

ILLINOIS POLLUTION CONTROL BOARD  
April 29, 1982

BEKER INDUSTRIES CORPORATION, )  
 )  
 ) Petitioner, )  
 )  
 ) v. ) PCB 80-224  
 )  
 ) ILLINOIS ENVIRONMENTAL PROTECTION )  
 ) AGENCY, )  
 )  
 ) Respondent. )

OPINION AND ORDER OF THE BOARD (by I. Goodman):

This matter comes before the Board upon a Petition for Variance filed on December 9, 1980 by Beker Industries Corp. (Beker) which requested a variance from certain conditions imposed in a prior Board Order in PCB 79-9 (Beker Industries Corp. v. IEPA, 35 PCB 389, September 20, 1979) and asked for relief from the compliance schedule imposed as a special condition to its NPDES Permit No. IL0036463. Beker seeks relief from the requirement that it neutralize its cooling pond with lime and institute a program of managed discharge of the contents of the cooling pond, by proposing the alternative of defluorinating its phosphoric acid. Similarly, in lieu of constructing a wastewater treatment plant for boiler blowdown and softener regenerate, Beker proposes to route boiler blowdown and softener regenerate to its cooling pond. This change is sought because "Beker now has the opportunity to put a portion of its idle phosphoric acid plant to use in defluorinating the phosphoric acid that is used to produce dicalcium phosphate." (Pet. 4; Rec. 2).

On December 11, 1980, the Illinois Environmental Protection Agency (Agency) filed an Objection and Request for Hearing. On December 18, 1980, the Board entered an Order requesting more information from the Petitioner. On May 21, 1981, the Agency filed a Recommendation which recommended that the Board grant the Petitioner's variance, subject to various conditions. On July 30, 1981, Beker filed its Response to the Agency Recommendation. On February 8, 1982, the Agency filed an Amended Recommendation which altered several of the previously recommended conditions. No hearing has been held in this matter and no public comments have been received.

The Petitioner owns and operates a chemical manufacturing plant in Marseilles, Illinois which is bounded, on the south, by the Illinois River, and, on the east, by Kickapoo Creek. The plant, which formerly manufactured sulfuric acid, phosphoric acid, and diammonium phosphate (DAP), currently utilizes molten sulfur to produce 175,000 tons of sulfuric acid per year and uses lime slurry and phosphoric acid to annually produce 39,000 tons of dicalcium phosphate, an animal feed supplement. (Pet. 7-8). Beker's plant: (1) employs about 40 permanent workers, with an annual payroll of over \$1,000,000; (2) employs about 40 seasonal workers, with a yearly payroll of about \$230,000; (3) purchases about \$150,000 worth of services from Illinois independent contractors; and (4) produces over \$15,000,000 worth of chemical products every year. (Pet. 8).

Beker ceased production of DAP in 1976. However, as a byproduct of the prior DAP production, a 50 foot high pile of calcium sulfate (i.e., gypsum) sludge, covering 80 acres, was created, and is now stored, on the plant site. Berms and ditches have been placed around the gypsum pile to collect seepage, but the ditch system is not totally effective in eliminating potential environmental injury from minor seepage which may include cooling pond water pumped onto the gypsum pile for the purpose of additional evaporation. (Rec. 3-4).

The previous production of DAP also required a 35 acre phosphoric acid cooling water pond which discharged flows to the Illinois River via an inlet and adjacent outlet point (outfall 002a). However, the only sources of water now entering this cooling pond are direct rainfall, surface runoff, and runoff from the gypsum pile. Effluent from the sulfuric acid plant boiler blowdown (Outfall 004a); water treatment plant waste (Outfall 004b); and boiler blowdown (Outfall 002b) must meet specified effluent limitations for total suspended solids, total dissolved solids, iron (total), copper (total), pH, and temperature. (Rec. 5-8; Appendix A & B of Rec.).

The Petitioner's phosphoric acid plant, which was shut down in 1976, remains closed. However, it is anticipated that the defluorination of phosphoric acid brought in from Beker's Louisiana plant may allow part of the phosphoric acid facility in Marseilles to be used again. (Pet. 7-8). Because the defluorination process results in recycling of cooling water, the Petitioner believes that neutralization of the cooling pond would be a totally unnecessary, wasted step causing arbitrary and unreasonable hardship. (Rec. 9-10).

The Agency's reservations pertaining to Beker's computer analysis of the cooling water pond level indicated that a contingency plan was necessary to assure that none of the overflows from the cooling water pond will enter the Illinois River.

In its Amended Recommendation, the Agency incorporated this contingency plan in the proposed conditions of the variance and noted that the Marseilles facility is currently operating only on a limited basis. (Am. Rec. 2-11).

The Agency has recommended that the Board grant the requested variance, subject to specified conditions. The Board, however, is concerned about possible seepage from the pond, especially after the addition of hot acidic effluent from the barometric condensers of the defluorination facility. The Board will therefore add a proviso that the defluorination facility not be activated until the monitoring wells are completed and the Agency is satisfied that there is no imminent danger to the environment that might require emergency corrective procedures.

The Board finds that denial of the variance would impose an arbitrary or unreasonable hardship upon Petitioner. Accordingly, the Board will grant the requested variance, subject to the conditions which are delineated in the Board's Order.

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

#### ORDER

1. The Petitioner, Beker Industries Corporation, is hereby granted a variance until April 15, 1985 from paragraphs 2(A), 2(B), and 5(C) of the Board's Order in PCB 79-9 (Beker Industries Corp v. IEPA, 35 PCB 389, September 20, 1979), subject to the following conditions:
  - a. This variance will expire should Petitioner permanently close its Marseilles facility, and the Board's Order in PCB 79-9 will again be in effect to the extent applicable to the shutdown facility. This facility will be considered permanently closed if operations do not recommence within one year of the date of the Board's Order regarding the instant variance request.
  - b. Petitioner shall comply with the contingency plan to prevent pond overflows into the Illinois River, as outlined in paragraphs b. through i. of the Amended Recommendation, filed February 8, 1982, which is incorporated by reference as if fully set forth herein, except that in no case shall the defluorination facility be activated until after the monitoring test wells in paragraph (g) are completed and the Agency is satisfied that the pond seepage does not constitute an imminent danger to the environment.

- c. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Enforcement Programs, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

CERTIFICATION

I, (We), \_\_\_\_\_ having read the Order of the Illinois Pollution Control Board in PCB 80-224, dated \_\_\_\_\_, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

\_\_\_\_\_  
Petitioner

\_\_\_\_\_  
By: Authorized Agent

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

- 2. The Board shall retain jurisdiction in this matter.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 29<sup>th</sup> day of April, 1982 by a vote of 5-0.

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