

ILLINOIS POLLUTION CONTROL BOARD
April 24, 1975

BIRD AND SON, INC.,)
)
 Petitioner,)
)
 v.) PCB 75-4
)
 ENVIRONMENTAL PROTECTION AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by Mr. Zeitlin)

This case, a Petition for Variance from the requirements of Rule 702(a), Mercury, of the Water Pollution Control Regulations, was filed with the Pollution Control Board (Board) on January 3, 1975; an Amended Petition was filed on February 6, 1975. The Recommendation of the Environmental Protection Agency (Agency) was filed on February 6, 1975, and an Amended Recommendation was filed on March 13, 1975. No hearing was held.

Petitioner is a manufacturer of roofing felt, and operates a felt mill at 2648 E. 126th St., in an industrial area of Chicago. It uses as its raw materials substances which would ordinarily be considered waste products. These recycled materials are mostly of wood and paper composition. The quantities involved are as follows:

Mixed Paper	40 tons
Corrugated Paper	25 tons
Wood Chips	38 tons
Wood flow (sawdust)	17 tons

(all quantities are shown on a daily basis) (Pet. 5)

These materials are carried through the manufacturing process by a continuous flow of water. The paper and wood are processed through various devices, including a hydropulper, to reduce them to the component fibers, and are then pressed into felt paper on a rotating screen. Approximately 110 tons of roofing felt are produced daily at the mill, which operates on a four-shift, twenty-four hour basis, employing 65 persons in the process.

Petitioner uses approximately 225,000 gpd of fresh water, 65% of which is taken from the Little Calumet River, and 35% of which is received from the Chicago municipal water supply (Am. Pet. 1). This water is recycled through the manufacturing process about 1000 times before it is discharged. The discharged water is screened to reduce fiber content, and the overflow from the screening tank is discharged into a sewer of the Metropolitan Sanitary District of Greater Chicago (Sanitary District). No water is returned to the Little Calumet River (Pet. 5 & 6).

Rule 702(a) of Chapter 3: Water Pollution, of the Board's Rules and Regulations, allows a concentration of .0005 mg/l of mercury (Hg) for any effluent to a public sewer system. The concentration of Hg in Petitioner's effluent has varied from .001 to .002 mg/l for composite samples and from .009 to .0038 mg/l for grab samples (Ag. Rec. 3). Petitioner alleges that the mercury content of its effluent originates in its raw materials, which are recycled waste products. Petitioner states that its own operations, discounting the mercury originating in the recycled raw materials, contribute less than 0.00002 mg/l Hg to the total mercury content of that effluent.

The sewer to which the plant discharges is tributary to Sanitary District's Calumet Sewage Treatment Plant. In 1974, the average influent concentration to this treatment plant was .00033 mg/l Hg, while the effluent contained an average of .00023 mg/l Hg, well below the .0005 mg/l levels set by the Board. Petitioner contributes less than .33% of the total Calumet Plant mercury influent. The total yearly discharge from Petitioner's plant is about 1.2 lbs (Ag. Rec. 3).

Petitioner alleges that it knows of no way to come into compliance with Rule 702(a) except to reduce the recycling of the water used, thus increasing the amount of water used and the dilution of its effluent, but not reducing the total amount of mercury discharged (Pet. 10, 11).

Noting the fact that Petitioner is using recycled products, that its discharge is a small fraction of the total mercury influent to the Calumet Plant, and that the Calumet Plant is not discharging mercury in excess of standards, the Agency recommends granting a variance for a one year period. In neither its original Recommendation nor the Amended Recommendation filed later did the Agency claim that a technologically feasible abatement method for reducing the mercury content of Petitioner's effluent presently exists. (Nor, it should be noted, did the Agency state that a feasible method does not exist.) The Agency instead cited earlier cases where the Board has dealt with problems of mercury effluent and where the Board ordered the Petitioners to undertake a program of research and development on the subject of mercury compliance.

Based on these factors, the Board must assume that the Agency does not dispute the claim of Petitioner Bird & Son that no such method is presently technologically feasible. Weighing this apparent determination by the Agency, with Petitioner's laudable use of re-cycled materials in its manufacturing, the Board will concur with the Agency's Recommendation and grant the variance requested for a period of one year.

The Board has in fact held, in the absence of a presently feasible technology, that a program of continuing research and development was a viable alternative to a compliance program. Union Oil Co. v. EPA, PCB 72-447, 10 PCB 217,224 (1973) (cyanide); Sherwin Williams v. EPA, PCB 71-111 3 PCB 37 (1971). Therefore, the Board will require Petitioner to study and develop a program regarding mercury abatement, including a closer examination of present raw materials and alternative sources of recycled materials with lower mercury content. cf, Nyco Products v. EPA, PCB 74-414, Feb. 6, 1975, and cases cited.

It must also be noted that in its variance Petition Bird & Son has raised several other issues, some of which are not properly part of a variance petition, and some of which are explicitly not decided by the Board in this matter. Petitioner has claimed that portions of the Board's Water Pollution Regulations, as applicable here, are unconstitutional or contrary to the General Assembly's mandate to the Board in the Environmental Protection Act. These allegations we summarily dismiss. Armstrong Chemcon, v. Pollution Control Board, 18 Ill. App. 3d 753, 310 N.E. 2d 648 (1974). Petitioner has also claimed that Rule 702 is inherently arbitrary and unreasonable insofar as it fails to distinguish between the various chemical forms in which mercury can be found; this would be more properly raised in a proposed regulatory amendment procedure. The Board specifically refuses to make a part of its finding in this matter Petitioner's contention that no effluent treatment method exists which would achieve compliance with Rule 702; the Board's decision here is limited narrowly to the facts and pleadings before it, and cannot be read as applying to problems of mercury discharges in general.

ORDER

IT IS THE ORDER of the Board that Petitioner Bird & Son be granted a Variance from Rule 702(a) of Chapter 3 for a period of one year from the date of this Order, subject to the following conditions:

a) Petitioner's discharge of mercury to the Metropolitan Sanitary District of Greater Chicago shall not exceed a concentration greater than .0038 mg/l at any time, or a total discharge of more than 1.2 lbs. of mercury per year.

b) Petitioner shall submit, within 90 days of the effective date of this Order, a proposed mercury abatement study program for the purpose of bringing its discharge into compliance with the standards set forth in Chapter 3 of the Board's Regulations. This program shall then be pursued during the remainder of the Variance period with progress reports made to the Agency on the first day of the sixth, ninth, and twelfth months of the Variance period. All reports shall be submitted to:

Illinois Environmental Protection Agency
Variance Section
2200 Churchill Road
Springfield, Illinois 62706

c) Within 35 days of the adoption of this Order, Petitioner Bird and Son, Inc., shall execute and forward to the Agency, a certification of acceptance in the following form:

CERTIFICATION

I (We) _____,
having read and fully understood the Order
of the Illinois Pollution Control Board in
PCB 75-4, hereby accept said Order and the
Variance granted thereby, understanding that
such acceptance is irrevocable and renders
binding all terms and conditions thereof.

Signed _____
Title _____
Date _____

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 24th day of April, 1975 by a vote of 4 to 0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board