

It should be noted that the information concerning cost of compliance in this matter is even less relevant because the compliance plan proposed by Citizens is not necessarily mandated by the permit condition. The Agency is only requiring Citizens to meet specified effluent standards under certain conditions and not specifying the installation of equipment. If Citizens is confident in the study it presented by Mr. Brink, it may chose not to make any changes in its operation. However, the risk of violating the permit condition and the water quality standard should be borne by Citizens and not by the people of the State of Illinois.

Citizens may also opt to act as the complainant in enforcement actions against upstream water treatment facilities that fail to comply with their permit conditions, as a means of assuring that the upstream conditions will not result in a water quality standard violation. Further, if Citizens is cited for a violation of the water quality standards, it may join any and all of the upstream dischargers in an enforcement or variance proceeding and therein determine necessary effluent reductions under 35 Ill. Adm. Code 304.105.

Throughout its permit appeal, Citizens attempts to rely on projections of

future operation by upstream sewage treatment plants. The relief the Petitioner is seeking resembles a wasteload allocation for all upstream dischargers and for Plant No. 2 if there is a water quality violation. However, as a sole petitioner, Citizens is in no position to represent the upstream dischargers and determine the technical feasibility, economic reasonableness and fairness to all dischargers, nor is it in a position to guarantee future action for upstream dischargers.

The Board also rejects the Petitioner's position that the construction time for a nitrification facility renders the permit condition pointless. While it is not clear on what basis the Petitioner feels the construction time would make the permit condition unnecessary, it is clear that Citizens has failed to meet the burden of proof with this argument. Again, it should be emphasized that the permit condition does not necessarily mandate the construction of a nitrification plant. The Petitioner has failed to show that other means of compliance are not available and has even suggested through its engineering study that no change in operation is required to comply with the permit condition. It is Citizen's responsibility, as part of the NPDES permit, to determine a way to adhere to the permit condition.

CONCLUSION

Citizens has failed to conclusively demonstrate the disputed permit conditions are not necessary to achieve the purposes of the Act or Board regulation. On this basis, Citizens' request of the Board to delete the condition is denied.

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

ORDER

The Agency's right to impose of ammonia-nitrogen concentration limitations at Citizens Utilities Company's Plant No. 2 in Bolingbrook, Will County is hereby upheld, and Citizen's request of the Board to delete the conditions is denied.

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985, 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 day of _______, 1989, by a vote of _______.

Dorothy M. Gunh, Clerk

Illinois Pollution Control Board