

ILLINOIS POLLUTION CONTROL BOARD

June 9, 1971

In the Matter of:)
) # R 70-12
 DES PLAINES WATER QUALITY STANDARDS)

Opinion of the Board (by Mr. Kissel):

In response to petitions from the Villages of Riverside and Franklin Park and from several hundred citizens, the Illinois Pollution Control Board scheduled hearings on the question of raising water quality standards for the Des Plaines River. The Board held three days of hearings, in Riverside, Franklin Park, and Gurnee. The concern of the residents of Riverside, Franklin Park, and other nearby municipalities over the state of the Des Plaines was prompted by the then proposed plan of the North Shore Sanitary District to discharge secondary-treated waste from the Clavey Road sewage treatment plants into the Des Plaines. The Petitioners asked that the Board amend SWB-11 to provide that all effluents being discharged into the Des Plaines River tertiary or other advanced waste treatment be provided. They sought to have Rule 1.08 of paragraph 116 of SWB amended to include a definition of advanced waste treatment as follows:

Type Treatment	BOD or ODI Reduction	Effluent BOD, ODI	Effluent Suspended Solids	Type Facilities	Stream Dilution Requirements
Advance	98	4	5	Series Units	Less than 1 to 1 - Des Plaines River

The Des Plaines River has its headwaters in Racine and Kenosha counties, Wisconsin. It then runs the entire length of Lake County and continues in Cook County, west of Chicago about 15 miles west of Lake Michigan, roughly paralleling the Lake Michigan lakeshore. The river traverses both Franklin Park and Riverside. The total drainage area in Illinois above Summit is 520 square miles.

According to the Illinois Sanitary Water Board Rules and Regulations, SWB-11, the Des Plaines River is to be used for the carriage of municipal and industrial treated effluents, for fishing, boating and recreation including full body contact, and for industrial water supply. The basic contention of the petitioners is that the Des Plaines River is already in extremely poor condition and that, therefore, it should not be further degraded by the addition of poorly treated sewage. (R. 11) The residents have found that the load the River must carry has become excessive, with the result that the river bank and bed are clogged with sediment and decaying, odor-producing substances. Residents and civic groups alike described in vivid detail the changes in the Des Plaines over the years and the loss in recreational value which its degradation has brought.

At the time of the hearings, the North Shore Sanitary District was planning two plants with discharges to the Des Plaines -- one at Gurnee, the other at Clavey Road. The Gurnee plant is to provide advanced waste treatment and discharge at 4 mg/l of biochemical oxygen demand (BOD₅) and 5 mg/l of suspended solids; the Clavey Road plant, 10 mg/l of BOD, 15 of suspended solids. Due to dilution from the Gurnee discharge, Clavey would need only supply supplemental treatment to its secondary effluent to meet state standards. In the opinion and order in the League of Women Voters et al. v. North Shore Sanitary District, however, the Board directed the District to discharge to the Skokie ditch rather than the Des Plaines River:

"We hereby require, therefore, that the District provide third stage treatment at the Clavey site (this means that degree of treatment so as to meet an effluent BOD standard of 4 and a suspended solids standard of 5) and discharge the effluent into the Skokie ditch. The difference in cost is minimal. It is estimated by the District's engineers that it would cost \$6 million to build tertiary facilities at Clavey Road. Since the District estimates that it will cost \$4 million to build the pipe to the Des Plaines, the difference is \$2 million to provide good water to the Skokie ditch."

Further, testimony by Carl Blomgren of the Agency established that even though SWB-11 does not contain an advance waste treatment standard, the Agency is insisting upon 4 mg/l of BOD₅ and 5 mg/l of suspended solids when dilution is less than 1 to 1. The proposed Water Quality Standards, R 71-14, would make such a standard applicable state-wide. Decision on the imposition of this standard will have to await the completion of hearings in R 71-14.

Testimony by the Illinois Environmental Protection Agency established that the waters of the Des Plaines are relatively free of pollutants as they leave Lake County:

"At Lake County Road, the samples were essentially in compliance with SWB-11 for all parameters, during 1969 and 1970, with the exception of one fecal coliform count and one sample analyzed for iron." (R. 316)

To the Cook County section of the river, however, the Metropolitan Sanitary District discharges raw sewage from 42 combined sewer overflows, and municipal sewer systems discharge raw wastes at 50 points. These discharges completely bypass treatment facilities when the sewer systems are overloaded and go untreated into the Des Plaines. The combined sewer overflows in Cook County result in the Agency's evaluation of this stream sector as a "deteriorated pollution tolerant environment." (R. 340) The degradation of the Des Plaines therefore occurs as the river passes through Cook County.

Due to the grave complexities of the combined sewer overflow problem from the Metropolitan Sanitary District, the problem quite obviously cannot be resolved within the confines of the present hearing, R 70-12. In the proposed Water Quality Standards for the State of Illinois, R71-14, however, Section 602 would require treatment of overflows by screening and disinfection by December 31, 1972, and full treatment of MSD's overflows by December 31, 1976. The 1976 deadline constitutes a one-year advancement in the date for complete compliance. Resolution of the question of treatment of combined sewer overflows, therefore, must await the completion of hearings on the newly-proposed regulation. The Board remains hopeful that technical and economic feasibility of such treatment will be established and that the resultant improvement in the water quality of the Des Plaines can be brought about with expedition.

ORDER

The hearing record in the Des Plaines River Water Quality Standards shall be incorporated into the Record of the hearing on Water Quality Standards, R 71-14.

I, Regina E. Ryan, Clerk of the Board, hereby certify that the above Opinion and Order was entered on the 11 day of June, 1971.



A handwritten signature in cursive script, appearing to read "Regina E. Ryan", is written over a horizontal line.