ILLINOIS POLLUTION CONTROL BOARD February 3, 1972

ENVIRONMENTAL PROTECTION AGENCY)))	
v .)	
AIRTEX PRODUCTS, INC.))	PCB 71-325
and)))	
CITY OF FAIRFIELD)))	

Honorable William J. Scott, Illinois Attorney General, by Mr. William C. Bowen, appeared on behalf of the Environmental Protection Agency;

Messrs. Charles J. O'Connor and Walter V. Lesak, appeared on behalf of Airtex Products, Inc.

Mr. Richard C. Cochran, appeared on behalf of the City of Fairfield

OPINION OF THE BOARD (by Mr. Dumelle)

This enforcement action was initiated by a complaint filed by the Illinois Environmental Protection Agency (EPA) against both respondents on October 15, 1971. The complaint was in two counts with Count I directed to Airtex Products, Inc., a manufactory and an Illinois Corporation (Airtex), while Count II directed similar allegations to the City of Fairfield (Fairfield), an Illinois municipal corporation.

The complaint was amended and the issues circumscribed at the hearing held on November 30, 1971 at the Fairfield City Hall as described below.

Count I of the original complaint alleged that Airtex owned and operated two factories in Fairfield for the manufacture of pumps and other metal products at which some metal plating operations were carried on. It was alleged that in connection with the manufacturing Airtex had caused, allowed and threatened the discharge of contaminants so as to cause or tend to cause water pollution. Further it was

averred that Airtex had caused or allowed cyanides and cyanogen compounds to enter the Fairfield sewer system in violation of Section 12(a) of the Environmental Protection Act¹ and Illinois Sanitary Water Board Rules and Regulations SWB-5 (hereafter SWB-5), Article I, Rule 1.01.²

Count II alleged that Fairfield owned, controlled or operated certain storm sewers which carried the Airtex cyanide discharges in violation of Section 12(a) of the Act to a creek which ultimately flowed to the Little Wabash River. It was further alleged that Fairfield was in violation of Section 12(a) of the Act and certain portions of SWB-14 (Rule 1.03, Sections b,c, and d)³ inasmuch as

Illinois Revised Statutes, Chap. 111-1/2, Sec. 1012(a)

No person shall:

- (a) Cause or threaten or allow the discharge of any contaminants into the environment in any State so as to cause or tend to cause water pollution in Illinois, either alone or in combination with matter from other sources, or so as to violate regulations or standards adopted by the Pollution Control Board under this Act;
- 2] Illinois Sanitary Water Board Rules and Regulations SWB-5 Article I,
 - Rule 1.01 Any person, firm or corporation engaged in manufacture or other process, including deactivation of processes, in which cyanides or cyanogen compounds are used shall have each and every room, where said compounds are used or stored, so constructed that none of said compounds can escape therefrom by means of building sewer, drain or otherwise directly or indirectly into any sewer system or watercourse.
- 3] Illinois Sanitary Water Board Rules and Regulations SWB-14, Rule 1.03

These Minimum Criteria shall apply to all waters at all places and at all times in addition to specific criteria applicable to specific sectors.

. . .

- b) Free from floating debris, oil, scum and other floating materials attributable to municipal, industrial or other discharges in amounts sufficient to be unsightly or deleterious;...
- c) Free from material attributable to municipal, industrial or other discharges producing color, odor or other conditions in such degree as to create a nuisance;
- d) Free from substances attributable to municipal, industrial or other discharges in concentrations or combinations which are toxic or harmful to human, animal, plant, or aquatic life.

it had caused or allowed the discharge of certain industrial wastes in amounts sufficient to be unsightly and deleterious which produced a nuisance and contained concentrations of contaminants toxic and harmful to human, animal, plant and aquatic life.

The EPA's prayer for relief in this case was for a fine against each of the respondents of \$10,000 for each violation (plus \$1,000 per day for continued violations) and "such further relief that the Board deems necessary."

