## ILLINOIS POLLUTION CONTROL BOARD November 18, 1983

PCB 83-76

VILLAGE OF SENECA, ) Petitioner, ) v. ) ILLINOIS ENVIRONMENTAL ) PROTECTION AGENCY, )

Respondent.

KEITH R. LEIGH APPEARED ON BEHALF OF PETITIONER, AND

E. WILLIAM HUTTON APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board on the June 15, 1983 petition of the Village of Seneca for variance from 35 Ill. Adm. Code 306.304 prohibiting overflows from sanitary sewers. On July 18, 1983, the Illinois Environmental Protection Agency (Agency) filed its Recommendation in support of variance subject to conditions. Hearing was held in this matter on September 15, 1983 in response to the timely-filed objection of Jeanne Mayfield of LaSalle, Illinois.

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The Village of Seneca (Village), LaSalle County, operates a sanitary sewer system tributary to its sewage treatment plant (STP). This sewer system serves approximately 1400 people; the balance of the population, about 700 people, are served by individual septic systems.

The Village's sanitary sewer system, which was mainly constructed during World War II, is subject to considerable infiltration/inflow (I/I). This has resulted in sewer surcharging and basement backups, and placement of the system on restricted status in May, 1967.

Variance is sought to allow the operation of an existing sanitary sewer bypass consisting of a 7" square hole cut in the top of a 12" main sanitary sewer line, at a point where the sewer, which lies in the alley right of way west of Main Street, crosses Rat Run Creek. This point is about 1/2 mile upstream of the STP's discharge into Rat Run Creek; Rat Run Creek is tributary to the Illinois River. The hole was originally cut by the Village to allow access to the pipe for cleaning purposes. While the Village asserts the cut was necessary because the manhole north of the creek had been removed, the Agency asserts that it was necessary because the manhole downstream of the creek was buried, but that the buried manhole was found and raised in October, 1981. The Agency additionally notes that, since then, the hole has been used as a bypass point. (Compare Pet., p. 2, with Agency Rec. p. 3.)

The hole is normally closed by a cover secured with a steel band. The Village reports that during storm events, nearby residents remove the cover to allow overflow of raw sewage into the creek to prevent basement backups. The Village estimates that bypassing is caused to occur during 1" rainfalls, or about 16 times yearly. Duration of each event is guessed to be 48 hours, with a discharge rate of 490 gallons per minute. Because of the amount of I/I to which the system is subject, the Village believes the loadings of this discharge to be 20 mg/l BOD and 25 mg/l suspended solids.

At hearing, additional information was presented by Kenneth R. Cline and Bill Graves, who live on south Main Street, Mr. Cline, who characterizes himself as "the low one on the [sewer] line", related that basement backups have been occuring in his home since December 24, 1980 whenever the Village gets a rain lasting over 20 minutes (R. 10, 19, 23). Mr. Graves concurred with Mr. Cline, but also stated that "since it's happened once, it takes less and less rain each time to have it happened (sic) again" (R. 23).

If variance is granted, the Village would propose to construct a weir box over the cutout hole, to insure that bypassing occurs only when necessary to prevent backups. Pursuant to the Agency Recommendation, at hearing the Village agreed to set the weir box at a position no more than six inches below the elevation of the low point on the line, to install a lock on the box and to inspect it daily.

The alternative compliance method would involve construction of a relief sewer from the point of overflow to the STP, at a cost of \$80,000. The Village believes that this would not be cost effective, given the other sewer work necessary on its system.

The Agency noted in its Recommendation that presently the Village is in the Construction Grants Program for upgrading its WWTP and sewer system. Essentially, Seneca has 2 grants, one addressing dry weather flow and another addressing wet weather flow. Presently, revised plans and specifications are under review by the Agency. These plans and specifications deal with dry weather flow and do not address wet weather facilities. Upon approval of the plans and specifications the Agency hopes to issue the Village a Step 3 grant.

The Village's sewer rehabilitation project under the "dry weather" grant consists of repairing or replacing manholes and their frames and lids, sealing manholes, disconnecting and rerouting storm sewer connections, disconnecting downspounts, etc. The sewer system evaluation survey estimates that sufficient I/I will be eliminated upstream of the bypass upon completion of the sewer rehabilitation project to offset the 490 gpm that the Village claims is the average discharge from the overflow. However, because sewer rehabilitation projects may not in some instances eliminate sufficient excess flows, the Village plans to conduct a flow monitoring study upon completion of the rehabilitation project to determine if additional construction, such as relief sewers, is required. If such construction is required the Village would need to amend its Facilities Plan and Plans and Specifications, but the Agency states that grants funds for such additional work "uncertain" at this time.

