ILLINOIS POLLUTION CONTROL BOARD July 11, 1985

CITY OF SYCAMORE,)	
Petitioner,)	
v.))	PCB 83-172
ILLINOIS ENVIRONMENTAL))	
PROTECTION AGENCY,)	
Respondent.	ý	

MR. CHARLES L. FIERZ, CITY ATTORNEY, APPEARED ON BEHALF OF PETITIONER; and

MR. E. WILLIAM HUTTON and MR. THOMAS DAVIS, ATTORNEYS, APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board on a petition filed by the City of Sycamore (Sycamore) requesting a variance from 35 Ill. Adm. Code 306.304 in order to modify its NPDES permit to allow a sanitary sewer bypass pursuant to 35 Ill. Adm. Code 309.184. The original petition was filed on November 17, 1983 and then amended pursuant to Board orders for more information on January 17, 1984, March 12, 1984 and July 3, 1984. Supplementary information was filed on November 14, 1984.

The Illinois Environmental Protection Agency (Agency) made several recommendations and motions that the petition be denied or dismissed for lack of information. Agency Rec., April 16, 1984 (recommending denial); Agency Motion to Dismiss, August 1, 1984 (no action taken, J. Anderson dissenting, August 2, 1984); Agency Second Rec., August 20, 1984 (recommending denial or dismissal); Agency Supplemental Motion to Dismiss, December 20, 1984.

The Agency's Supplemental Motion to Dismiss was taken up at the Board's January 10, 1985 meeting. However, the motion failed to muster the four affirmative votes required under 35 Ill. Adm. Code 101.109 to become a "final determination." Consequently, no action was taken on the motion and the case proceeded to hearing. Hearing was held on January 28, 1985 and briefs were subsequently filed by the Petitioner on May 1, 1985 and by the Agency on June 3, 1985.

Before discussing the variance petition itself, it is necessary to address an objection raised by the Agency to the admission of a written study prepared by Sycamore's present engineering consultants, Greeley and Hansen, on the grounds that it is hearsay (R. at 126-7). The Agency also objects to each and every exhibit tendered by the City at hearing on the grounds of hearsay and lack of foundation.

The Agency argues that the Hearing Officer improperly received this evidence contrary to the dictates of 35 Ill. Adm. Code 103.204 (Ag. Brief in Opp. at 2). Section 103.204 provides that Hearing Officers "shall receive evidence which is admissable under the rules of evidence as applied in the Courts of Illinois" and "may receive evidence which is material, relevant and would be relied upon by reasonably, prudent persons in the conduct of serious affairs . . . "

First, the Board notes that Sycamore claims that the report was not offered to prove the truth of the matter asserted therein, but only to illustrate what steps were being taken to correct the City's overflow problems. Assuming however that the study was submitted as proof of the facts therein, it does constitute hearsay. The Board finds, however, that it was properly admitted under Section 103.204 as material and relevant. The Board notes that the Agency itself made a written request for the entire report (Second Rec. at par. 2) which request was apparently met (R. at 34-5). The Board also finds that the rest of the exhibits were properly admitted under this Section.

The City of Sycamore is located in Dekalb County, Illinois. Sycamore has a sanitary sewer system and owns and operates three wastewater treatment plants at two locations, the North Site and the South Site. According to the Greeley and Hansen report, the rated capacities of each of the plants, in millions of gallons per day (MGD), is as follows:*

Plant	Flow Ra	te
	Design Average	Design Maximum
North Site Original Plant New Plant	0.8	2.5 9.64
South Site Southwest Plant	.45	1.0

The plants serve a population of approximately 9,800. The subject of this petition are the two plants, the "original" and

^{*}At the outset, the Board wishes to note that where information supplied by the City is unclear or contradicted by other filings made by the City, the Board has generally referred to that information submitted last in time.

