ILLINOIS POLLUTION CONTROL BOARD
September 20, 1984

UNITED STATES CAN COMPANY,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 84-23
	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

OPINION AND ORDER OF THE BOARD (by W. J. Nega):

This matter comes before the Board on the petition for variance of the United States Can Company (U.S. Can) filed on February 24, 1984. The Petitioner has requested a variance until December 31, 1985 from the volatile organic compound (VOC) emission limitations of 35 Ill. Adm. Code 215.204(b) [(formerly Rule 204(n)(1)(B) of Chapter 2: Air Pollution Regulations)] in order to complete the development of a reformulated, low-VOC exterior varnish coating.

On March 8, 1984, the Board entered an Order requesting additional information on the levels of volatile organic compound emissions and on ozone ambient air quality. On March 30, 1984, the Petitioner filed an amended variance petition and supplemental information in response to the Board's Order. On April 5, 1984, the Board entered an Order which directed that the case be set for hearing. On May 25, 1984, the Illinois Environmental Protection Agency (Agency) filed its Recommendation which recommended that the Petitioner be granted a variance until December 31, 1985, subject to certain conditions. A hearing was held on July 12, 1984.

The United States Can Company owns and operates a multi-shift metal can manufacturing plant located at 1717 Gifford Road in Elgin, Illinois which employs 440 people and has an annual payroll of $14,300,000. (R. 13). The Petitioner's facility is located in the extreme southwest corner of Cook County in a sparsely populated area less than a mile from both the DuPage and the Kane County lines. The nearest residents are located about one mile to the east at a small trailer park. (Pet. Exh. 1, p. 2-3).

The United States Can Company is a new company created on December 1, 1983 through the purchase (via a leveraged buy-out

where all the Petitioner's assets were used to secure the needed financial capital) of three Sherwin-Williams Company metal container plants located in Elgin, Illinois; Hubbard, Ohio; and San Leandro, California. (R. 13-14). The Petitioner's Elgin facility is the largest and most important of the three container plants owned by the company. (R. 13).

No cans for the beer, beverage and food markets are produced at this Elgin plant. Instead, the Petitioner manufactures metal cans for the general line can market. The product line produced at the Elgin plant consists of steel quart and gallon oblong cans and nine sizes of aerosol cans. (Pet. 2, Rec. 2). All cans are three-piece cans which are made of steel. A separate body, top, and bottom are formed separately from sheets of steel and then are seamed together to make a can. Before being punched, slit, formed, and connected to make a can, the steel sheets are coated with interior and exterior finishes.

The Petitioner's lithography and coating department applies both interior and exterior coatings to the steel sheet before it is formed into cans. (Rec. 2). The lithography department utilizes three conventional (solvent-base) coaters and three ultra-violet (0% VOC) coaters. Only the three conventional (solvent-base) coaters are the subject of U.S. Can's requested variance. (Rec. 2). Although the company also applies end-sealing compounds, no variance is necessary for that operation since it is currently in compliance with applicable regulations. (Rec. 2).

Over forty different coatings which contain VOCs are used in the lithography department. Section 215, Appendix C (formerly Rule 205(j) of Chapter 2: Air Pollution Regulations) mandates that sources of VOC emissions generated by can coating operations must achieve compliance with Section 215.204(b) by December 31, 1982. Section 215.204(b) requires that VOC emissions from U.S. Can's surface coating operations be limited to 2.8 pounds per gallon (lbs./gal.).

In 1983, the Petitioner used a total of 101,700 gallons of exterior coatings and 19,165 gallons of interior linings. Thus, the company used a total of 120,865 gallons of coatings in 1983 which contained VOC (i.e., 101,700 gallons of exterior coatings plus 19,165 gallons of interior linings = 120,865 gallons of coatings).

According to the Agency's calculations, the resultant VOC emissions in 1983 were as follows:

Actual emissions:	521,173 lbs./yr.	=	260.6 tons/yr.
Allowable emissions:	402,198 lbs./yr.	=	201.1 tons/yr.
Excess emissions:	118,975 lbs./yr.	=	59.5 tons/yr.

At the time that U.S. Can bought the Elgin plant from the Sherwin-Williams Company on December 1, 1983, the facility was not in compliance with Section 215.204(b). (Rec. 3). However, the Petitioner has indicated that the Sherwin-Williams Company had been diligently attempting to develop reformulated, low-VOC coatings since July 1978; had tested over 140 different low solvent formulations, and had met with considerable (but not total) success. (Rec. 3). U.S. Can has continued this coating reformulation program since buying the plant from the Sherwin-Williams Company and estimates that $290,000 has been spent on this program to date. (Rec. 3).

The facility's present compliance program includes a three-step program for reformulation of exterior coatings to high solids. Step one is the reformulation of an exterior varnish to replace non-compliance varnishes. This step is virtually completed and will account for a reduction of 16 tons of VOC. Step two is the reformulation of the exterior varnish used for aerosol can tops and bottoms which is expected to be completed by December 31, 1984. This step will account for a reduction of 35 tons of VOC. Step three is the reformulation of exterior white coatings which is anticipated to be completed by December 31, 1985. This step will account for the reduction of 34 tons of VOC. (Rec. 3).

