

ILLINOIS POLLUTION CONTROL BOARD  
July 8, 1976

BIRD & SON, INC., )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 76-116  
 )  
 ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 Respondent. )

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

This matter is before the Board on a Petition for Variance filed by Petitioner Bird & Son, Inc., on April 26, 1976. A Recommendation from the Environmental Protection Agency (Agency) was filed on June 4, 1976. No hearing was held in this matter.

Bird & Son again seeks relief from the 0.0005 mg/l (0.5 ppb) limitation on mercury discharges to sewers in Rule 702(a) of Chapter 3: Water Pollution, of the Board's Rules and Regulations. Such relief was previously granted in Bird & Son, Inc. v. EPA, PCB 75-4, 16 PCB 463 (1975), subject to certain conditions. Bird & Son claims here that the factors which led to the grant of a Variance in PCB 75-4 are still present, and again justify such a grant. Bird & Son also now asks that a Variance be granted either permanently or for a longer period of time than previously granted, and that the conditions to such a grant be eased.

Bird & Son operates a factory in an industrial area on the south side of Chicago where various paper and wood wastes are recycled for the production of roofing felt. Operations at that plant remain essentially the same as described in PCB 75-4, supra, except as noted:

1. Water usage has been reduced to 115,000 gallons per day, of which 25,000 gallons are evaporated as steam and 90,000 gallons are discharged through sewers to the Metropolitan Sanitary District of Greater Chicago's Calumet Sewage Treatment Works;
2. A coal-fired boiler has been converted to oil. Cf., Bird & Son, Inc. v. EPA, PCB 75-166 (Nov. 13, 1975).

As was the case in PCB 75-4, Bird & Son's effluent to sewers consistently exceeds the 0.0005 mg/l standard for mercury discharges to sewers. Data in the Agency's Recommendation shows Bird & Son discharging an average flow of .09 million gallons per day to sewers, with mercury concentrations ranging from 0.0019 to 0.0036 mg/l.

These levels are within the 0.0038 mg/l standard set as a condition to Variance grant in PCB 75-4. In addition, the data contained in the Agency's Recommendation indicates that these sewer discharges do not cause a violation of the 0.0005 mg/l standard in the Calumet sewage treatment plant's discharge to waters of the state.

Our order in PCB 75-4 also required that Bird & Son undertake, and report to the Agency, on a study program for the elimination of mercury from its effluent. Although the studies initiated by Bird & Son covered the mercury concentrations in alternate sources of raw materials, various mercury removal methods, and the effects of other water purification concepts on mercury removal, none have been successful. Bird & Son does note, however, that it is still pursuing the matter by investigating two unproven mercury removal methods.

Based on its lack of success, Bird & Son asks that it be relieved of the burden of pursuing such expensive studies.

We find that Bird & Son has once again shown that a Variance is warranted for its operations. Its use of recycled materials causes a problem which present technology is apparently unable to solve. In addition, no environmental harm has been shown.

We shall, however, require that Petitioner continue to investigate means of removing the mercury from its effluent. Although this need not take the form of the "concentrated" study which Bird & Son engaged in over the last year, we shall require that it continue to investigate the two unnamed methods noted above, and that it continue to actively keep abreast of current literature on the subject. We shall require that Bird & Son report to the Agency on its success with the two untried mercury removal methods, and that it report to the Agency whether its monitoring of research by others reveals any processes or removal methods worth further investigation. Should either of the two aforementioned, untried mercury removal methods prove adequate for Bird & Son's needs or, if any other process or method is found which will allow compliance with the applicable standard, Bird & Son will be required to implement such methods within one year.

As a final condition to the grant of this Variance, we shall recommend -- in keeping with Bird & Son's argument that the present mercury sewer discharge standards are unreasonable -- that Bird & Son participate in any regulatory proceeding before this Board with regard to that general standard. Such participation should include a presentation of Petitioner's experience and research efforts under this and the preceding Variance.

Because the facts before us here do not indicate that any promising technology or other mechanism for mercury removal applicable to Petitioner's problems is about to appear, we shall grant a Variance for a two-year period. Because of the inherent dangers of mercury, we do not feel that any longer period can be justified.

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

ORDER

IT IS THE ORDER OF THE POLLUTION CONTROL BOARD that Petitioner BIRD & SON, INC. be granted a Variance from Rule 702(a) of Chapter 3: Water Pollution, for a period of two years, from April 24, 1976 until April 24, 1978, subject to the following conditions:

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

b. Petitioner shall submit to the Environmental Protection Agency, within 180 days of the date of this Order, a report of the efficacy of the two mercury removal methods detailed in its Petition in this matter.

c. Petitioner shall, by the end of each of the two years encompassed in the above granted Variance, submit to the Environmental Protection Agency a report detailing its analysis of the literature on the subject of mercury removal, noting any technology or methods which are promising with regard to Petitioner's effluent; such reports and those required under paragraph (b) of this Order, above, shall be submitted to:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
Variance Section  
2200 Churchill Road  
Springfield, Illinois 62706

d. Should any technologically feasible and economically reasonable method for the removal of mercury from Petitioner's effluents be found, either by Petitioner or any one else, Petitioner shall, within ninety (90) days of receiving notice thereof, submit to the Environmental Protection Agency a plan to implement such method within one year of receiving such notice, and shall thereafter comply fully with such plan.

e. Petitioner shall, within thirty (35) days of the date of this Order, execute and forward to the Environmental Protection Agency, Control Program Coordinator, 2200 Churchill Road, Springfield, Illinois 62706, a certificate of acceptance in the following form:

I, (We), \_\_\_\_\_, having read the Order of the Illinois Pollution Control Board in case No. PCB 76-116, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
SIGNED

\_\_\_\_\_  
TITLE

\_\_\_\_\_  
DATE

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 8<sup>th</sup> day of July, 1976, by a vote of 5-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board