

ILLINOIS POLLUTION CONTROL BOARD
March 15, 1973

ENVIRONMENTAL PROTECTION AGENCY)
)
) #72-207
)
v.)
)
COUNTY OF DUPAGE)

DOUGLAS T. MORING, ASST. ATTORNEY GENERAL, ON BEHALF OF
ENVIRONMENTAL PROTECTION AGENCY
WILLIAM V. HOPF, ASST. STATE'S ATTORNEY (OF DUPAGE COUNTY), ON
BEHALF OF RESPONDENT

OPINION AND ORDER OF THE BOARD (BY SAMUEL T. LAWTON, JR.):

Complaint was filed by the Agency against Respondent, County of DuPage ("County") on May 16, 1972, alleging that it was the owner and operator of a wastewater treatment plant known as the Nordic sewage treatment plant ("Nordic"). The complaint alleged that continuing violation by Respondent, as well as violations on certain specified dates between September 22, 1970 and January 3, 1972, of Section 12(a) of the Environmental Protection Act [Ch. 111-1/2, §1012(a), Ill. Rev. Stat. (1971)]. During that same period, Respondent was charged with failure to meet the minimum conditions as to water quality contained in the Rules and Regulations under SWB-14 made effective by §49(c) of the Act, and violation of Rule 1.03, paragraphs (a), (b) and (c) of the Rules and Regulations for Water Quality Standards. More serious violations were also alleged, including excess BOD, excess suspended solids and high coliform content, in violation of those Rules and Regulations.

Before hearing, Respondent filed two Motions: A Motion to Strike and a Motion to Add parties. The Motion to Strike was directed toward relief Complainant seeks under paragraph 2(e) of the complaint.

"That the Board thereafter enter an order directing Respondent...to take such action as necessary to abate said violations, pursuant to Section 46 of the Act."

Respondent's Motion to Add Parties requested the addition of the other operators of wastewater treatment facilities within "Region I". The Board entered a preliminary order denying the motion to add parties and suspending decision on the motion to strike until the matter had been heard in its entirety.

Section 46 states:

"Any municipality or sanitary district which has been directed by an order issued by the Board or by a Court of competent jurisdiction to abate any violation of this Act

or of any Regulation adopted thereunder shall, unless said order be set aside upon petition for review, take steps for the acquisition or construction of such facilities, or for such repair, alteration, extension or completion of existing facilities, or for such modification of existing practices as may be necessary to comply with the order. The cost of the acquisition, construction, repair, alteration, completion, or extension of such facilities, or of such modification of practices shall be paid out of funds on hand available for such purposes, or out of the general funds of such municipality or sanitary district not otherwise appropriated.

If funds on hand or unappropriated are insufficient for the purposes of this section, the necessary funds shall be raised by the issuance of either general obligation or revenue bonds. If the estimated cost of the steps necessary to be taken by such municipality or sanitary district to comply with such order is such that the bond issue, necessary to finance such project, would not raise the total outstanding bonded indebtedness of such municipality or sanitary district in excess of the limit imposed upon such indebtedness by the Constitution of the State of Illinois, the necessary bonds may be issued as a direct obligation of such municipality or sanitary district and retired pursuant to general law governing the issue of such bonds. No election or referendum shall be necessary for the issuance of bonds under this section.

The funds made available by the issuance of direct obligation or revenue bonds as herein provided shall constitute a Sanitary Fund, and shall be used for no other purpose than for carrying out such order or orders of the Board.

The Attorney General shall enforce this provision of the act by an action for mandamus, injunction or other appropriate relief."

We do not reach the question of whether a County that operates a series of sewage treatment plants is a de facto sanitary district. The complaint has made no argument of the issue of whether Respondent is within the purview of §46. Even if the County were subject to these provisions, there has been no showing that such relief pursuant to §46 is appropriate. The motion is dismissed.

The Region I referred to as one of the nine regions described in No. R70-17 of Proposed Wastewater Regionalization Regulation for DuPage County. The other major sewage treatment facilities within Region I are the plants controlled by Itasca, Wood Dale, Bensenville and Addison. Three plants have been proposed for this region, all of which contemplate the elimination of the Nordic facility.

