ILLINOIS POLLUTION CONTROL BOARD
October 17, 1974

RAYMOND ESKER AND HAROLD JURGENS, d/b/a ESKER AND JURGENS, Petitioners,	)	
vs.	)	PCB 74-278
ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

Mr. Q. Anthony Siemer, Attorney, on behalf of Petitioners;
Mr. John H. Rein, Attorney, on behalf of the Environmental Protection Agency.

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

Raymond Esker and Harold Jurgens, d/b/a Esker and Jurgens, (hereinafter Petitioners) filed a petition for variance which was received by the Environmental Protection Agency (Agency) on July 19, 1974.

Petitioners seek relief from a ban imposed by the Agency (pursuant to the operation of Rule 921(a) of Chapter 3: Water Pollution of the Illinois Pollution Control Board Rules and Regulations (Chapter 3)) on further sanitary sewer extensions in an area served by the sewage treatment plant owned and operated by the City of Effingham (City). Petitioners seek relief to enable the start of development of a 45 1/3 acre tract of land known as the Shenandoak Subdivision, located in the County of Effingham, approximately one-half mile north of the City of Effingham, Illinois. Specifically, Petitioners seek permission to install and operate 1350 feet of sanitary sewer extension which would ultimately serve ten (10) single-family residences. However, Petitioners have stated that only six (6) residences are planned for construction during the term of any variance granted under the present request.

The City is presently served by a secondary trickling filter sewage treatment plant which was designed to receive and treat a wastewater flow of 1.27 million gallons per day (MGD) and an organic population equivalent (P.E.) of 11,500. Monthly Operation Reports submitted by the City for calendar year 1973 show the following:

Average daily flow = 2.07 MGD
Three (3) month low flow = 1.67 MGD
Three (3) month high flow = 2.59 MGD

The organic loading using the average daily flow figure is 10,273 P.E. The total load on the plant (actual and permitted) is now 12,497 P.E.,

with the hydraulic load at 1.878 MGD, or 147.9% of the hydraulic capacity and 108.7% of the organic capacity. A table of average daily flow per month for all available months in 1971, 1972 and 1973 is presented below:

CITY OF EFFINGHAM SEWAGE TREATMENT PLANT

AVERAGE DAILY FLOW PER MONTH

(MGD)

	1971	1972	1973
January	--	1.49	1.99
February	--	1.49	2.02
March	--	1.56	2.79
April	--	1.75	2.96
May	--	1.33	1.86
June	1.44	1.48	--
July	1.45	1.47	--
August	1.27	1.59	1.78
September	1.60	1.54	1.61
October	1.33	1.35	1.63
November	--	2.02	2.26
December	--	1.81.	--

Because of this excessive overloading, the Agency placed a ban on further sanitary sewer extensions tributary to the City's plant on February 19, 1974. In fact, the Agency confirmed its own conclusions as to the hydraulic overload with data submitted by the City in its application for operating permit. It is this sewer ban from which Petitioners seek relief.

The City's plant discharges to an intermittent stream. This intermittent stream is tributary to Salt Creek, which in turn is tributary to the Little Wabash River. The intermittent stream into which the City's plant discharges provides a dilution ratio of less than one to one. On September 16, 1970, a stream survey was conducted by Agency personnel on Salt Creek. This survey indicated that the City's sewage treatment plant was degrading the aquatic biota from a balanced condition upstream of the plant to a polluted environment downstream of the plant. Semi-polluted conditions then persisted for about 3 miles downstream to about 7 1/2 miles downstream. It also appeared that another pollution source entered Salt Creek some 6 1/2 to 7 1/2 miles below the plant. Tests of a grab sample of plant effluent on that date indicated 30 mg/l BOD and 78 mg/l total suspended solids.

Since the City's plant has an untreated waste load in excess of 10,000 P.E., the plant must meet the 20 mg/l BOD and 25 mg/l suspended solids standard of Rule 404(b) of Chapter 3. Results of Agency grab sampling indicate that the City plant often fails to achieve the standard imposed by Rule 404(b), and on a number of occasions the tests show

exceedingly high BOD and suspended solids concentrations. In addition, exceedingly high fecal coliform counts have been obtained in violation of Rule 405 of Chapter 3. Finally Rule 203(f) of Chapter 3 contains an allowable concentration for ammonia nitrogen (as N) of 1.5 mg/l in the receiving stream. Since the receiving stream provides essentially zero dilution and the stream ammonia nitrogen concentration cannot exceed 1.5 mg/l, the effluent from the City's plant must meet a standard of 1.5 mg/l ammonia nitrogen as N. This standard has been violated on every date of Agency sampling in 1973. The following table is a summary of Agency grab sampling results of the City plant's effluent during the past year:

Date	BOD (mg/l)	Suspended Solids (mg/l)	Ammonia (as N)(mg/l)	Fecal Coliforms Counts/100 ml)
1/16/74	68	130	14.0	700,000
3/27/74	37	110	13.0	100
4/10/74	55	80	11.0	920,000
5/28/74	28	80	7.5	200
6/4/74	25	31	8.6	100
7/2/74	2	50	15.5	0

The following table is a summary of data compiled from Monthly Operation Reports submitted by the City:

Month	Flow MGD		Final Effluent BOD	
	Average	Range	Average	Range
August '73	1.71	1.18-3.68	28	15-40
September '73	1.61	1.23-2.53	26	15-40
October '73	1.63	1.02-2.52	24	15-35
November '73	2.06	1.03-4.38	29	10-60
December '73	2.52	1.42-4.69	23	10-40
January '74	3.09	1.70-4.57	21	5-35
February '74	2.67	1.73-4.25	26	10-50
March '74	2.89	2.24-4.29	29	6-57
April '74	2.77	1.65-3.72	27	3-60
May '74	2.29	1.39-4.37	30	6-63
June '74	2.45	1.60-4.05	14	7-30

In addition to the inadequacies of the treatment plant described above, frequent bypassing occurs along the transport system during wet weather periods. Furthermore, separate component parts of the treatment plant have frequently become overloaded and caused bypassing of that part.

