

ILLINOIS POLLUTION CONTROL BOARD
October 9, 1975

COUNTY OF MACOUPIN)
UNIVERSITY MANOR NURSING HOME,)
)
Petitioner,)
)
v.) PCB 75-273
)
ENVIRONMENTAL PROTECTION AGENCY,)
)
Respondent.)

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

Petitioner County of Macoupin, (County), filed its original Petition for Variance in this matter on July 17, 1975, stating that it sought permission to install sewer connections to serve "University Manor, the new County Nursing Home, Carlinville, Illinois." In an Order dated July 24, 1975, the Pollution Control Board, (Board), stated that the County's Petition was inadequate in that it failed to identify the Statute or Regulation from which Variance was sought, and ordered that the missing information be supplied within 30 days.

Following submission of a Recommendation by the Environmental Protection Agency, (Agency), on August 18, 1975, the County submitted an "Attachment" to its original Variance Petition on August 20, 1975. (The Board finds that the additional information submitted by the County constitutes an Amended Petition, and shall treat it as such.) Petitioner seeks a Variance from Sections 12 and 39 of the Environmental Protection Act, (Act), and Rule 962(a) of the Board's Water Pollution Regulations, insofar as these would prevent the issuance of a permit by the Agency allowing tie-in of the new University Manor facility to the City of Carlinville sewer system. Ill.Rev.Stat. Ch.111-1/2, §1012,1039 (1973); PCB Regs.,Ch.3,Rule 962(a).

No hearing was held in this matter.

The County presently operates an antiquated and obsolete nursing home north of Carlinville, Illinois. The old County Nursing Home, (old Home), has a capacity of 38 beds, and is able to obtain only a conditional license from the Illinois Department of Public Health because of the old Home's inability to meet state standards. The old Home was constructed in 1902, and converted to its present use by the County in 1942.

To alleviate this situation, the County is presently in the process of constructing a new County Nursing Home, ("University Manor"), in the City of Carlinville. University Manor is expected to cost approximately \$750,000, and will have a capacity of 98 beds. Pending the completion of the new facility, the County has been allowed by the Department of Public Health to continue operating the old Home.

According to the Petitioner, the old Home is served by a septic system. University Manor will be served by the sewer system of the City of Carlinville. The County estimates that University Manor will be completed and ready for occupancy in September, 1975; however, the Environmental Protection Agency has refused to issue the necessary permits to allow connection of University Manor to the Carlinville Sewer System.

It is clear from the Amended Petition and the Agency's Recommendation that the Agency's action in refusing this permit was proper. Carlinville's Sewage Treatment Plant, (STP), has a design capacity of 0.55 million gallons per day (MGD); without considering any bypassed flows, average loading at the plant was 1.005 MGD during the first six months of 1975. Carlinville reports indicated BOD₅ loadings in Carlinville's effluent ranging between 15 and 24 mg/l; Agency grab samples over the last year averaged 44 mg/l for BOD, and 42 mg/l for suspended solids. In addition, a geometric mean of 12 Agency grab samples revealed an average of 165,000 fecal coliform. During periods of rain, raw sewage is usually bypassed into an unnamed tributary to the Blackburn Branch of Macoupin Creek, into which the STP discharges.

To correct this inadequacy, Carlinville is presently engaged in plans to construct expanded treatment facilities. On June 4, 1975, the City was awarded a Step I State Grant, and plans for the new treatment plant are to be submitted to the Agency in September, 1975. Carlinville now expects, under a time schedule approved in the Agency Recommendation, that it will be able to complete construction of a 1.5 MGD tertiary treatment plant by February, 1978.

In the interim, the Agency has certified Carlinville's NPDES Permit, which limits the city to a 40 mg/l BOD₅ and 40 mg/l SS effluent from the present plant. (NPDES Permit No. IL 0022675.) Contingent on construction of the new STP, Carlinville's effluent will then be limited to 10/12 mg/l for BOD₅ and SS, respectively.

Petitioner estimated that the University Manor facility will place a further P.E. loading on the present STP of approximately 104, and an average additional flow of 10,400 gallons per day. Petitioner has further estimated that University Manor will result in a 1.77% load increase on the already overloaded Carlinville STP.

Agency calculations, however, indicate that Petitioner's estimates are excessive. First, Petitioner based its estimates on the design flow of the STP, rather than on the present overload flow entering the plant. Second, the Agency has examined figures from other nursing homes and concluded that nursing home patients exert a lower P.E. loading on sewage systems. This conclusion agrees with the finding of the Board in First Trust and Savings Bank of Taylorville v. EPA, PCB 74-448, March 13, 1975. Based on that fact, and the fact that any increase in loading is to be measured against present rather than design loads, the Agency feels that the new University Manor will result in an increased load of only 6344 to 8424 gallons per day, or .5% to .7% of present total loading on the STP.

The Agency has concurred in several claims made by Petitioner which would support the grant of this Variance. First, the Agency agrees that a failure to approve the new nursing home would work a hardship on the residents of the old Home. In addition to the problems noted by the Department of Public Health, the Agency notes that the old Home is not air conditioned, and does not have the required patient facilities which will be present in University Manor. Second, calculations submitted by the Agency show that four other nursing homes in Carlinville, and seven in the surrounding area, are filled to near capacity. Were the Board to deny this Petition, and the old Home closed by the Department of Public Health, the additional strain on existing facilities would be great. (A comment received by the Board from the Illinois Department on Aging supports this view, and urges that the Variance be granted.)