The County purchased the Nordic plant in 1963 by County Board resolution (R.17). The purchasing agency was the Department of Public Works which then became responsible for its operation. The only justification offered in evidence for the acquisition was by the Department's Director:

"This (Nordic) was the second sewage treatment facility that was purchased by the County of the Department of Public Works...The County felt a need to eliminate the smaller utility companies, eliminate smaller package plants and go to a comprehensive County-wide system."

Apparently, the County rested all its hopes on a referendum, which eventually took place in 1970 to establish a single County-wide treatment facility. That referendum was decisively defeated. In the interim, the County has also acquired additional facilities not subject to this complaint.

In regard to the Nordic plant, apparently no major effort was made to upgrade the facility. Though additional area was eventually served (R.20-21). The County's initial purchase was a complicated deal in which the original developer sold the plant to another developer, who, in turn, sold the plant to the County, on interest-free purchase where the County "would repay out of the revenue of the system, the developers...some \$66,000. (R.21). That purchase was completed a year or so ago. The Contract for purchase called for services to a much larger area which the County undertook to supply, as needed (R.22). At present, the plant is serving 384 residential customers with the population equivalent of 1,400 (R.25). The plant's designed capacity is 100,000 gallons per day (R.10).

The County has supported plans for wastewater regionalization. However, it has made little improvement in the facility subject to this complaint. For all practical purposes, it has been going from year to year, in each instance, hoping that regionalization would relieve them of their responsibilities to fulfill the Water Quality Standards. Certainly, in retrospect, its program of acquisition and enlargement of the service area has been unwise. The subsequent failure to maintain water quality standards, its lack of revenue to upgrade the plant (an apparent unwillingness on the part of the County to provide more general funds) have left it in a rather desperate situation. The most difficult single item to understand is the financial situation (R.39-55). For example, the following testimony:

- A. "After getting the money in the budget for engineering services only in 1972, the County did by resolution authorize engineering for the trunk sewer between Itasca and Nordic sewage treatment facility.
- Q. Even though they were unable to determine the manner in which they could pay for this interceptor, is that correct?

- A. Yes...
- Q. You mentioned \$35,000 that you received in revenues that is from the Western Plant?
- A. And restricted funds from the Nordic Plant, in other words any connection fees or service fees would go into a restricted fund to pay back the developer, and on Golden Gates Estate, \$66,000.
- Q. And you paid that off in about nine years?
- A. That was just paid, right.
- Q. From 1963 until 1970, so that during that period of time you generated enough revenue, \$66,000, to pay back the development, is that correct?
- A. That is right.
- Q. At the present time, is there any money in the budget attributable to the Nordic Park Plant, or from any other sources that could be used there for the installation of equipment at chemicals?
- A. We have approximately--there was about \$42,000 total that we had in that restricted account which we authorized engineering, which we estimate to be about \$35,000--preliminary engineering for a trunk sewer.
- Q. So there are seven thousand dollars remaining?
- A. Right.
- Q. Will that be available to construct piping and put in a tank with additional chemicals in the final tank?
- A. That would be used for that purpose, yes.
- Q. What type of approval, if any, are necessary to extend that \$7,000?
- A. You would have to go back to the Board (DuPage County Board).
- Q. The effluent quality of this plant has been substantially above regulation for a long period of time, is that correct?
- A. That is correct...
- Q. I guess our real question is -- How come you don't use - you don't look into the addition of chemicals or something to improve the quality of that effluent when you have known that it is -- that its been bad.

A. Well, as I say, we had no money budgeted in 1971 at all for any capital expenditures at all.

Q. But you did have this restricted?

A. We did, in 1972.

Q. You had \$42,000 that could have been used, right, if you had a resolution?

A. Right. That was just transferred recently to the front...

Q. And the decision was made to fund engineering rather than put equipment into this plant, is that right?

A. That is correct.

(R.45, 48-51).

This reveals the County's self-imposed dependence upon an interceptor connection to relieve it of its responsibilities toward this facility.

The Agency's testimony was brief and directed only to establishing violations of the Act and Regulations. It has done so on the following dates: June 10, 1971 and July 19, 1971. A stipulation between the parties allows the inspection and laboratory reports for the other specified dates to be entered as exhibits without objection as to accuracy of methodology or observations (EPA Ex. 1). These reports establish the violations alleged on these dates: September 22, 1970, October 20, 1970, November 17, 1970, December 8, 1970, March 10, 1971, April 29, 1971, May 18, 1971, June 10, 1971, July 19, 1971, August 19, 1971, September 22, 1971, and January 3, 1972. There was no affirmative testimony on the part of the Agency as to possible remedy of the situation. Only on cross-examination did the complainant elicit from Respondents' witness the acknowledgement of the possibility that certain chemical additions, such as ferric chlorides and anionic polymers, might have some value in improving the effluent quality (R.47).