"sew" plants, located at the North Site. These facilities generally consist of two largely separate treatment plants with grit removal, primary clarifiers, aeration tanks and final clarifiers. While the design average flow (DAF) to these two plants is 4.3 MGD the actual average daily flows to the site range from 1.0 to 1.5 MGD, far below the rated capacity. Sycamore explains that two water-intensive industries, with a combined impact of 0.9 MGD, have departed from the City (Third Am. Pet. at 2). Since both plants were not needed, all flow was sent to the new plant and the original plant was taken out of The new plant is more than adequate to handle all service. normal dry weather flows and in fact, produces effluent of a higher quality than that mandated by its NPDES permit (Second Rec. at par. 13). However, during wet weather flows, shortfalls in capacity at the new plant occur which the City contends results in sewer surcharging and the subsequent back-up of sewage in basements. Consequently, the City requests a variance to permit the use of a 24 inch diameter bypass pipe during periods of extreme wet weather to "Martin's Ditch" which is a tributary of the East Branch of the Kishwaukee River.* The variance is requested for five years or until rehabilitation or reconstruction of the system is accomplished.

The cause of the sewer surcharging and subsequent basement flooding, and whether the bypass will, in fact, alleviate these problems is vigorously disputed by the Agency. Moreover, the Agency contends that the petition should either be dismissed or denied because Petitioner has not met its burden of proof. Specifically, the Agency points to the lack of a definite compliance plan, and an inadequate consideration of 1) possible measures to minimize any adverse impact; 2) the extent of any environmental impact; and 3) possible compliance alternatives.

Apparently, the City has had basement flooding problems which predate construction of the new plant (R. at 14). However, the City contends that the new plant, which was intended to ameliorate the flooding, has only exacerbated it (R. at 14). The plant was constructed with grant funding pursuant to an engineering study prepared by W. Duechler and Associates. The study concluded that there was excessive infiltration and inflow (I/I) in the collection system and recommended 1) reduction of I/I on cost-effective basis; 2) construction of a new treatment plant at the North Site; 3) expansion of the North Cross Street Pumping Station; and 4) replacement of the old Parkmoor Lift Station with a new East Interceptor (Greeley and Hansen report at 3).

^{*}Additionally, the City requested that it be able to use eleven existing small portable pumps as well as a 10" portable pump but conceded that this request should be dismissed. (Objections to Motion to Dismiss, August 13, 1984). Accordingly, the Board dismisses the requested relief with respect to these pumps.

The City contends that the whole system is now a "lemon" because during at least two rainfalls "extensive, tragic, flooded basements occurred". (Pet. Brief at 2). According to the City, sewer surcharging occurs during wet weather because the entire system was not designed for peak hourly flows. Inadequate capacity exists at the treatment plant, pumping station, interceptor sewers and lift station (R. at 35). For instance, the design maximum pumping capability at the North Site is 18.16 MGD and the peak flow rate during a 2.9 inch rainfall is 25 MGD (Third Am. Pet. at 3). The Board will not reiterate here all of the alleged design shortfalls.

The City further contends that all cost-effective I/I has already been eliminated to no avail and thus, has concluded that "[o]nly massive reconstruction of the entire system offers a real cure." (Pet. Brief at 6). A schedule for compliance was submitted as follows:

ITEM	DATE COMPLETED
Research and Report on Design Error	August 1984
Planning and Report on Various Alternatives and Solutions to Problems with Cost-Effective Analysis	January 1986
Design of Excess Flow Facilities and/or Flow Reduction Measures	July 1987
Construction of Excess Flow Facilities and/or Flow Reduction Measures	July 1989

The only cost estimate provided was that of an 8.0 million gallon bypass storage tank estimated at \$2.7 million.

The City contends that the schedule as submitted is the only responsible course of action. The City asserts that it is committed to a long term solution but that it needs time to develop its alternatives. As proof of its commitment the City has proffered a study prepared by its new engineering consultants, Greeley and Hansen. However, this engineering study concerns itself solely with alleged design flaws made by the previous engineers. While the identification of possible flaws may be a necessary prelude to correcting the overall problem, the study fails to demonstrate what positive steps will be taken to correct the problem as required by the Illinois Environmental Protection Act (Act). The Board notes that this petition has been pending for close to two years without any progress towards a compliance plan.

