ILLINOIS POLLUTION CONTROL BOARD December 4, 1975

OLIN	CORPORATION, Petitioner,))	
	v.)) PC1	B 75-369
ENVIE	RONMENTAL PROTECTION Respondent.	AGENCY,))	

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

This matter comes before the Pollution Control Board (Board) upon Petition for Extension of Variance by Olin Corporation (Olin), for Zones 6 and 17 of its waste water treatment facilities from Rule 203(f), Part II, Chapter 3 of the Water Pollution Regulations of the State of Illinois. Olin was granted variance from the same Rule in PCB 73-484 (December 19, 1974).

Olin operates a manufacturing plant in East Alton, Illinois, which occupies an area of approximately 1732 acres. Approximately 5600 workers are employed at the East Alton location with an annual payroll of some \$65 million and with local purchases of approximately \$2 million for supplies and services. The East Alton area has been designated as a labor surplus area by the Federal Government, and Olin has, and applies, an approved plan to employ disadvantaged persons from this area.

Olin conducts a brass casting operation and manufactures copper, copper-base alloy slabs, and copper-alloy tubing at its Zone 17. At Zones 1 and 7, brass strip and fabricated products, metallic and shot shell ammunition are manufactured, and a steam generating plant and a potable water treatment plant are operated. At Zone 4, Olin manufactures shot shell ammunition and primer explosives.

Waste water discharges from Zones 1, 4 and 7 are treated by Olin's Zone 6 Waste Water Treatment Facilities, while Zone 17 Waste Water discharges are treated by Zone 17 facility. Both facilities employ a lime precipitation and polymer coagulation and flocculation process. After treatment the effluent from both facilities is either pumped or can flow by gravity to the east fork of Wood River. Sludge is dewatered by means of coil filters. Average discharge from Zone 6 treatment facility is 2.5 million gallons per day and from the Zone 17 facility, 0.7 million gallons per day.

Under Rules 203 and 404 of Chapter 3, Olin's effluent must meet a BOD of 4 mg/l, a suspended solids of 5 mg/l, and a copper concentration of 0.02 mg/l, because the dilution ratio of the receiving stream is less than 1 to 1. both treatment plants have improved on the design criteria as to BOD, suspended solids, and copper, the requirements of Rule 203 and 404 have not yet been met. The Illinois Environmental Protection Agency filed its recommendation on October 24, 1975, verifying the foregoing facts and further stating that no economically feasible method is presently available for Olin to consistently meet the 0.02 copper The Agency states that Olin has consistently made standard. good faith efforts to correct its copper problem and that its Waste Water Treatment Plants are being maintained and operated in the best possible manner. Indeed, the plants and are exceeding their original design criteria. Agency recommends that the variance be granted subject to certain conditions. No hearing was held in this matter and no citizen complaints are on file.

Although the stream is in a polluted state, Olin contends that extension of the variance would not impose any injury upon the public and offers, as proof, sampling by both the Agency and Olin which indicates that no degradation of Wood River has taken place as a result of said discharges. In addition, Wood River from Zone 6 discharge to its confluence with the Mississippi River is not used by the public for any beneficial purpose. Petitioner contends that the only practical method of achieving compliance with the 0.02 mg/l copper water quality standard would be to shut down or greatly diminish its East Alton plant operations imposing upon Olin, its employees, its suppliers, customers, stockholders, and the Madison County community an arbitrary and unreasonable hardship.

The Board rejects the notion that the denial of a variance would force Olin to shut down their operation. However it is clear that Olin has pursued their duties under the previous variance in good faith and that there is no reasonable method at the present time by which Olin can comply with the copper standard. The Board will, therefore, grant Olin's petition for a variance from Rule 203(f) upon the condition that their Waste Water Treatment Facilities do not exceed a 0.5 mg/l discharge of copper and that Petitioner continue to investigate new means of controlling its effluent discharge of copper, particularly the feasibility of using the starch xanthate method at such time as it becomes commercially available.

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 Olin corporation be granted variance from Rule 203(f) Part II of Chapter 3 of the Water Regulations for the discharge of copper from its Zone 6 and 17 wastewater treatment facilities until December 19, 1977, upon the following conditions:

- That Olin's discharge from Zones 6 and 17 wastewater treatment facilities not exceed 0.5 mg/l of copper on a daily average basis;
- That Olin continue to investigate additional means of controlling its effluent discharge of copper;
- That Olin submit quarterly progress reports to the Agency on its investigation;
- That Olin report to the Board and the Agency on the feasibility of using the starch xanthate method within 90 days after it becomes commercially available;
- That should a procedure to reduce copper become available prior to the end of this variance, Olin shall immediately submit a final compliance plan to the Board and the Agency, including a date specific for compliance.
- Within 30 days of the adoption of this Order the Petitioner shall execute and forward to both the Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706 and the Pollution Control Board, a Certification of Acceptance and agreement to be bound to all terms and conditions of this Order. The form of said certification shall be as follows:

CERTIFICATION

I (We),	having read and fully of the Illinois Pollution		
Control Board in PCB 75-	-369 hereby accept said Order all of the terms and conditions		
	Signed		
	Title		
Mr. Young abstained.	Date		
I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the, day of, 1975 by a vote of			

Christan L. Moffe Illinois Pollution

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