In response to a motion filed on November 18, 1971 by Airtex to require that the pleadings be made more definite and certain (or be dismissed) the Board on November 29, 1971 entered the following preliminary order:

Respondent Airtex moves to dismiss or, in the alternative, for a more definite statement, both on the ground that the complaint contains insufficient information. We do not find the complaint totally deficient, and additional information can be provided by discovery. The motion is denied.

The hearing proceeded with no knowledge of the preliminary order, the hearing officer and parties were apparently uninformed of the Board's preliminary order. At the hearing on November 30, much discussion and effort was taken up with dealing with Airtex's motion to require greater specificity in the charges made by the Environmental Protection Agency. The result of the representations, stipulations and hearing officer's rulings at the beginning of the hearing was to restrict the Environmental Protection Agency's complaint to the very narrow issue of alleged cyanide discharges on May 4 and May 14, 1971.

Subsequent to the hearings, on December 8, 1971 Airtex filed a motion to vacate the preliminary order stating that the entry of the preliminary order was unknown to both the parties and the hearing officer at the time of the hearing held on November 30, 1971. Further, the motion stated that the parties and the hearing officer narrowed and made more certain the charges in the complaint and all parties proceeded to a full hearing on the issue of cyanide discharges on May 4 and May 14, 1971. We, therefore, vacate our preliminary order of November 29, 1971 and hold it to have no force or effect in this proceeding.

We find both respondents to be in violation; Airtex in violation Section 12(a) of the Act and SWB-5, and Fairfield in violation of Section 12(a) of the Act. As part of our order in this case we will require that Airtex cease and desist any and all untreated cyanide discharges into the storm or sanitary sewer system of the City of Fairfield. Also, we will require that Fairfield cease and desist accepting any and all untreated cyanide discharges from the Airtex plant.

Further, we will impose a money penalty on Airtex in the total amount of Eleven Thousand Dollars (\$11,000.00) for the two separate occurrences of cyanide discharges on May 4 and May 14, 1971 and a money penalty in the amount of Eleven Hundred Dollars (\$1,100.00) on the City of Fairfield in connection with the same occurrences of cyanide discharge on the same dates.

Airtex manufacturers and reconditions parts for the automotive and other industries at the two plants which it operates in Fairfield. The company employs approximately 1,000 persons to whom only a small number, perhaps 3 or 4 (R. 111) are or were involved in the company's plating operations. The 1971 estimated payroll of the company was stated to be about \$6,767,000.00. Only the plant located at 407 West Main Street (Plant No. 1) is involved in this proceeding. Monge, president of Airtex, testified that about 30,000,000 pounds of materials were shipped from the plant in 1970 of which about 600,000 or 2% were plated (R. 112). Mr. Reinhardt Wesemann, Chief Manufacturing Engineer, for Airtex described the plating process as a relatively small operation. Barrel plating of zinc, copper and dichromate is conducted. The parts to be plated are placed in hexagon-shaped perforated barrels about 30 inches in length. The barrels are immersed in a cleaning tank and tumbled and then rinsed. Plating baths and further rinsing are the next steps followed by drying. During the rinsing cycles wastes overflow and drain into the sewer during the normal course of operation (R. 152-154). Mr. Monge stated that although plating was a relatively minor part of the company's operations it was an essential aspect of the company's work (R. 111-112).

The company ceased its plating operations on May 14, 1971 and has since then been shipping its plating requirements to Evansville, Indiana (R. 113). Mr. Melvin L. Spencer, Executive Vice President of Airtex, in charge of manufacturing and engineering among other things, testified that at the time of receipt of a telegram from the EPA on May 14, 1971 stating that excessive cyanide discharges were occurring he made the decision to shut down the already abridged plating operations (R. 134-135, EPA Ex. 7). Three or four employees were laid off due to the closing down of the plating operations (R. 121). Mr. Monge stated that having the plating done in Evansville, rather than at the Fairfield plant, will cost the company an additional \$28,000.00 per year (R. 113-114). Beyond the dollars aspect of cost, Mr. Monge said that the fact of not being able to conduct their own plating has caused many other inconveniences and costs such as adding an additional week to the in-process inventory and other problems of inventory control (R. 111-115).

