ILLINOIS POLLUTION CONTROL BOARD
April 29, 1982

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Complainant,	)	
v.	)	PCB 78-50
NORTH SHORE SANITARY DISTRICT, an Illinois Municipal Corporation,	)	
Respondent.	)	

MR. DENNIS R. FIELDS, SPECIAL ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF THE COMPLAINANT.
MR. M.R. CONZELMAN; CONZELMAN, SHULTZ, SNARSKI AND MULLEN; APPEARED ON BEHALF OF THE RESPONDENT.

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

On February 2, 1978 the Illinois Environmental Protection Agency (Agency) filed a five-count complaint against the North Shore Sanitary District (District). The complaint was amended twice: on July 25, 1978 adding Counts VI-XV and on May 1, 1979 adding Counts XVI-XXVI. On December 4, 1980 the Board granted an Agency motion to dismiss Count V. Ten days of hearings were held between November 9, 1979 and March 25, 1981, at which members of the press and public appeared. The Agency filed its closing brief on January 20, 1982. The District filed its closing brief on January 29, 1982.

The complaint alleges improper operation of the District's Gurnee Sewage Treatment Plant (STP) which is located on the Des Plaines River within the Village of Gurnee in Lake County and which began operation in April of 1976 (R.832-833). These operations began prior to completion of the STP's sludge transfer pumping station which was to pump the sludge to Waukegan for processing (R.835 and see Compl. Ex. No.31). Until completion, the sludge was to be transported to Waukegan by truck.

COUNT I

In Count I the Agency alleges that in late January of 1977 operational difficulties led to a discharge of solids into the Des Plaines River which resulted in accumulations of sludge in violation of Rule 203(a) of Chapter 3: Water Pollution, and Section 12(a) of the Environmental Protection Act (Act).

Section 12(a) generally prohibits water pollution while Rule 203(a) states that waters of the State shall be free "from unnatural sludge or bottom deposits," among other things.

The District does not seriously contend that it was not responsible for the solids discharge and the resultant accumulations of sludge in January of 1977. While the District does make a fleeting effort to establish that the source of the sludge was unknown (R.108-110), according to the District's own calculations, 434,540 pounds of suspended solids were discharged during January and February of 1977, more than 263,000 pounds in excess of allowed discharges (see Compl. Ex.3). In a report prepared for the District, William Mitsch, Ph.D. states: "The solids formed shoals and deposited in the channel meanders... The most significant deposits occured (sic) in a 7200 foot stretch from the plant discharge to the Route 120 bridge southwest of Gurnee." (see Compl. Ex.4,p.1.)

The Board finds that the District violated Section 12(a) of the Act and Rule 203(a).

COUNT II

In Count II the Agency alleges that from March 8, 1977 and intermittently thereafter the District discharged "obviously turbid" wastewater into the Des Plaines River in violation of Rule 403 and Section 12(a) of the Act. The only evidence tending to show such violation is a statement by Richard Springer, an Environmental Protection Engineer for the Agency, that on June 27, 1977 he observed water in the Des Plaines River near Route 120 which "had a poor visual quality" (R.99), and Complainant's Exhibit 19, an Inspection Report prepared by Mr. Springer concerning his March 8, 1977 inspection. In that report he states:

> While collecting the effluent sample I noticed that there was an overflow from only the eastern half of the post-aeration chlorine contact tank facilities. The west post-aeration tank was just being filled up (was recently taken out of service for cleaning and modification) and it's contents were quite dark and turbid. However, after the aerator was turned on and the system became equalized it's visual quality began improving.
>
> At the time of my visit, the plant secondary effluent appeared to be of a better quality than the chlorinated effluent, which was turbid and contained large visible solids.

The Board notes that the river observation was considerably downstream of the District's discharge point, and that no proof

was presented that the poor visual quality resulted from the District's effluent. Further, Gene Lukasik testified on behalf of the District that he examined the District's effluent on March 8 and that it was not obviously turbid (R.926-927).

While the inspection report is somewhat vague and ambiguous, it does indicate a specific observation of turbid chlorinated effluent which when balanced against Lukasik's more general observation (he makes discharge observations "on a daily basis") is sufficient to support a finding of a violation of Rule 403 and Section 12(a) of the Act. However, there is no proof of anything more than an isolated violation and no penalty, therefore, will be imposed for this violation.