The Agency is correct in maintaining that a compliance plan is to be submitted as part of the petition and not developed over the pendency of the variance itself. Modine Manufacturing Company v. IEPA, PCB 79-112 (August 18, 1982). The compliance

plan, as submitted, does not satisfy this requirement. In reality, the plan is nothing more than a vague sketch which fails to commit the City to a specific course of action. In specific instances, where there is no apparent solution to the problem, compliance plans may include time for research leading to an ultimate but as yet unidentified resolution. However, in this instance, sufficient time to study as well as develop a compliance plan has already transpired. The "plan" also fails because no explanation is given as to why it will take five years to correct the problem or why the time intervals between each "step" are so lengthy. The Board finds the City's failure to proceed with a permanent solution surprising in light of the long history and gravity of the situation.

Also surprising is the City's apparent failure to take into account possible measures to alleviate the impact of the flooding on its residents and on the environment. For instance, the Agency feels that the old plant could be better utilized to provide some level of treatment for at least 18.16 MGD. states that the old plant is used during wet weather but its usefulness cannot be determined without re-engineering studies (Third Am. Pet. at 3). The Agency also contends that an aggressive program to reduce illegal connections and seal leaking manholes would have a positive impact and is a relatively lowcost measure available to the City in the interim. While the estimated maximum total daily I/I during wet weather was about 12.34 MGD, only 1.44 MGD was eliminated during the sewer rehabilitation program. More than 70 percent of the I/I was unlocated and "speculated to be on private property and beyond the scope of the study" (Greeley and Hansen report at 8). early as 1976 it was known that an estimated 1,200 footing drains were connected to the sanitary sewer system at unidentified locations (Ex. E at 39). The City's failure to investigate and eliminate these sources of I/I, then and now, remains unexplained. While the City initially had professed to commit itself to eliminating excess I/I as part of this variance, by the hearing date this plan had been abandoned in favor of investigating "design flaws". Given the apparent extent of Sycamore's I/I and the relative ease, low cost and timely results which could be expected from an aggressive program to reduce it, the City's explanation for rejecting the program is simply unconvincing.

The City apparently sees its dilemma as either bypass and "kill a few fish" or risk the health and safety of its citizens (R. at 118-120). However, because the bypassing does not cure basement flooding the City continues to risk both its residents and the environment. The City has made no formal assessment of the environmental impact of its bypassing activities. The City simply argues that any environmental impact will be minimal because the bypasses are expected to occur only once or twice yearly and at such times when the Kishwaukee is at extremely high water levels. The City estimates the dilution ratio during these occasions to approach 5000 to 1. It expressly rejects the

necessity of performing a more detailed impact analysis because it argues that this would entail breaking the very regulations from which the variance is sought (R. at 39). The Board rejects this argument as specious; bypassing activities have been going on for a number of years, each event presented an opportunity for data gathering.

The Agency questions Sycamore's conclusions that any environmental impact would be minimal. The Agency feels that the petition grossly underestimates the actual amount of bypassing and that the dilution ratio provided is unreliable since it is founded on only one date. The Board also notes that the dilution ratio, on its face, appears highly questionable. Also lacking is a plan of operation for the bypass. Limitations as to how much and how often is to be bypassed under various rainfall conditions are necessary to minimize the environmental impact attendant with bypassing raw sewage. The Act requires that Sycamore do more than make conclusory statements as to the "minimal" effect on the Kishwaukee.

The crux of Sycamore's hardship claim is that its faulty sewer and treatment system causes basement back-ups and that ipso facto bypassing is justified to protect the health and welfare of The Board notes that the first flooding incident its citizens. attributed to the new plant occurred on May 23, 1983, over 2 years ago, and yet the City has not proceeded to identify a viable compliance option, much less embark on a course toward its Moreover, the City apparently intends to take no implementation. measures to alleviate the continuing impact of the sewer surcharging on its residents while developing options. As previously noted, the relatively low-cost alternative of reducing excessive I/I has been expressly rejected. The Board is highly concerned about Sycamore's declared resistance to active pursuit of any interim measures, which would alleviate the plight of its residents during heavy storm conditions, other than a crisis response that, at best, only partially addresses the potential health and other problems resulting from basement backups, and fails to address the environmental consequences at all. Compounding the situation is Sycamore's less than aggressive pursuit of a compliance plan to ultimately cure the problem. Consequently, it appears that much of Sycamore's hardship is self-imposed.