Mr. Monge stated that starting in late 1967 or early 1968 Airtex began to seek advice as to what should be done to abate its cyanide discharges (R. 118). Airtex experimented with a no cyanide solution which proved to be unsatisfactory because of the poor quality of the plated parts (R. 119). Nonetheless, at the time of the hearing, Mr. Monge stated that Airtex was planning further experimentation with the no cyanide process and that any future plating at the plant would be performed on a no cyanide basis (R. 119). The no cyanide process was not successful because Airtex did not have the proper cleaning facilities (R. 157). Black blotches and speckles were noted on the plated parts (R. 157).

After the no cyanide experiments, Airtex evaluated a low cyanide plating process which was in use until the plating shut down on May 14, 1971 (R. 119-210). Airtex went into full production with the low cyanide process about June 8, 1968 (R. 182). After a period of experimentation with the low cyanide process Airtex reduced its usage of cyanide by over 50% (R. 158).

Mr. Henry Meisenheimer Fairfield's consulting engineer met with Airtex representatives in May 1968 to discuss various water pollution problems including the cyanide problem (R. 161-163). On July 25, 1969 Mr. Wesemann wrote to the Mayor of Fairfield requesting that Airtex be allowed to divert the rinse water from the plating operation to the sanitary sewer system (R. 169-170, Airtex Group Ex. 9). Mr. Wesemann represented that the cyanide concentration of the wastes was below the allowable limit (R. 170, Airtex Group Ex. 9). The letter requested that Fairfield act to obtain the necessary permit from the Sanitary Water Board (R. 171, Airtex Group Ex. 9).

Mr. Wesemann had plans drawn up and forwarded to Fairfield so the city could then apply for the cyanide discharge permit (R. 171-172). The City informed Airtex by letter of August 8, 1969 that Airtex would be kept informed of developments with regard to the sewer discharge permit (R. 172-173). On August 19, 1969 Airtex forwarded certain other engineering information to the City relating to the permit (R. 173). Mr. Meisenheimer stated that he did not feel that the plans submitted by Airtex to Fairfield were sufficient to the point where his engineering firm could recommend that the City accept the plant's cyanide wastes (R. 199-200). This opinion was never communicated to Airtex (R. 212). The City then authorized their consulting engineers to undertake a study of the City's facilities to determine under what conditions they could accept cyanide and other industrial wastes (R. 201). engineer's report concluded that it would be necessary to increase the capacity of the treatment facilities in order to handle all the industrial wastes from Airtex's facilities (R. 202).

Mr. Harold Meisenheimer sent a letter to the Mayor of Fairfield on May 21, 1971 (R. 191-192, Airtex Ex. 10) in which he referred to a preliminary engineering report dealing with industrial waste discharges to the sanitary sewer system. The report was never given to Airtex (R. 192). The City of Fairfield never indicated that the plans and other materials submitted by Airtex were anything but satisfactory (R. 189). On the subject of discharge into the City's storm sewer system, and not the much discussed sanitary sewer system, the company had never requested nor had they ever received permission to dump cyanide wastes into the storm sewer in which they had been discharging (R. 189).

Mr. Clinton C. Mudgett, an environmental control engineer for the EPA, testified to taking a sample on May 4, 1971 of the Airtex plating effluent at the point where the waste was being discharged from the plating room to a street drain at the northeast corner of the plant (R. 45, 46). At the time of extracting the sample from the waste stream, Mr. Mudgett noted that the flow was fairly high, indicating that plating operations were in progress (R. 46).

Mr. Mudgett also took a sample from the Fairfield storm sewer on May 4, 1971 located near the intersection of Union and Main Streets about 3 or 4 blocks from the plant (R. 47-49, 74, Airtex Ex. 1). He noted the rate of discharge of waste to the storm sewer and observed a slight oil film on the surface of the water (R. 48).

After analysis it was determined that the cyanide concentration of the Airtex plant discharge was 12.0 milligrams per liter and that the cyanide concentration of the wastes in the storm sewer at Union and Main Streets was 4.3 milligrams per liter (R. 53-56, EPA Ex. 1,2).

