

ILLINOIS POLLUTION CONTROL BOARD

May 19, 1983

MAPLE LAWN HOMES, )  
 )  
 ) Petitioner, )  
 )  
 ) v. ) PCB 83-37  
 )  
 ) ILLINOIS ENVIRONMENTAL PROTECTION )  
 ) AGENCY AND CITY OF EUREKA, )  
 )  
 ) Respondent. )

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

This matter comes before the Board on the petition filed March 14, 1983 by Maple Lawn Homes (MLH) seeking variance from 35 Ill. Adm. Code 309.241 (formerly Rule 962 of Chapter 3: Water Pollution). Pursuant to Orders of the Board, amendments to the petition were filed April 5 and May 11, 1983.

MLH variance to allow for issuance of construction and operation permits from sanitary sewers to serve a planned 22 unit senior citizen's housing addition to the facility. MLH alternatively requests that the 33 P.E. flows from these units be allowed to be treated either A) by the existing Maple Lawn Homes Treatment Plant (MLH STP) or B) by the City of Eureka Treatment Plant (Eureka STP). As part of Option B, MLH additionally requests authority to convey all or part of the wastewater currently treated by the MLH STP to the Eureka STP.

By the Board's Order of March 24, 1983 the City of Eureka (Eureka) was joined as a necessary party, which was aligned as a party respondent in the May 11 amendment to the MLH petition. On May 2, 1983 the Illinois Environmental Protection Agency (Agency) filed a Recommendation in support of grant of variance with conditions. On May 17, the Agency advised the Board that it would file no amended Recommendation. Hearing was waived, and none has been held. This matter is being given expedited consideration pursuant to the MLH March 14 request.

Maple Lawn Homes, a not-for-profit retirement community owned by the Mennonite Church, is located on the north edge of the City of Eureka in Woodford County. The MLH facility consists of an apartment building (120 residents), a health care center (80 beds), an administrative center, 21 cottages, and a day care center (licensed for 40 children). The current resident population is approximately 255. MLH has a full-time equivalent employment of 75.

Wastewater from the facility is currently treated by the MLH STP, which consists of two waste stabilization ponds in series. The average daily flow to the STP, based on 1982 records, is estimated at 17,300 gallons per day.

The Agency reports that this STP was constructed and first permitted in 1964 to serve a 150 bed nursing home. Since that time, the STP has never discharged to the receiving waters identified in the permit--the East Branch of Walnut Creek, a tributary of the Macinaw River. It is assumed that the wastewater infiltrates into the ground, based on the creek's 7-day, 10-year low flow of zero, and the fact that in the area evaporation equals rainfall. It is unknown where the wastewater migrates after infiltration, but the parties agree that some quantity could be surfacing in Walnut Creek, which is about 700 feet from the stabilization ponds.

The MLH STP is currently permitted to treat a daily average flow of .02 million gallons per day, or 20,000 gpd, and is required to meet effluent limitations of 10 mg/l BOD and 12 mg/l TSS on a 30 day average. MLH believes that if its STP discharged treated wastewater, rather than having it "disappear" by evaporation and infiltration, that permit conditions would likely be violated.

The Agency notes that addition of flows of 33 P.E. (3,300 gpd) to the STP would result in average daily flows of 20,600 gallons, a hydraulic overload. Even without the proposed 33 P.E. addition, the STP is considered to be organically overloaded, as is. Based on the Illinois Recommended Standards for Sewage Works, organic loading to the MLH STP should be no more than 26 pounds/acre/day. This would limit use of the STP to 153 residents, although the current population at MLH is already 255.

MLH estimates believes that it would cost about \$300,000 to upgrade its facilities to allow for issuance of permits for its planned 22 unit expansion. This expenditure is alleged to be cost prohibitive.

MLH asserts that its long list of applicants for senior citizens' housing justifies its desire to expand its independent living/cottage program. It further alleges that its proposed expansion will result in a \$1.3 million privately-funded construction project which will help relieve local unemployment in the construction industry.

MLH believes that the best long-term compliance option would be connection of its entire sewer system to that of Eureka, for treatment of flows by the Eureka STP. However, the Eureka STP is not currently judged to be capable of accepting additional flows absent grant of variance. The STP was placed on critical review by the Agency March 5, 1979, as the tributary waste load was found to be within 84% of the system's design capacity;

notification of impending restricted status was issued October 12, 1982 on the grounds that the STP is being operated within 101% of design capacity.

The Agency reports that Eureka's consulting engineers claim that the flow data used to calculate the hydraulic loading may be inaccurate due to a malfunctioning flow meter resulting in high readings, and that faulty sewer rehabilitation work by a contractor may have failed to prevent excess infiltration and inflow.

The City is, however, involved in upgrading its facilities through the construction grants program. The Agency affirms that the City has completed sewer system rehabilitation, and has been awarded a Step 1, 2, 3 grant for sludge handling facilities (Phase A), and for STP expansion (Phase B).

