

ILLINOIS POLLUTION CONTROL BOARD  
August 18, 1977

CPC INTERNATIONAL, INC., )  
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 )  
 Petitioner, )  
 )  
 v. ) PCB 77-149  
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 ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 )  
 Respondent. )

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

On June 3, 1977, Petitioner CPC International, Inc. (CPC) filed a petition before the Board requesting variance from Rule 404 of the Water Regulations (Chapter 3) until November 1, 1979, for the cooling water discharge at its Pekin, Illinois plant. The Environmental Protection Agency filed its Recommendation on July 5, 1977. No hearing has been held in this matter.

CPC owns and operates a wet corn milling plant which discharges to the Illinois River. The dilution ratio is approximately 95:1. The plant uses approximately 20 million gallons of water per day for process cooling. CPC's petition indicates that since 1966 the company has undertaken a program of in-plant changes to reduce BOD in the Pekin plant cooling water, which have resulted in a substantial improvement in BOD cooling water discharges. These changes are outlined in the variance petition.

CPC has now determined that the source of over half of the long-term average BOD cooling water discharge is corn sweetener refinery evaporators. CPC has recently installed entrainment separators, but apparently the failure of the entrainment separators to completely scrub the vapor stream causes the violation of the Rule 404(b)(ii) BOD standard. The Agency indicates that the efficiency of such devices is frequently not readily predictable. CPC has also retained consultants to conduct a detailed study of the cooling water sewers, to measure flow rates in the various branches and to determine if there are any major losses from sources other than evaporators which have not been detected. Because of the age of the plant, which was built in the 1890's, in some cases the precise locations and configurations of the sewers are unknown. The study was due to be completed by June 17, 1977.

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CPC now intends to undertake a major equipment replacement program to achieve compliance, replacing the corn sweetener refinery barometric condensers serving the evaporators with surface condensers. CPC also intends to undertake certain evaporator modifications and replacement of a cooling water pump. The cost of condenser conversion alone, excluding the other modifications, is estimated to be about four million dollars. CPC included a completion schedule with its petition, which indicates that completion is expected by November 1, 1979. The Agency agrees that the proposed schedule is reasonable in light of the complexities involved.

In 1976 and for the first four months of 1977, the average BOD discharge from the Pekin plant was 32 mg/l. CPC's cooling water flow is only approximately 1% of the river's 10 year low flow of 1938.8 MGD. Under normal river conditions, the percentage contribution is, of course, much less. CPC therefore alleges, and the Agency agrees, that any adverse environmental impact resulting from the grant of this variance would be minimal.

The Board finds that, based upon CPC's diligence in constructing water pollution abatement facilities and the minimal adverse environmental impact caused by the temporary continuance of this discharge, an arbitrary and unreasonable hardship would be created by denial of this variance. The Board hereby grants CPC variance from Rule 404(b)(ii) as it relates to BOD until November 1, 1979, subject to the conditions detailed below.

The Board notes that the Agency recommends that the Board order CPC to meet the applicable Best Practicable Treatment (BPT) limitations determined under federal law. However, as we noted in City of Quincy v. EPA, PCB 77-102, the U.S. EPA is the appropriate Agency to determine and enforce BPT limitations. This variance is granted to the extent consistent with applicable federal law as determined by the U.S. EPA.

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 CPC International, Inc. be granted variance from the BOD effluent standard of Rule 404(b)(ii) of Chapter 3 until November 1, 1979,

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subject to the following conditions:

1. CPC shall adhere to the schedule of compliance for its Sugar Refinery Cooling Water Revisions as outlined in Exhibit A to the Petition for Variance, which Exhibit as incorporated by reference as if fully set forth herein.

2. CPC shall, beginning January 1, 1978, report quarterly to the Agency and to the Board its progress in achieving compliance for this discharge.

IT IS SO ORDERED.

Mr. Dumelle concurs.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board hereby certify the above Opinion and Order were adopted on the 18<sup>th</sup> day of August, 1977 by a vote of 5-0.

  
Christan L. Moffett, Clerk  
Illinois Pollution Control Board

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