

ILLINOIS POLLUTION CONTROL BOARD
February 25, 1988

FRANTZ MANUFACTURING COMPANY,)
)
 Petitioner,)
)
 v.)
)
)
ILLINOIS ENVIRONMENTAL)
PROTECTION AGENCY and)
THE CITY OF STERLING,)
)
 Respondents.)

PCB 87-157

OPINION AND ORDER OF THE BOARD (by J. Theodore Meyer):

This matter comes before the Board on an October 13, 1987 variance petition filed by Frantz Manufacturing Company (Frantz). The Board issued a more information order on October 15, 1987, and Frantz submitted an amended petition on December 1, 1987. Frantz seeks an extension of a variance granted by the Board on February 5, 1987, in PCB 86-143. That variance gave Frantz relief until September 1, 1987 from 35 Ill. Adm. Code 304.120 as it relates to five-day biochemical oxygen demand (BOD) and from 35 Ill. Adm. Code 304.124(a) as it relates to oils. In the instant petition, Frantz seeks an extension of variance until September 1, 1988, because the City of Sterling (Sterling) has not completed construction of a receiving sewer as originally scheduled. That sewer forms the basis of Frantz's compliance plan. On December 3, 1987, the Board joined Sterling as a party respondent. Sterling has not participated in this proceeding.

On January 22, 1988, the Illinois Environmental Protection Agency (Agency) filed its recommendation, recommending that the variance extension be granted subject to conditions. Frantz waived its right to a hearing, and none was held.

BACKGROUND

Frantz owns and operates a ball bearing manufacturing plant located one mile west of Sterling in Whiteside County, Illinois. The facility, which manufactures anti-friction wheels and bearings for gravity flow conveyors, employs 97 employees and does approximately \$10,000,000 in business annually.

One facet of the manufacturing work undertaken at the plant involves the plating of the products produced there. Frantz plates approximately 24,000 pounds of materials per day through the use of a zinc electro-plating process. This process consists

of an automatic barrel line with a zinc potassium chloride bath. The equipment used in the plating process includes a 650 gallon soap tank, a 390 gallon electro-clean soap tank, a 580 gallon rinse tank, a 290 gallon acid tank, a 580 gallon rinse tank, two potassium chloride plating tanks of 1500 gallons each, a 290 gallon 1% nitric acid dip tank, two 290 gallon chromate dip tanks, a 580 gallon cold rinse tank, and a 290 gallon hot rinse tank.

As a byproduct of the plating operation, approximately 17 gallons of effluent per minute emanate from the various rinse tanks. These wastes are channeled through a DMP chemical reduction and precipitation waste treatment system. Some of the waste is recycled, with the remaining average of 4000 gallons per day discharged to Elkhorn Creek at a point immediately below the discharge of the Sterling/Rock Falls sewage treatment plant.

Frantz reports that the BOD concentration in its effluent ranges from 93 mg/l to 256 mg/l, and that the oils concentration ranges from 13 mg/l to 128 mg/l. Frantz states that the average concentrations of BOD and oils in its effluent are 166 mg/l and 69 mg/l, respectively. On the other hand, the Agency reports the following monthly averages:

<u>Month</u>	<u>BOD (mg/l)</u>	<u>Oils (mg/l)</u>
11/87	125.0	25.0
10/87	71.0	13.0
9/87	46.0	14.0
8/87	50.0	1.0
7/87	46.0	6.0
6/87	18.0	3.0
Average	59.3	10.3

The effluent limitations found at 35 Ill. Adm. Code 304.120(a) and 304.124(a) are 30 mg/l for BOD and 15 mg/l for oils.

Relief Requested and Compliance Plan

Frantz states that during the period of variance, it will reduce oil discharges by the use of surface skimming or oil capture elements. However, Frantz asserts that no significant reduction of BOD is possible under existing conditions. Thus, it asks that the following interim discharge limits be imposed:

	<u>BOD (mg/l)</u>	<u>Oils (mg/l)</u>
Daily Maximum	260	100
Daily (sic) Average	165	65

The Agency recommends that the interim limits be tightened to "more accurately reflect the level of treatment being provided." (Agency recommendation at 5.) The Agency suggests these limits:

	<u>BOD (mg/l)</u>	<u>Oils (mg/l)</u>
Daily Maximum	150	50
Monthly Average	75	25

The compliance plan previously proposed by Frantz, and accepted by the Board in PCB 86-143, involves construction of a sewer line connecting the Frantz facility with the City of Sterling sewer system. This will allow the pre-treatment effluent from Frantz to be discharged into Elkhorn Creek after passing through the municipal facility. The present pre-treatment facilities will remain in operation. Frantz states that Sterling has already committed to construct the sewer line to the plant. The original variance anticipated that the sewer line would be ready for hookup by September 1, 1987. As noted above, the sewer has not been completed, and Frantz seeks an extension of variance until September 1, 1988. This new date for compliance is supported by a letter from the Whiteside County Board's executive assistant. (Variance petition, Ex. E.) The County Board is the entity which is responsible for actually constructing the sewer line. The relationship between the County Board and Sterling as to construction of the sewer line is not clear in this record.

