## ILLINOIS POLLUTION CONTROL BOARD May 20, 1976

OLD BEN COAL COMPANY,	)		
Petitioner,	)		
V.	)	PCB	76-61
ENVIRONMENTAL PROTECTION AGENCY,	)		
Respondent.	)		

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

This matter comes before the Board on the variance petition of Old Ben Coal Company filed March 2, 1976 seeking relief from Rules 203(c), 402 and 404(f) of Chapter 3: Water Pollution Rules and Regulations, as applied to phosphorus. An Agency Recommendation was filed with the Board on April 21, 1976. No hearing was held in this matter.

Petitioner is engaged in the mining and processing of bituminous coal in Franklin County. Petitioner is building a wash house for its men and plans to construct an extended aeration type package sewage treatment plant, with tertiary filtration and chlorination to treat the wastewater from the wash house. Since this will be a new facility, there is presently no flow but the average design flow is estimated to be 7000 gpd which will contain an effluent phosphorus concentration of 0.5 mg/l - 2.0 mg/l.

Rule 203(c) sets a standard of 0.05 mg/l for phosphorus as P in any reservoir or lake, or in any stream at the point where it enters any reservoir or lake. Petitioner's effluent will discharge to an unnamed ditch which is tributary to Sanduskey Creek, which is tributary to Rend Lake. Since the streams have a seven day, ten year low flow value of zero, the effluent must contain less than 0.05 mg/l phosphorus. Petitioner alleges there is no economically feasible method of reducing their P concentration to this level, and therefore requests this variance permitting an effluent phosphorus concentration of 2.0 mg/l. While Petitioner did consider the possibility of land application as well as pumping the effluent to another watershed, these alternatives were discarded, however, because the Petitioner found they were not cost effective.

Based upon the National Eutrophication Survey's Report on Rend Lake the annual total phosphorus loading to Rend Lake is 164,090 pounds per year. Assuming that Petitioner's effluent contains 2 mg/l P, at the 7000 gpd flow rate the phosphorus loading to Rend Lake from Petitioner's facility would be approximately 40 pounds per year, which represents only 0.015% of the yearly phosphorus loading.

On January 5, 1976, the Agency filed a Petition for Regulatory Change (R76-1) with the Board which would amend the Regulation by requiring only point sources which have 1500 or more population equivalent to treat wastewater to a level not to exceed 1 mg/l prior to discharge. As justification for this proposal the Agency submits that eutrophication studies by both the United States Environmental Protection Agency and the Illinois State Water Survey show that the contribution of point source dischargers to the total phosphorus problem of lakes and reservoirs is small compared to the non-point source contribution. The Agency submits that non-point sources, such as run-off waters from farm lands fertilized with phosphate base fertilizers, account for the overwhelming majority of the phosphorus loading of most lakes and reservoirs.

In light of these studies and the exceedingly small contribution that Petitioner's discharge will make to the Rend Lake phosphate problem, the Board finds that the Petitioner is entitled to a variance. Petitioner also seeks a variance from Rules 402 and 404(f). Rule 402 provides, as does Rule 404(f)(ii)(A), that no effluent shall alone or in combination with other sources cause a violation of any applicable water quality standard. Rule 404(f)(ii)(D) requires in part that the operator file a project completion schedule for achieving compliance with applicable water quality standards (phosphorus). The Board finds that Petitioner is also entitled to variance from Rules 203(c), 402, 404(f)(ii)(A) and 404(f)(ii)(D) as those Rules concern phosphorus.

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

## ORDER

Old Ben Coal Company is granted a variance for the operation of the aforesaid treatment plant from the phosphorus limitations of Rules 203(c), 402, 404(f)(ii)(A) and 404(f)(ii)(D) of Chapter 3: Water Pollution Regulations until May 20, 1981, subject to the following conditions:

l. This variance will terminate upon adoption by the Board of any modification of the existing phosphorus water quality standards and effluent limitations and Old Ben Coal Company shall comply with such revised regulations when adopted by the Board.

- Petitioner's discharge shall not exceed 2 mg/l phosphorus.
- 3. Petitioner's discharge shall not exceed 7,000 gpd based on a 30 day average.
- 4. Within 35 days of the date of this Order, Petitioner shall submit to the Manager, Variance Section, Division of Water Pollution Control, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois, 62706, an executed Certification of Acceptance and agreement to be bound to all terms and conditions of the variance. The form of said certification shall be as follows:

CERTIFICATION			
the Order of the Illinois Pollution Control Board in PCB 76-61, understand and accept said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.			
SIGNED			
TITLE			
DATE			

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 20th day of \_\_\_\_\_\_\_, 1976 by a vote of 5-0

> Christan L. Moff Illinois Pollution