The treatment plant consists of a two-story primary clarigester (Clarifier on top of digester), a trickling filter and a secondary clarifier in series. Sludge from both the primary and secondary clarifiers is digested in the clarigester and then dried on sludge drying beds. (Stipulated Surveillance Reports).

Much of the problem seems to be associated with bad operating practices; in particular, the sludge handling and treating operations. The surveillance reports indicate frequent dates where dark colored di-

gested single particles were observed in the primary clarifier, the secondary clarifier or at the plant outfall. (Stipulated Surveillance Reports). The source of these particles is primarily the digester portion of the clarifier and indicates either an overloaded digester because of lack of sludge removal or faulty rakes on the floor of the clarifier not moving the primary sludge into the digester. The regurgitation of sludge back into the supernatant increases the effluent BOD and SS and exerts a high chlorine demand resulting in low efficiency of effluent disinfection and high bacterial concentrations.

The bypasses that were reported occurring should be lessened with the expansion of raw sewage pumping from 2-75 gpm units (.216 MGD total) to 1-350 gpm units (.504 MGD). The pump, however, appears to be sized too large for the normal plant flows and must be operated intermittently. (Stipulated Surveillance Reports). At the high pumping rate, the plant treatment efficiencies are reduced but no evidence of flooding the trickling filter was presented. Decreased bypassing resulting from the increased pumping should also reduce the gross pollution at the outfall which consists of rags, paper and vegetable particles.

The presence of rags and paper clogging the trickling filter spray arms and appearing at the outfall indicates the lack of, or a faulty bar screen at the front end of the plant. Many plants also have a comminuter (grinder) to shred bulk materials that reach the plant. No evidence was presented of the existence of either a bar screen or comminuter.

The record also indicates the absence of a full-time operator (R. 48) who would give prompt attention to the operating problems.

We will not order Respondent to make a major expansion or capital improvement in this facility. However, we cannot go along with Respondent's apparent decision to stay all improvements pending our Order #R70-17. In recognition of its responsibility to protect public health, Respondent should have been carrying out a program of adequate maintenance. This is a grave matter and we have reservations in not assessing a substantial penalty. Our Order, infra, is directed to what we consider to be the minimum needed for the protection of the public and conformation with the relevant statutes and regulations.

On the basis of the record, we order Respondent to upgrade its operations of the sewage treatment facilities, and to submit a plan directed toward maintenance and repair, rather than large capital expenditures. We note that Respondent has indicated that there is at least \$7,000 in funds that could be used in this manner. Respondent should direct its plan toward incorporating the improvements noted below. The Board does not establish the cost of making the improvements; Respondent must estimate such costs in its plan. Operations to be improved include: More frequent sludge removal from the digester; inspection and/or repair of sludge removal equipment for primary and secondary clarifiers; possible use of small pumps in parallel with large pump to provide a more flexible pumping schedule; repairs to the screening facility or possible installation of

screens at the front end of the plant to prevent rags or other trash from clogging the trickling filter spray nozzle; chemical addition if the cost is reasonable; and the presence of on-site personnel as necessary. Plans should be submitted within 35 days from the date of this Order. The circumstances of the case would normally call for the imposition of a penalty. However, in view of the contemplated program for regionalization of the DuPage County sewage systems, we see no useful purpose in the imposition of a penalty at this time and none will be assessed.

This opinion constitutes the findings of fact and conclusions of law of the Board.

IT IS THE ORDER of the Pollution Control Board that within 35 days from the date of this Order, Respondent shall submit to the Agency and the Board, a plan to upgrade the operation at the Nordic facility. The plan should be in conformance with the guidelines stated in the Opinion and should result in a significant improvement in effluent quality and the virtual elimination of gross pollution occurring at the plant outfall. The Board retains jurisdiction for such other and further orders as may be appropriate.

I, Christan Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Order was adopted on the 15th day of March, 1973, by a vote of 4 to 0.

Christan J. Moffett