The Agency states that Frantz has already completed the arrangements required to connect to the sewer line when it is completed. The Agency feels that the failure to construct the sewer line during the previous variance has not been adequately explained, but notes that it is clear that Frantz has no control over the actual construction of the line and thus no direct responsibility for the delay.

ENVIRONMENTAL IMPACT

As was the case in the original variance, neither Frantz nor the Agency have provided any sampling data pertaining to Elkhorn Creek. At that time, the Agency stated that because all stations on Elkhorn Creek were found to be "full aquatic life support streams", and because the Frantz discharge would account for only 0.02% of the 7-day 10-year low flow of the creek, it believed that the granting of the variance would cause no adverse environmental impact. In its recommendation in this case, the Agency notes that because Sterling's wastewater treatment plant has been discharging directly into the Rock River for the past year, that discharge has not been available to dilute Frantz's flow in Elkhorn Creek. Even at that, the Agency has received no complaints of fishkills or the like in the creek. Thus, the

Agency states that it does not expect any further adverse impact on the receiving stream by the extension of the variance.

HARDSHIP

Frantz alleges that continued operation of its plating line is critical to the company. Frantz further indicates that if it were forced to cease operation of the plating line, the materials needing plating would have to be transported a minimum of 45 miles to receive the same treatment. Plating costs would be expected to double, which Frantz contends would adversely affect the company's position in what it terms a highly competitive market. Frantz also states that three of its plating department personnel would be laid off as a consequence of ceasing plating operations.

The Agency notes that in PCB 86-143, the Board found that Frantz would incur an arbitrary or unreasonable hardship if required to comply immediately with the BOD and oils limitations. The Agency points out that the situation is unchanged, and states that it is convinced that there is a sufficient hardship to warrant the requested relief.

CONCLUSIONS

As previously stated in the original variance, the Board finds that Frantz would incur an arbitrary or unreasonable hardship if required to comply immediately with the regulations in question. This finding, in combination with the limited duration of the requested extension, the presence of a commitment to comply, and the minimal environmental impact expected during the variance extension, persuade the Board that the requested relief should be granted. The Board agrees with the Agency that because Frantz has no control over the actual construction of the sewer line, Frantz bears no direct responsibility for the delay in compliance. The Board will therefore grant Frantz a variance from Sections 304.120(a) and 304.124(a), subject to conditions.

As noted above, the Agency recommends that the interim effluent limits be tightened to more accurately reflect the level of treatment being provided. As the Board noted in its opinion and order granting the original variance, establishing interim limitations is difficult because there is not a great deal of effluent data presented. The Board agrees with the Agency that the monthly averages of Frantz's effluent in June 1987 through November 1987, as reported by the Agency, are well below the interim limits imposed in the original variance. However, the latest monthly average for BOD is 125 mg/l, well above the Agency's suggested BOD monthly average of 75 mg/l. Given the fact that the variance is extended only until September 1, 1988, and in view of the limited data, the Board will impose the interim limits of the original variance, as suggested by

Frantz. Of course, the Board encourages Frantz to keep its BOD and oils discharges at the lowest possible level.

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

ORDER

Frantz Manufacturing Company (Frantz), Bearing Division, is hereby granted variance from 35 Ill. Adm. Code 304.120(a) (as it relates to BOD) and 304.124(a) (as it relates to oils) for the discharges from the plating operations at its Sterling, Illinois facility, subject to the following conditions:

1. The variance shall expire on September 1, 1988 or upon connection to the City of Sterling's sewer system, whichever occurs first.
2. During the variance period Frantz shall meet the following interim effluent limitations:

	<u>BOD (mg/l)</u>	<u>Oils (mg/l)</u>
Daily Maximum	260	100
Monthly Average	165	65

3. Frantz shall perform all actions necessary to complete its connection to the City of Sterling Wastewater system, and shall report to the Agency on July 1, 1988, regarding the status of the project. Frantz shall also report to the Agency upon the completion of the project.
4. Frantz shall make timely application to the Agency for any necessary permits, including but not limited to construction and pre-treatment permits.
5. Within 45 days after the date of this Opinion and Order Frantz shall execute and send to:

Illinois Environmental Protection Agency
Attention: James Frost
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, Illinois 62706

a certificate of acceptance of this variance by which it agrees to be bound by the terms and conditions contained herein. This variance will be void if Frantz fails to execute and forward the certificate within the 45 day period. The 45 day period shall be held in abeyance for

any period during which the matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

I, (We), _____, having read the Opinion and Order of the Illinois Pollution Control Board, in PCB 87-157, dated February 25, 1988, understand and accept the said Opinion and Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

By: Authorized Agent

Title

Date

- 6. Section 41 of the Environmental Protection Act (Ill. Rev. Stat. 1985, ch. 111^{1/2} par. 1041) provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 25th day of February, 1988, by a vote of 7-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board