The City has decided to go forward with an interim plan to upgrade their treatment plant in an attempt to provide for an average flow of 1.75 MGD (17,500 P.E.) and the equivalent of 2,590 lbs. BOD per day. In addition, the City proposes to have 250,000 gallons per day of cooling water removed from the City's sanitary sewer system. The Agency issued Permit #1974-AB-495 on March 21, 1974, for these interim additions and modifications. Agency engineers, however, cannot predict whether these

improvements will both provide for treatment capabilities for 17,500 P.E. and provide for effluent quality of 20 mg/l BOD and 25 mg/l suspended solids. The Agency issued the subject permit with the belief that the improvements should improve the quality of the effluent produced. However, Agency engineers cannot predict that, even after the improvements are completed, the plant will be able to meet the 20 mg/l BOD and 25 mg/l suspended solids standard of Rule 404(b) of Chapter 3. The Agency specifically included Special Condition #1 in the permit. Special condition #1 explicitly states that the sanitary sewer extension restricted status must remain in effect, despite the issuance of the permit for interim improvements. The City was well aware that the Agency could not guarantee the success of the improvement program. In a March 5, 1974, report entitled Effingham Sewage Treatment Facility Interim Plan, prepared by the City's Consulting Engineers, and transmitted to the Mayor and City Council, the following statement was made:

> "...just because they (the Agency) permit the proposed modifications to the sewage treatment facilities, that is no sign that they (the Agency) will lift the restriction. The restriction will be lifted only after it is exhibited that the plant is operating at a level acceptable to the EPA."

As to hardship, Petitioners allege that they have resigned other jobs to devote themselves full time to the subdivision business and that they would lose a substantial portion of their personal income if the requested variance were denied. However, no data is presented as to income and no facts have been submitted to support this allegation.

Petitioners further allege that denial of the requested variance would entail the loss of the spring and summer months for construction purposes. It is obvious that the whole construction season was already lost by the time Petitioners filed their variance petition.

Petitioners allege that certain arbitrary hardships will be imposed if the variance request is denied, e.g. that "no ban is imposed upon residential sewer hookups where mains already exist." The Agency notes in this regard that pursuant to Rule 901 of Chapter 3, the Agency only has the power to control those connections which would serve more than one residence and/or 15 or more persons.

Petitioners assert that they revised their plats at the request of the City Planning Commission and now cannot use septic systems as an alternate treatment device. The end result of compliance with the Planning Commission's request does not result in total loss of use of the property to the Petitioners. Rather, Petitioners' use is merely suspended or limited while the restricted status remains in effect. Further, Petitioners have apparently not explored the possibility of installing septic systems on alternate lots. If an easement is granted purchasers to use alternate lots for septic systems until sewer lines become available, construction can begin on about half the available lots.

The Agency believes Petitioners' use and enjoyment of the subject property is at most merely suspended and not terminated.

From the petition, it is obvious that construction has not commenced. The Board has held in a number of North Shore Sanitary District sewer ban cases that at least substantial steps toward completion of construction must have taken place before the date of the ban in order for the Board to find the requisite hardship and grant a variance. As the Board said in Monyek v. Environmental Protection Agency, PCB 71-80 (June 19, 1971) and Feige v. Environmental Protection Agency, PCB 72-192 (August 1, 1972);

> "Undeniably, petitioner is confronted with some measure of inconvenience in this case. We cannot, however, view petitioner's plight as singular and therefore arbitrary nor can we commiserate to such a degree that we grant rather than deny this request. In cases where a house has been completely built before the date of the order (March 31, 1971) or where substantial steps toward completion have been taken we can clearly judge the hardship of non-connection to be unreasonable."

The Board has followed the logic of these decisions in other 'sewer ban' cases similar to the present situation, Lobdell and Hall v. Environmental Protection Agency, PCB 72-511, Springfield Marine Bank v. Environmental Protection Agency, PCB 73-348. In those cases where the Board has granted variances in 'sewer ban' situations, some extreme hardship has been present of substantially grater magnitude than that alleged by Petitioners here: For example, forfeiture (Viking Investment Company v. Environmental Protection Agency, PCB 73-236); petitioners with very limited means would suffer a severe financial loss (Ronald H. and Carolyn Bower v. Environmental Protection Agency, PCB 73-273); a grossly overloaded school building needed more room (Meridian Community Unit School District #1 v. Environmental Protection Agency, PCB 73-349); and an outbreak of hepatitis which could have been caused by malfunctioning septic tanks (City of Silvis v. Environmental Protection Agency, PCB 74-88). The Board finds, therefore, that Petitioners have not shown the degree of hardship necessary under the Act.

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

IT IS THE ORDER of the Pollution Control Board that:

This Petition be and is hereby denied without prejudice.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted on this 17th day of October, 1974 by a vote of 4-0.

Christan L. Moffett