Even were the Board to ignore the gross factual deficiencies in this variance petition, a grant of variance would be inappropriate and, indeed, could serve to aggravate the problem. Any variance which would be granted by the Board would require interim compliance measures and demonstrable progress towards ultimate compliance: the record makes clear that these essential conditions of the variance have already been either rejected or resisted by Sycamore. To grant the type of variance as requested by Sycamore, thus fostering Sycamore's otherwise non-complying actions and removing the threat of enforcement, would be an unacceptable encouragement of the status quo.

The City asserts that "to not grant a hardship variance to the City of Sycamore would be manifestly inconsistent and unjust" relying on variances granted by the Board in City of Farmington v. IEPA, PCB 83-63, October 6, 1983; Village of Bourbonnais v. IEPA, PCB 83-71, October 19, 1983; Village of Seneca v. IEPA; PCB 83-76, November 18, 1983 (City's Brief at 4-5). However, the petitioners in the above matters were in substantially different circumstances than Sycamore and succeeded in meeting their burden under the Act.

In the <u>City of Farmington</u>, a variance for bypassing was granted to allow the <u>City to conduct</u> a flow monitoring study. The bypassing was simply the only mechanism available to the <u>City to gather the data necessary to solve its severe environmental problem</u>. Accordingly, the variance was only granted for the short period necessary to collect the data. The Board specifically noted that should the <u>City request a variance extension beyond the data collection period a compliance plan would be necessary</u>.

Although the <u>Village of Bourbonnais</u> case presented a more similar situation to that of Sycamore's, in that matter the Village identified and committed itself to a compliance alternative. Specifically, it was contemplated that within four years of the grant of the variance a new plant would be finished capable of treating all of Bourbonnais' waste. In the interim, the Village had made provision for treatment of 2.0 MGD above its treatment capacity by constructing an interceptor sewer connecting it to another treatment plant. The imposition of other expensive short-term solutions was found to constitute an arbitrary and unreasonable hardship. However, the Village was ordered to aggressively reduce I/I and deadlines were imposed for reduction of flows and use of the bypass.

Finally, the Village of Seneca is also inapposite because it was demonstrated that the creek discharged to was already considered "degraded" and that elimination of the bypass would be of minimal beneficial effect. More importantly, it was contemplated that a sewer rehabilitation project, although principally concerned with dry flow, would eliminate enough I/I upstream of the bypass to offset the flow discharged from the bypass. The Village was also in the construction grants program to correct its wet weather flow problems.

Although Sycamore's pumping activities may have minimized the extent of basement flooding, as testified to, it did not serve to prevent it and thus is ineffective as a long-term solution. Rather, the health and welfare of Sycamore's citizens depends primarily on the the City's commitment to identify long-term solutions and then proceed to implement them as expeditiously as possible. Unfortunately, the ease of the "quick fix" approach has apparently slackened the City's commitment to find an ultimate solution. For example, Mayor Johnson testified that he feels more bypasses are warranted (R. at 118). Variance

may only be granted where it is demonstrated that the timely compliance called for by the Act and regulations is to be achieved. Sycamore has not made such a demonstration. For all of the foregoing reasons, the Board finds that Sycamore has failed to demonstrate the arbitrary or unreasonable hardship, as balanced against environmental harm, necessary to justify grant of variance. Accordingly, variance from 35 Ill. Adm. Code 306.304 and 309.184 is hereby denied.

The Board notes that this denial does not preclude Sycamore from initiating a new variance proceeding by filing a petition remedying the deficiencies outlined in this Opinion.

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

ORDER

The City of Sycamore is hereby denied a variance for its 24 inch diameter bypass pipe to Martin's Ditch and its eleven "small portable pumps and 10" portable pump from 35 Ill. Adm. Code 306.304 and 309.184.

IT IS SO ORDERED.

- B. Forcade and J. Theodore Meyer concurred.
- J. D. Dumelle, R. Flemal and W. Nega dissented.

Dorothy M. Gunn, Clerk

Illinois Pollution Control Board