The Agency has also shown that the sewage facilities at the old Home are wholly inadequate. The Agency investigation showed that, contrary to the information in the original Petition submitted by the County, the old Home is not served by a septic system. Instead, the old Home has an almost entirely inoperable Imhoff Tank and intermittent sand filter. There is no method to allow transfer of sludge from the completely filled Imhoff Tank to the sludge drying beds, so that a broken tube system on the Tank operates as a constant discharge structure to one sand filter. The Agency further states that the sand filter in use is subject to constant ponding over 1/3rd of its surface; as much as ten gallons per minute of untreated sewage enter a tributary of Macoupin Creek from the old Home.

As further proof of hardship, Petitioner states that the cost to provide adequate treatment for the University Manor facility would probably exceed \$25,000. Any such costs incurred in providing treatment for University Manor would be completely lost upon completion of the proposed new Carlinville STP.

Balancing all of these factors, the Board finds that:

1. There exists a hardship to the present residents of the old Home.
2. There exists a hardship to the Petitioner, arising from:
 - a. lost use of its \$750,000 investment in University Manor, either permanently or pending completion of treatment facilities.
 - b. costs of providing alternate treatment controls at University Manor, exceeding \$25,000.
3. Failure to grant the instant Variance would create a further hardship because:
 - a. there is a need for additional nursing care beds in the area.
 - b. closure of the old Home would place an additional strain on existing area facilities.
4. The additional load to the admittedly overloaded present STP would be minimal, and will last only until completion of the proposed new STP.

We feel that a grant of the Variance has been justified, and that the County has carried its burden of proof. The situation here is unlike prior cases, where the Board has had to weigh the likelihood of sewer back-ups during wet weather. There is no indication here of hydraulically overloaded sewers, despite Carlinville's combined sewer system. See, First National Bank of Springfield v. EPA, PCB 74-298, 14 PCB 723 (1974); see also, First Trust and Savings Bank of Taylorville, supra.

In addition, the grant of this Variance would be in keeping with prior, similar cases decided by the Board. The Board found in Brethren Home of Girard v. EPA, PCB 75-193, July 24, 1975, that "the overall interests of the community are best served by granting this variance." (Opinion at 4). A similar decision was reached in First Trust and Savings Bank of Taylorville, supra. Similarly, the Board has previously found in analogous situations that the presence of community hardship weighs heavily in our consideration of a Variance. See, Sandwich Community Unit Schools Dist. No. 430, v. EPA, PCB 74-428, April 4, 1975, and cases cited there.

As the Agency points out in its Recommendation, there remains the possibility that funding for the new Carlinville STP may not be forthcoming from the State and Federal Governments. To deal with this possibility, we have adopted the Agency's recommended condition to require that, in the eventuality that Carlinville does not receive grant funding, Petitioner will be required to submit plans for construction of a holding tank for use during periods of heavy inflows to the existing Carlinville STP.

The Agency apparently fears that the County will convert the old Home to some other use after the new University Manor Nursing Home has been completed. In granting this Variance, we may require of Petitioner any reasonable conditions which will tend to decrease the total of pollutants entering the waters of the State. By allowing the new University Manor to tie into the Carlinville sewer system, and also requiring that Petitioner cease and desist all improper discharges from the old Home, we will decrease the total damage done to Macoupin Creek and its tributaries. We will therefore impose a stronger condition than that suggested by the Agency, and require that Petitioner simply cease and desist all discharges from the old Home in violation of the Act or our Rules and Regulations, immediately after the patients have been transferred from the old Home to the new University Manor Nursing Home.

No variance has been granted with regard to §§12 and 39 of the Environmental Protection Act; since we have granted a Variance from Rule 962 (a) of the Water Pollution Regulations, Variance from those Sections is unnecessary.

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

ORDER

IT IS THE ORDER OF THE POLLUTION CONTROL BOARD that Petitioner County of Macoupin be granted a Variance from Rule 962 (a) of Chapter 3: Water Pollution of this Board's Rules and Regulations, until February 28, 1978, to allow connection of its new County Nursing Home, known as University Manor, to the City of Carlinville sewer system, subject to the following conditions:

1. If the Carlinville Sewage Treatment Plant does not receive Step II and Step III state grants for the upgrading of present treatment facilities or the construction of new facilities by February 28, 1976, Petitioner County of Macoupin shall submit to the Agency within 60 days thereafter feasibility and cost studies for the construction and operation of a holding tank to be used in conjunction with the new University Manor Nursing Home.

2. If the Carlinville Sewage Treatment Plant does not receive Step II and Step III state grants for the upgrading of present treatment facilities or the construction of new facilities by April 30, 1976, the Environmental Protection Agency may, as a condition of any permits issued for the installation or connection of sewer facilities to serve Petitioner's new nursing home, require that Petitioner install and operate a holding tank.

3. Immediately following the opening of Petitioner's new nursing home, and the transfer of patients thereto from Petitioner's old nursing home, Petitioner shall cease and desist all violations of the Environmental Protection Act or this Board's Rules and Regulations caused by discharges from its old nursing home.

4. Within 30 days of the date of this Order, Petitioner County of Macoupin shall execute and forward to the Manager, Variance Section, Division of Water Pollution Control, Illinois Environmental Protection Agency, 2200 Churchill Rd., Springfield, Illinois, 62706, and to this Board, a Certification of Acceptance in the following form:

CERTIFICATION

I (We), _____ have read and fully understand the Order of the Illinois Pollution Control Board in PCB 75-273, and accept said Order, understanding that such acceptance renders all terms and conditions of said Order binding and enforceable.

SIGNED

TITLE

DATE

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 9th day of October, 1975 by a vote of 4-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board