COUNT III

In Count III the Agency alleges that the District "caused or allowed the discharge of deoxygenating effluent into the Des Plaines River to contain dissolved oxygen at levels below those required by Rule 203(d)" in violation of that Rule and Section 12(a) of the Act. As the District points out, Rule 203 is a water quality standard, not an effluent standard. Therefore, any such discharge violation must be pursuant to Rule 402, which was not alleged. Further, the Agency has not even briefed this issue.

The Board, therefore, finds that the Agency has failed to prove the allegations of this Count.

COUNT IV

In Count IV the Agency alleges that the District caused the death of fish and other aquatic life worth $692.18 through the discharge of deoxygenating wastes in violation of Section 12(a) of the Act and that the District is, therefore, liable for that amount pursuant to Section 42(b). There is no question that a fish kill of that extent occurred on or about June 27, 1977 (see Compl. Ex.24), and the Board has already concluded in Count I that the District violated Section 12(a) of the Act by discharging unlawful quantities of suspended solids, a deoxygenating waste. The question becomes one of whether that discharge caused the fish kill.

The District contends that the only opinion expressed as to causation was that of Dr. Chambers, an expert witness presented by the District, who indicated that the District "had nothing to do with it" (Resp. Br., Jan. 29, 1982, pp.4-5). However, that position overstates the case. Dr. Chambers in fact testified that the District discharge "was not directly responsible for the fish kill" (R.233, emphasis added). It was his opinion that the fish kill was "caused by low dissolved

oxygen in the water," the low water level and high temperature (R.229-230). He also stated that his opinion as to the District's lack of responsibility was premised upon a failure to find any toxic substances or organisms which could have been "causal agents" (R.232-2330).

The Agency, however, does not allege that toxic substances or organisms caused the kill. Rather its position is in agreement with Dr. Chamber's conclusion that the cause was low dissolved oxygen concentrations. Gary Erickson, a biologist with the Department of Conservation testified that the materials on the bottom of the river (the sludge) would take up the oxygen and could cause fish to be killed (R.151). While it is true that no expert testimony was directly expressed by any Agency witness concerning the specific cause of the June 27 fish kill, a report made by Harvey Brown, also a Department Biologist, on the date of the kill, notes that:

> Near the upper limit of the kill, above route 120 bridge, one sucker was observed "gulping" at the surface. A dissolved oxygen test was made below Route 120 with a result of 1.0 parts per million reading. Water temperature at this point was 80 degrees Fahrenheit and pH was 7.4. Downstream station #3 (below route 176) the dissolved oxygen reading was 2.2, water temperature 80 degrees Fahrenheit, and pH 7.6. The bottom of the stream contained a large quantity of black mucky sediment and had a sewer odor. This condition was most evident at the upper three stations.

Based upon the testimony and exhibits cited, the Board finds that the June 27 fish kill was a result of low dissolved oxygen levels, which in turn were caused by a combination of high temperature and deoxygenating wastes and exacerbated by the low flow conditions. The question then becomes whether the District's discharges earlier in the year were the "cause" of the fish kill pursuant to Section 42(b). Clearly, there were several "causes."

The District had little or no control over the river level and temperature, such that it could be found to be responsible only if the deoxygenating wastes discharged by the District were a substantial factor in causing the kill. Based upon the location of the kill downstream of the Gurnee STP (Compl. Ex. 24), the lack of other such kills in the absence of sludge deposits (R.____), the depression of oxygen levels in the area of those deposits (Compl. Ex.23 and R.151-155), and the failure of the District to show any significant contribution to the deoxygenating wastes from other sources discharging to the affected portion of the Des Plaines River, the Board finds that the District was a significant factor in causing the fish kill and is, therefore, responsible for payment of the value

of the fish killed (as calculated in Compl. Ex.24).

COUNTS VI-XV

Counts VI through XV deal with the District's failure to file reports in a timely fashion and various other matters all of which are required by the District's NPDES Permit No. IL0035092 (Compl. Ex.1). The District argues that the Board is without jurisdiction to enforce these requirements due to the holding in Citizens For A Better Environment v. EPA (596 F2d 720, Seventh Circuit, January 26, 1979). Therein, the Court did in fact hold that the approval of Illinois' NPDES permit program by the Administrator of USEPA was improper because of USEPA's failure to have adopted rules for public participation at the time of approval. However that decision does not remove the Board's jurisdiction to enforce NPDES permits in that the issuance of mandate was stayed by Order of May 30, 1979 and that stay has been continued on several occasions since then. It appears that since the Administrator has now repromulgated the approval (46 Fed. Reg. 24295; April 30, 1981), the mandate will never issue and the Illinois NPDES permit program will maintain its continuity.

