

ILLINOIS POLLUTION CONTROL BOARD
November 21, 1984

COLUMBIA TOOL STEEL COMPANY,)	
)	
Petitioner,)	
)	
v.)	PCB 84-144
)	
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

OPINION AND ORDER OF THE BOARD (by B. Forcade):

On September 17, 1984, Columbia Tool Steel Company ("Columbia") filed a petition for variance, for one year, from Board regulations establishing effluent limitations for Iron (35 Ill. Adm. Code 304.124) and effluent limitations in Columbia's NPDES permit implementing that regulation. On October 24, 1984, the Illinois Environmental Protection Agency ("Agency") filed a recommendation that variance be granted for one year, subject to certain conditions. No objections were received, no hearing was held.

Columbia owns and operates a steel fabrication facility in Chicago Heights, Illinois which employs approximately 115 individuals. The facility produces tool and die steels by melting, casting, forging and annealing carbon steel and steel alloys. In the past, Columbia used water from two sources, the City of Chicago Heights potable water supply and Columbia's own water well, for non-contact cooling purposes within the plant. The cooling water is discharged through Columbia's only outfall (numbered 005) to Columbia's storm sewer which discharges to Thorn Creek via the State Street storm sewer (Pet., ¶ 1-5).

Columbia asserts that it has been unable to consistently meet the 2.0 mg/l Iron discharge limitation of 35 Ill. Adm. Code 304.124 because of high background concentrations of Iron in Columbia's water supply. In December, 1983, Columbia switched all non-contact cooling water to its own well system which it felt was lower in Iron; however, this did not solve the problem. Analytical values for Iron from the two supply sources and Columbia's effluent are as follows (Pet. ¶ 6 & Ex. 1; Rec., p. 3):

Iron Values in mg/l

Date	Chicago Heights Public Water Supply	Columbia's Well	Columbia's Effluent 30 day Avg. Daily Max.	
3/13/80	12.7			
9/83			2.8	3.8
10/83	4.0	2.5		
10/83			3.2	5.0
11/83			2.15	3.3
12/83			0.8	1.9
1/84			1.7	2.3
2/84			2.4	4.1
3/84			2.93	4.7
4/84			3.7	8.2
5/84			2.02	2.5
6/84			2.2	3.8
7/84			0.74	1.0
7/3/84	11	19		240
7/5/84	5.1	1.8		1.3
7/6/84	6.7	28		0.12
7/9/84	3.7	1.8		.23
7/10/84	6.0	24		3.2
7/11/84	11	22		0.33
7/12/84	6.7	13		0.62
7/13	21	2.6		
7/16/84	8.0	2.7		
7/17/84	6.3	1.8		
7/18/84	7.2	1.5		
7/19/84	10	1.3		
7/20/84	12	1.1		
7/23/84	13	0.59		1.0
8/84			3.5	5.0

The nearest water quality monitoring station on Thorn Creek is about 8 stream miles downstream of Columbia. The 1982 data from that station shows water quality was above the 1.0 mg/l Iron standard in 5 out of 9 samples, with a high value of 6.5 mg/l (Rec., p. 3). The Agency believes other dischargers could contribute to these water quality violations, and it is not aware of any problems or complaints regarding high Iron levels in Thorn Creek, or any adverse effect on the aquatic community.

Since the high Iron levels come from the water supply Columbia has taken steps to reduce the amount of water discharged, hoping to reduce the problems. As of September, 1984, the only discharges from outfall 005 are from the rolling mill cooling water when the rolling mill operates. This amounts to about 30-40,000 gallons per day (Pet., ¶9). The only method for Columbia to ensure compliance with the discharge limitations would be to construct a treatment system for approximately \$100,000. Columbia asserts, and the Agency agrees, that this would impose an arbitrary and unreasonable hardship on Columbia, especially since it would be to treat only non-contact cooling water.

For its compliance plan, Columbia intends to conduct studies to demonstrate that Iron concentrations in excess of 2.0 mg/l result entirely from water supply contamination within the meaning of 35 Ill. Adm. Code 304.103, which would allow the Agency under Section 304.141(b) to increase the NPDES permit effluent limitation for Iron in Columbia's permit. This study and the demonstration to the Agency are expected to take one year.

The Board finds that immediate compliance with the 2.0 mg/l Iron effluent limitation would impose an arbitrary and unreasonable hardship on Columbia. Consequently, the Board will grant Columbia approximately a one-year variance with conditions requested by the Agency.

The Agency recommends a variance from the Iron water quality standards of Section 302.208. Based on the limited information in this record, the Board will deny that recommendation leaving the question open if any future and more concrete dispute should arise.

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

ORDER

The Columbia Tool Steel Company is hereby granted a variance from the Iron limitations of 35 Ill. Adm. Code 304.124(a) for its Chicago Heights facility (Outfall 005), subject to the following conditions:

1. This variance shall expire on December 31, 1985.
2. During the term of this variance, Columbia's effluent shall meet a daily maximum value for Iron of 10.0 mg/l.
3. Columbia shall continue to monitor and report Iron concentrations as stated in its NPDES permit.
4. By October 1, 1985, Columbia shall complete its report correlating well water Iron levels with effluent Iron levels and submit the report to the Agency by November 1, 1985.
5. Within 45 days of the date of this Order, Columbia Tool Steel Company shall execute a Certification of Acceptance and Agreement to be bound to all terms and conditions of this variance. Said Certification shall be submitted to the Agency at 2200 Churchill Road, Springfield, Illinois 62706. The 45-day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

CERTIFICATION

I, (We) _____, hereby accept and agree to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB 84-144, November 21, 1984.

Petitioner

Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 21st day of November, 1984 by a vote of 5-0.

Dorothy M. Gunn
Dorothy M. Gunn, Clerk
Illinois Pollution Control Board