A flow monitoring study has been underway to determine what, if any, flow monitoring discrepancies and/or STP capacity exists; this would determine whether in fact Phase B work would be necessary. Phase A design work is anticipated to be submitted to the Agency in May, 1983, a contract to be awarded in August, 1983, and work completed in July, 1984.

Interim results of the flow monitoring study will be submitted to the Agency in June, 1983, and the study's completion is scheduled for October, 1983. Based on interim results the City believes Phase B work may be needed. If so, design work would be estimated to begin in November, 1983, with a contract to be awarded July, 1984 and construction to be completed in July, 1985.

However, Phase B work would be contingent on a grant amendment for funding of the Phase B work. The City "supports Maple Lawn Homes' programs" and agrees that the proposed expansion "will relieve th demand for elderly housing." The City's position is that

"it would welcome Maple Lawn Homes as a sewer user at such times as adequate capacity is available, or when a grant amendment has been approved to fund Phase B. The legal, administrative, and financial details of connection to the City system have yet to be resolved." (Letter of March 7, 1983.)

Concerning the MLH hardship claims, the Agency notes that the acknowledged housing hardships to the elderly and the economic hardship to the community at large are to some degree offset by MLH failure to investigate whether Eureka had sufficient capacity at its STP. The Agency's position overall is aptly stated in its Recommendation:

This variance petition presents a choice between transporting additional wastewater to an already over-loaded inadequate treatment system at the nursing home

or transporting additional wastewater to the City's activated sludge treatment system which may or may not be overloaded, is providing treatment within effluent standards and is expected to have Phase A work done by the end of this year which may provide all the capacity needed to accommodate Maple Lawn Homes and other development. The Agency thinks it is better to transport the wastewater to Eureka now where it will receive adequate treatment as opposed to sending it to the lagoon system for inadequate treatment and then six months from now connecting to the Eureka system anyway. As a second choice the Agency would find it acceptable to allow wastewater from up to 153 residents to the Maple Lawn lagoons with the remainder to be transported to Eureka's system. (Rec. at 7-8).

Variance is therefore recommended subject to conditions.

The Board finds this petition to be an even closer judgment call than most, as MLH has apparently not fulfilled its duty to investigate STP treatment capacity, and is operating an organically overloaded plant. If variance is granted, MLH would anticipate occupancy of the homes by December, 1983, which would result in excess flows from the expansion alone going to the Eureka plant for between 7 and 19 months, depending on whether Phase A work alone or Phase A and B work are needed to solve the City's problems. On the other hand, the economic and housing hardship cannot be ignored, and connection to the Eureka plant would clearly be the most cost-effective means of solving the actual or potential odor and water pollution problems stemming from the additions to overloaded lagoons. On balance, the Board finds that denial of variance to allow MLH's expansion would impose an arbitrary or unreasonable hardship.

The Board cannot allow transport of additional flows to the MLH lagoon. Variance will be granted to allow immediate connection of the proposed addition to the Eureka system, with the conditions that the existing overloaded lagoon system be operated in the best manner practicable. The Board notes that in granting variance, that it is not--which it cannot--requiring Eureka to accept the MLH flows. Respondent Eureka will therefore be required to certify its willingness to accept MLH flows.

The Board agrees with the Agency's feelings that the lagoon system should be phased out of service as rapidly as possible, and that ultimate connection to the Eureka system seems to be the solution to the lagoon problem. However, immediate connection of the average 17,300 gpd loadings received by the lagoon to the Eureka STP would considerably increase the hydraulic loading to a plant which is more-likely-than-not hydraulically overloaded, based on interim information. The additional flows could also cause the plant to fall out of compliance with the effluent standards it is currently meeting.

At this time, the information provided concerning the capacity of the Eureka plant, and even Eureka's willingness to accept MLH flows, are just too sketchy to justify grant of variance at this time. The Board encourages MLH and Eureka to submit a joint petition for variance at such time as final flow monitoring information is available.

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

#### ORDER

Petitioner, Maple Lawn Homes (MLH), is granted a variance from 35 Ill. Adm. Code, §309.241 subject to the following conditions:

a) This variance authorizes the Agency to issue to MLH permits to construct and to operate a sanitary sewer extension to the City of Eureka Treatment plant, to serve the 22 unit elderly housing units discussed in the Board's Opinion. MLH shall apply for said permits within 35 days of the date of this Order. Grant of this variance does not relieve MLH of its obligation to obtain and to submit to the Agency the City of Eureka's certification of willingness to accept the 33 P.E. flows the expansion will entail.

b) MLH shall operate its overloaded treatment plant in the best manner practicable.

c) Within forty-five days of the date of this Order, Petitioner shall execute and forward to Steve Spiegel, Enforcement Programs, 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 83-37, 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.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 19<sup>th</sup> day of May, 1983 by a vote of 4-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board