Therefore, the Board finds that it does in fact have jurisdiction to consider these allegations.

COUNTS VI, X AND XVIII-XXI

The Agency alleges in these Counts that the District has failed to submit reports regarding the control of industrial users (Counts VI, XVIII and XIX) and daily monitoring reports (DMR's; Counts X,XX and XXI) in a timely manner. The District admits these violations (R.934-936 and R.67-68 and 972, respectively) and simply offers an explanation for the lack of timeliness. The explanation only goes to the penalty, not to the violation. The Board, therefore, finds that the Agency has proven violations of Rules 501 and 901 as well as Sections 12(a),(b) and (f) of the Act as alleged in these Counts.

COUNTS XI-XIII, XXV AND XXVI

In these counts the Agency alleges that the District violated its NPDES permit and State limitations for biochemical oxygen demand (BOD_5; Counts XI and XXVI) and ammonia-nitrogen (NH_3-N; Count XIII). The Agency presented DMR's (Compl. Ex.7) to establish these violations and the District has not contested the fact that these limitations were exceeded. Again, it has simply offered an explanation that goes to mitigation of any penalty assessed and does not constitute a defense to the allegations.

Therefore, the Board finds that the District has violated Rules 901 and 404(f)(ii) and Sections 12(a),(b) and (f) of the Act as alleged in these Counts.

COUNTS VIII, XVI AND XVII

In Counts VIII, XVI and XVII the Agency alleges that the District failed to monitor for certain parameters as required by its NPDES and State permits. However, Penny Bouchard, the coordinator for industrial waste for the District, testified that the District did in fact monitor for these parameters on a weekly basis (R.960), and her testimony is uncontradicted. While these reports were not filed in a timely manner, due to the fact that the Agency's forms did not include space for this data, the data was submitted upon request (R.960-962). While the District technically violated the filing requirement, that was not alleged.

The Board, therefore, finds that the Agency has failed to prove the allegations contained in Counts XVI and XVII.

COUNTS XIV AND XXIV

In Counts XIV and XXIV the Agency alleges that the District violated its oil and grease effluent limitations under its NPDES and State permits. Again, these allegations are supported by the DMR's showing excessive discharges of oil and grease during November and December, 1977, as well as March of 1978. The District contends, however, that the testing procedures which were required by the Agency and USEPA were simply wrong and resulted in artificially high values.

Frederick Winter, Chief Chemist for the District, testified that the Standard Method used by the Agency was in error, that he modified it and obtained correct results (R.989-991). Further, he unsuccessfully attempted to discuss this modification with the Agency (R.991-995). He also testified that the District was later approved by the Agency for wastewater analysis which included approval of the modification, and that the District has not been shown to violate these standards under the modified procedures. The Agency has not rebutted these facts.

Therefore, the Board finds in this case that the Agency has failed to prove the allegations of Counts (XIV and XXIV).

COUNTS XV, XXII AND XXIII

In each of these Counts the Agency alleges that the District failed to submit timely reports of non-compliance regarding

violations of BOD_5, SS and NH_3-N standards which the Board has found above. Complainant's Exhibit 16, which includes all reports of non-compliance filed during the relevant time period fails to include reports of these violations. Again, the District does not dispute the facts but simply offers an explanation which does not serve as a defense.

The Board, therefore, finds that the Agency has proven violations of Rules 501 and 901 and Sections 12(a),(b) and (f) of the Act.

COUNT VII

In Count VII the Agency alleges that the District has failed to enact an effective industrial waste ordinance. However, H. William Byers, General Manager and Chief Engineer of the District, testified that Respondents Group Exhibit No. 27 is a copy of the District's original industrial waste surcharge ordinance which was enacted in 1971 and amendments to it (R.957). He also testified that the ordinance was approved by the USEPA in 1975 (R.958 and see Resp. Gp. Ex.28) and that over one million dollars has been collected under it (R.957). The Agency, on the other hand, has failed to produce any contrary evidence.

The Board, therefore, finds that the Agency has failed to establish the violations alleged in Count VII.