Mr. Mudgett returned to the plant on May 20, 1971 and noted that there was only a very small amount of flow, estimated to be about one-half gallon per minute, coming from the plating operations (R. 57-58). The plating had apparently stopped and the comparative trickle of waste flow was thought to be due to a final cleanup of the equipment (R. 58). No samples were taken on May 20.

Mr. Bob Samuel, a Sanitary Inspector for the EPA visited the Airtex plant on May 14, 1971 for the purpose of collecting samples of the plant discharge and the receiving stream (R. 85). He extracted a sample from the same Airtex discharge point that Mr. Mudgett had previously taken a sample (R. 88) from. Mr. Samuel estimated the discharge rate to be about 75 gallons per minute. The cyanide concentration in the sample was .03 mg/l (R. 89, EPA Ex. 3). On the same day, Mr. Samuel also took a sample at the discharge from the storm sewer at about the same place where the May 7 sample was taken (R. 90-91). He estimated the flow at the storm sewer to be about 75-100 gal per min. (R. 91). The cyanide concentration at that point was 1.5 mg/l (R. 91, EPA Ex. 4).

Mr. Samuel also took a sample from the receiving stream, an unnamed branch tributary to Pond Creek. The sample was collected near the east city limits of Fairfield from a bridge on Illinois Route No. 15 (R. 93). The cyanide concentration in that sample was .08 mg/l (R. 93, EPA Ex. 5). Plating operations were in progress at the time and date of Mr. Samuel's sample collection (R. 96). Other samples taken by Mr. Samuel on the same day from the Little Wabash River and Pond Creek showed no cyanide to be present (R. 99-102).

At the close of the Agency's case, counsel for Airtex moved for a finding for the respondent and moved to strike the testimony relating to sample analyses on grounds of irrelevancy (R. 104). Airtex maintained that there had not been any introduction of regulations which were alleged to be violated and no connection was made between the sample analyses and violation of regulations. The City of Fairfield also moved to dismiss and find for the respondents (R. 107-108). We deny both respondents' motions in both aspects.

The waters of the State of Illinois are a broad concept. They include both public and private waters. For purposes of the cyanide regulation, they include sewers and other such closed conduits. The statute defines "waters" to be "all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this State."

The regulation which has been violated in this case is very plain and quite simple. SWB-5 was enacted by this Board's (and the EPA's)predecessor, the Illinois Sanitary Water Board. Rule 1.01 of SWB-5 is clearly an effluent standard which prohibits the discharge of cyanides to any water course in any concentration. Airtex had a duty to prevent the discharge of any amount of cyanides into any sewer system or other water course. Rule 1.01 is a zero discharge standard, it prohibits the dumping of any and all cyanide-bearing wastes whatsoever.

Because cyanide is toxic to aquatic and other organisms its presence in treatment plant influents can impair the biological treatment efficiency of the plant by inhibiting the growth and activity of the necessary treatment organisms (R. 202). Once the organisms are killed, the efficiency of treatment can drop off severely and it may take considerable time for the plant to be fully effective again (R. 203). Present regulations (including SWB-14) contain a limit on cyanide as a water quality standard of 0.025 mg/l. It has been proposed that this standard be lowered to 0.01 mg/l because of cyanide's toxicity as regards fish and other forms of life. The fact that the water quality standard as regards cyanide is placed at .025 mg/l for intrastate waters in no way takes away from the force of the effluent standard in SWB-5 which proscribes all cyanide discharges except those specifically allowed for under further explicit provisions of SWB-5.

Rule 1.02 of SWB-5 contains a procedure whereby a cyanide discharge up to 2 mg/l could be discharged to a sanitary sewer system which led to a sewage treatment plant. The regulation is clear that the permit to discharge cyanide must be obtained by the municipality from the State. Nonetheless, the City's lack of action does not relieve Airtex from complying with the no discharge provision. Airtex could have availed itself of legal remedies such as mandamus to force the City to apply for the cyanide discharge permit. During the period that SWB-5 was was under the jurisdiction of the Illinois Department of Health a permit application form was available to be used by a municipality to obtain approval from the Sanitary Water Board to accept cyanide-bearing wastes in sanitary sewer systems (R. 130). Such a procedure is still available through the EPA.