To date, the Village has received a Step 1 and Step 2 grant with costs totaling \$171,024, of which \$42,756 was the Village's share. It is estimated that construction costs for the sewer rehabilitation will be approximately \$290,000 of which 25% or \$72,500 will be the Village's share if a Step 3 grant is obtained. The Agency does not dispute Petitioner's \$80,000 figure as the cost of a relief sewer to eliminate surcharging on the 12-inch interceptor.

The Board notes that, at hearing, the Agency did an unusually fine job of explaining in "laymen's terms" the environmental factors it assessed, operation of a weir box, and its reasons for recommending that variance be granted. Rat Run Creek has been determined to be in a degraded condition. Of the three major causes of this degradation, the sewer bypass at issue is considered to be the third and least important, since bypassing occurs during periods of high stream flow with resulting dilution and better stream aeration. The other two causes are 1) the poor quality effluent discharged from the STP, which offers only primary treatment and which routinely bypasses flows, and 2) since 1/3 of the Village's homes employ septic systems, that partially treated sewage is discharged into groundwater eventually finding its way into the creek.

Progress toward abatement of these latter two pollution sources is proceeding through the grants program, with STP upgrading expected to be completed "by 1985" (R. 15). The Agency believes that, given the performance of the existing STP, immediate elimination of the Main Street bypass probably would not result in significant recovery of the creek from its degraded condition.

Balancing the known health dangers from basement backups against the environmental impact of overflows to the creek, the Agency recommends grant of variance provided, among other things, that the Village is required to construct the weir box as soon as possible, and to enforce its existing sewer use ordinance.

The Board appreciates the feelings espressed at hearing by Mrs. Mayfield of LaSalle, objecting to continual "temporary methods" and continuation of pollution of the Creek, and hence the Illinois River. The Board finds that denial of the requested variance would impose an arbitrary or unreasonable hardship, as the immediate and substantial risks to the health of the Main Street dwellers from basement backups outweighs the benefits downstream users would experience from immediate but minimal improvement in the water quality of Rat Run Creek and the Illinois River. Variance will be granted from 35 Ill. Adm. Code 306.304 until July 1, 1985, subject to conditions similar to those suggested by the Agency. These will include construction of the weir box by December 31, 1983, continued pursuit of STP and sewer system rehabilitation through the grants program, and vigorous enforcement of the sewer use ordinance's program for disconnection of illegal downspouts.

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

## ORDER

1. Petitioner, the Village of Seneca, is granted variance from 35 Ill. Adm. Code 306.304 until July 1, 1985, to allow for operation of the existing Main Street sewer bypass, subject to the following conditions:

a. On or before December 31, 1983, the Village shall construct a weir box over the existing sewer bypass. In so doing, the Village shall determine the elevation of the lowest basement in the vicinity of the sewer line and adjust the weir to a position no more than six inches below this elevation.

b. The Village shall keep the weir box locked.

c. The Village shall monitor its bypass once each day, and shall record in writing time of inspection, weather conditions including accurate rainfall measurements for the Village, volume of discharge and duration of discharge. Every attempt should be made to determine the maximum bypass rate during each bypassing incident. The above information shall be compiled in written form monthly and submitted to the Agency as an attachment to the Village's Discharge Monitoring Report (DMR).

d. The Village shall submit a semi-annual report outlining its progress in enacting and enforcing its sewer use ordinance. These reports shall be attached to the December and June DMR"s, respectively. e. The Village shall diligently pursue upgrading of its treatment plant and sewer system, and shall adhere to the extent practicable to the schedule contained in paragraph 16 of the Agency's Recommendation of July 18, 1983, which is incorporated herein by reference as if fully set forth.

2. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

## CERTIFICATE

I, (We), \_\_\_\_\_\_, having read the Order of the Illinois Pollution Control Board in PCB 83-76, dated \_\_\_\_\_\_, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

Date

IT IS SO ORDERED.

Board Member J. Marlin abstained.

Board Member W. Forcade abstained.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the  $18^{+-}$  day of *Normon*, 1983 by a vote of 5 - 0.

Christan L. Mofflett, Clerk Illinois Pollution Control Board