COUNT IX

In Count IX the Agency alleges that the District violated its NPDES permit requirement to operate its facility in an optimum fashion as indicated by the STP's discharge of an excessively high residual chlorine concentration. The District, however, presented testimony to rebut this allegation.

Mr. William Franz, the Gurnee STP Superintendant, testified that the STP was to have been built with an on-line chlorine analyzer which used the titration method (R.966). However, that apparatus was inoperative, and until it could be made operational a HAC-Little color comparator-type kit was used (R.966). Mr. Franz further testified that that kit gave inaccurately high readings and that it has since been replaced with an Ampreometric Titrator which gives more accurate results and which shows the STP's chlorine residual discharge to be within limits (R.967-968). Results with the new equipment are about half of the results with the old equipment (R.970). He finally testified that the plant was being run in an optimal fashion (R.967).

Again, based upon the lack of Agency testimony to rebut this, the Board finds that no violation has been proven under Count IX.

PENALTY

The Board must next determine what penalty, if any, should be assessed for the violations found by the Board in this proceeding. Despite the Board's findings of violation, the District has offered evidence in mitigation which is properly considered in determining any penalty.

Count I: While the Board has found that the District discharged unacceptably high levels of solids, the District contends that this resulted from operational problems associated with the start-up of the STP and that all that could have been done to minimize and correct the problem was done (R.834-905). The Agency contends that the problem was foreseeable and could have been handled better.

The Board finds that the Agency has done little more than demonstrate that one can see with greater clarity with the advantage of hindsight. The Board, therefore, finds that a penalty would not aid in the enforcement of the Act. While the District may have made some questionable decisions, there is no real proof that it acted irresponsibly or that the imposition of a penalty would result in a better response should such problems arise in the future.

Count II: The Board has found, as stated earlier, that no penalty is appropriate.

Count IV: The Board has found that the District caused $692.18 worth of fish to die due to its improper discharge. While no penalty was found to be appropriate in Count I for the discharge, the District is not relieved from responsiblity for the harm caused to the fish by its discharge. Pursuant to Section 42(b) of the Act, the District will be ordered to pay that amount to the Wildlife and Fish Fund.

Counts VI,X and XVIII-XXIII: The Board has found that the District failed to file DMR's, industrial user and non-compliance reports in a timely fashion. The District contends that the user reports' requirement is impossible to comply with due to the lack of timely availability of necessary information (R.935-940). With regard to the DMR's and non-compliance reports, the District contends that the requirements are overly burdensome and that the time was better spent working on plant operations (R.973).

However, as the Agency points out, there is no showing that the District ever requested a modification of those

requirements or a variance from this Board. These are the proper channels for remedying such problems. The District's unilateral decision to ignore State requirements cannot be condoned, and the Board finds that a penalty is necessary to encourage the District to follow proper procedures, and will order that the District pay a penalty of $1,000. While it is certainly true that the taxpayers will ultimately pay this fine, that too may aid in the enforcement of the Act, for the taxpayers will quickly tire of paying higher taxes to pay the penalties assessed against those responsible for violating the Act.

Counts XI-XIII,XXV and XXVI: The Board has found that the District discharged BOD_5, SS and NH_3-N at levels above their standards. The District, however, presented uncontradicted testimony that these violations resulted from a nitrification problem that arose during December of 1977 and January through March of 1978 (R.979). The STP had been designed for single-stage nitrification and operated satisfactorily until the weather turned cold (R.979). The testimony also shows that the District took all steps that it could to remedy the problem on a short-term basis and finally installed two-stage nitrification, which apparently remedied the problem (R.980-985). Thus, the question of imposing a penalty for these violations is nearly the same as in Count I, and the Board again finds that a penalty is not justified to aid in the enforcement of the Act.

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

ORDER

1. The North Shore Sanitary District is found to have violated Rules 403, 404(f)(ii), 501 and 901 of Chapter 3: Water Pollution, and Sections 12(a),(b) and (f) of the Act.

2. It is hereby ordered that the District shall, within 45 days of the date of this Order, pay the amount of $692.18 payable to the Wildlife and Fish Fund; and that

3. The District shall, within 45 days of the date of this Order, pay a penalty in the amount of $1,000, payable to the State of Illinois, which is to be sent to:

Illinois Environmental Protection Agency
Fiscal Services Division
2200 Churchill Road
Springfield, Illinois 62706

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 29th day of April, 1982 by a vote of 5-0.

Christan L. Moffett, Clerk
Illinois Pollution Control Board