Without the proper permission the City of Fairfield could no more legally accept cyanide-bearing wastes than could Airtex discharge such wastes. In this case both respondents are liable for the excessive cyanide discharges found to have occurred on May 4 and May 14, 1971. We will therefore enter cease and desist orders against both respondents in this case.

^{4]} Ill. Rev. Stat., Ch. 111-1/2, Sec. 1003 (o).

Taken together the testimony of Airtex and Fairfield tends to put the liability for the cyanide water pollution on a continuously moving circular belt. Airtex is not liable because they have applied for a permit through the City and the City has not acted. Fairfield is not liable because they are not discharging any cyanide-bearing wastes. We have already dealt with the premise of Airtex's liability and concluded that they are clearly responsible for the violation of the regulation by the act of discharging cyanide bearing wastes. The City's liability for the water pollution in this case derives from its knowledge of the cyanide discharges and the provisions of Section 12(a) of the Environmental Protection Act. That section makes it a violation to "cause or threaten or allow the discharge of any contaminants into the environment...so as to cause or tend to cause water pollution..." Although the City did not generate the contaminants but only allowed their transport in its sewers the City is liable for allowing the cyanide wastes to cause water pollution. Under the Act the City has an obligation to take affirmative action to abate pollution attributable to material flowing through its sewers. As we said in EPA v. City of Champaign (PCB 71-51C, September 16, 1971):

It cannot be a complete defense that the City did not itself generate any wastes or discharge anything into its own sewers; so to hold would absolve any municipality from the need to treat domestic sewage deposited by others into its sanitary sewers, a plainly untenable proposition. We think the City, by undertaking to carry storm waters from lands within its borders, assumed a certain duty to avoid unnecessary pollution as a result. (Opinion, p. 17).

Further as regards the verb "allow", we said in that case and reiterate here that:

The use of the word "allow expresses a legislative policy requiring affirmative action by the owner of such property as refuse dumps or sewers to prevent unnecessary pollution. This does not make him an insurer; it does not mean the Board will impose monetary penalties every time somebody pours oil into a city's sewer in the middle of the night. The question of technical and practical feasibility of control enters into the determination of a city's obligation here, just as it does in every other case under the statute (Sections 31(c), 33(c)). We will not require the City to do what is unreasonable; but we do hold that the statute requires it to do its level best to prevent pollution from its sewers. This conclusion is buttressed by the fact that the City, as owner, is in a far more advantageous position than is the Agency to perform routine policing of its own sewer system. (Opinion p. 18-19).

This opinion constitutes the Board's findings of fact and conclusions of law in this proceeding.

ORDER

Having considered the record in this proceeding it is HEREBY ORDERED:

- 1. That respondent Airtex Products, Inc. cease and desist from discharging any and all cyanide compounds from its operations at 407 West Main Street in Fairfield, Illinois in violation of SWB-5 and Section 12(a) of the Environmental Protection Act.
- 2. That respondent City of Fairfield cease and desist from accepting wastes from the Airtex plant to its storm sewer system in violation of Section 12(a) of the Environmental Protection Act.
- 3. That Airtex pay to the State of Illinois by March 1, 1972, the sum of Eleven Thousand Dollars (\$11,000.00) as a penalty for the violations found in this proceeding. Penalty payment by certified check or money order payable to the State of Illinois shall be made to the Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Drive, Springfield, Illinois 62706.
- 4. That Fairfield pay to the State of Illinois by March 1, 1972 the sum of One Thousand One Hundred Dollars (\$1,100.00) as a penalty for the violations found in this proceeding. Penalty payment by certified check or money order payable to the State of Illinois shall be made to the Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Drive, Springfield, Illinois 62706.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the Board adopted the above Opinion and Order on the day of February, 1972 by a vote of

Christan L. Moffett, Clerk

Illinois Pollution Control Board