

ILLINOIS POLLUTION CONTROL BOARD
May 20, 1976

ILLINOIS MASONIC HOME,)
)
 Petitioner,)
)
 v.) PCB 76-66
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

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

This matter comes before the Board on the petition of Illinois Masonic Home filed March 4, 1976 seeking relief from Rule 203(c), Rules 402 and 404(f)(ii) of Chapter 3: Water Pollution Rules and Regulations as regards phosphorus. An Agency Recommendation was filed on April 28, 1976. No hearing was held in this matter.

Illinois Masonic Home, located in Sullivan, Moultrie County, is a facility which is maintained for the aged and is owned and operated by the Brotherhood of Masons. At this facility Petitioner owns and operates a sewage treatment plant which treats approximately 50,000 gpd of domestic wastes. The plant consists of a paper-removing screen, a bar screen, a complete mixed activated sludge aeration tank, intermediate clarifier, trickling filter, and a rectangular final clarifier which is also used as a chlorine contact chamber. The waste-activated sludge is digested in an aerobic digester. The plant effluent is discharged to Jonathan Creek which is tributary to Lake Shelbyville.

Rule 203(c) sets a standard of 0.05 mg/l for phosphorus as P in any reservoir or lake, or in any stream at the point where it enters any reservoir or lake and Rule 402 requires that the Petitioner's effluent not contribute to a violation of the Rule 203(c) water quality standard. The phosphorus concentration in Jonathan Creek as it enters Lake Shelbyville presently exceeds 0.05 mg/l; therefore the Petitioner's effluent is water quality limited to the Rule 203(c) standard of 0.05 mg/l phosphorus. Petitioner alleges there is no economically feasible method of reducing its phosphorus concentration to this level, and therefore requests this variance from the standard. While Petitioner did consider the alternatives of chemical treatment, land application and pumping the effluent to another treatment facility, these alternatives were discarded because the Petitioner found they were not cost effective.

Information about Lake Shelbyville's nutrient loading contained in the Preliminary Report on Shelbyville Reservoir reveals that the discharge from Petitioner's treatment plant contributes only 0.4% of the total phosphorus load being transported to Lake Shelbyville.

On January 5, 1976, the Agency filed a Petition for Regulatory Change (R76-1) with the Board which would amend the Regulation by requiring only point sources which have 1500 or more population equivalent to treat wastewater to a level not to exceed 1 mg/l prior to discharge. As justification for this proposal the Agency submits that eutrophication studies by both the USEPA and the Illinois State Water Survey show that the contribution of point source dischargers to the total phosphorus problem of lakes and reservoirs is small compared to the non-point source contribution. The Agency submits that non-point sources, such as run-off waters from farm lands fertilized with phosphate base fertilizers, account for the overwhelming majority of the phosphorus loading of most lakes and reservoirs.

In light of these studies and the small contribution that Petitioner's discharge will make to the Lake Shelbyville phosphate problem, the Board finds that the Petitioner is entitled to a variance. Rule 402(f)(ii)(A) provides, as does Rule 402, that no effluent shall alone or in combination with other sources cause a violation of any applicable water quality standard. Rule 404(f)(ii)(D) requires in part that the operator file a project completion schedule for achieving compliance with applicable water quality standards (phosphorus). Because Petitioner plans to apply for a Pfeffer exemption, the Board will also grant a variance from Rules 404(f)(ii)(A) and 404(f)(ii)(D) as those Rules apply to phosphorus.

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

ORDER

Illinois Masonic Home is granted a variance for the operation of its sewage treatment plant from the phosphorus limitations of Rules 203(c), 402, 404(f)(ii)(A) and 404(f)(ii)(D) of Chapter 3: Water Pollution Regulations until May 20, 1981, subject to the following conditions:

1. This variance will terminate upon adoption by the Board of any modification of the existing phosphorus water quality standards and effluent limitations and Illinois Masonic Home shall comply with such revised regulations when adopted by the Board.
2. Petitioner shall initiate a program to reduce the level of phosphorus contained in its effluent. This program should include, but not be limited to, the replacement of phosphate soaps and detergents with non or low phosphate soaps and detergents.

3. Within 35 days of the date of this Order, Petitioner shall submit to the Manager, Variance Section, Division of Water Pollution Control, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois, 62706, an executed Certification of Acceptance and agreement to be bound to all terms and conditions of the variance. The form of said certificate shall be as follows:

CERTIFICATION

I, (We), _____ having read the Order of the Illinois Pollution Control Board in PCB 76-66, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto 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 20th day of May, 1976 by a vote of 5-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board