Thus, the present compliance program anticipates reformulation of the high volume coatings which would then allow compliance pursuant to the internal offset provisions contained in Section 215.207 (formerly Rule 205(n)(4) of Chapter 2: Air Pollution Regulations). Upon completion of its coating reformulation program, U.S. Can will be in compliance with Section 215.204(b) and VOC emissions from its Elgin plant are expected to be about 25 tons below allowable emission limits. (Rec. 4). The company has indicated that coating usage, in terms of gallons per year, is expected to be about the same in 1984 and 1985 as in 1983, but it is anticipated that the VOC emissions will be substantially reduced.

U.S. Can has investigated the possibility of using add-on control systems as an alternative if its reformulation compliance program is unsuccessful. However, such controls would cost over $555,000 (not including construction costs such as necessary roof work and superstructure construction which the facility could not supply) plus $50,000 in annual operating costs. Because the installation and operation costs of a thermal incineration system or a catalytic reactor system are so large, this alternative could only be considered as a last resort and might necessitate the selling of its Ohio and California plants (to finance the purchase of such controls), the closing of production lines for three weeks and concomitant loss of business, and might jeopardize the existence of the Elgin plant as a viable economic entity. (R. 13-14).

The Agency has indicated that the Petitioner has been engaged in good faith, diligent efforts to come into compliance with Section 215.204(b). As stated on page four of the Agency's Recommendation, "the Agency further believes that Petitioner's compliance program should achieve the necessary reductions within an expeditious time frame". The Agency has noted that it considers U.S. Can's reformulation program to be preferable to the installation of add-on controls. (Rec. 4). The controls necessary to properly reduce VOC emissions and achieve immediate compliance would consume vast amounts of sometimes scarce natural gas. Additionally, the provisions of Section 215.106 (formerly Rule 205(r) of Chapter 2: Air Pollution Regulations) would limit the operation of the controls to only seven months a year, so that annual VOC emissions are likely to be greater if controls are used to achieve compliance rather than the proposed coatings reformulation program. (Rec. 4). The Agency states that, upon completion of the Petitioner's compliance program, the Elgin plant will have fewer VOC emissions, on an annual basis, than if it had installed control equipment. The Board points out that, regarding only ozone caused health effects, it is not as important if VOC emissions are greater on an annual basis provided that they are reduced during the ozone season.

The company's facility is located in a sparsely populated, mixed industrial and rural area about one mile from the nearest residents. The Agency has never received a complaint from area residents pertaining to this Elgin plant. (Rec. 5).

The Petitioner's metal can manufacturing facility is located in an area which is classified as nonattainment for ozone and the closest ozone monitoring station is located about four miles to the northwest of the plant in Elgin, Illinois. Ozone levels in excess of the primary ambient air quality standard of 0.12 parts per million were not exceeded at that monitor during 1982. In 1983, the primary ambient air quality standard for ozone was exceeded twice during the year. (Rec. 5).

The Agency has indicated that it believes that a denial of the requested variance would constitute an arbitrary and unreasonable hardship because: (1) U.S. Can has been diligently seeking a means to reduce its VOC emissions; (2) the Agency has no reason to doubt that the company's continuing coating reformulation program will be equally as diligent; (3) U.S. Can's episode action plan provides sufficient safeguards during periods of high ozone concentration; (4) installation of afterburners may not be the most environmentally sound solution in the long run, and would be extremely expensive and wasteful of natural gas; (5) the facility was already out of compliance when U.S. Can bought the Elgin plant, and even though the previous owner was attempting to achieve compliance, the Petitioner should not be held accountable

for its predecessor's failure to seek a variance, and (6) when the Board initially adopted the VOC emission limitations in R80-5, it was realized that the regulations were "technology forcing" and it was anticipated that variances for some facilities would be needed. (Rec. 4-10).

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

The Board notes that, of course, nothing in this Order shall be construed to relieve the United States Can Company from its responsibility to pay noncompliance penalties that may be assessed under Section 120 of the Clean Air Act, 42 U.S.C., Section 7420.

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

ORDER

The Petitioner, the United States Can Company, is hereby granted a variance for its metal can manufacturing plant in Elgin, Illinois until December 31, 1985 from 35 Ill. Adm. Code 215.204(b), subject to the following conditions:

1. The Petitioner shall submit written reports to the Agency by October 24, 1984, and every third month thereafter, detailing all progress made in achieving compliance with Section 215.204(b). Said reports shall include information on the names of replacement coatings and the manufacturer's specifications including per cent solids by volume and weight, per cent VOC by volume and weight, per cent water by volume and weight, density of coating, and recommended operational parameters; detailed descriptions of each test conducted including test protocol, number of runs, and complete original test results; the quantities and VOC content of all coatings utilized during the reporting period; the quantity of VOC reduction during the reporting period; and any other pertinent information which may be requested by the Agency. The reports shall be sent to the following addresses:

Environmental Protection Agency
Division of Air Pollution Control
Control Programs Coordinator
2200 Churchill Road
Springfield, Illinois 62706

Environmental Protection Agency
Division of Air Pollution Control
Region 1, Field Operations Section
1701 South First Avenue
Suite 600
Maywood, Illinois 60153

2. The Petitioner shall apply to the Agency for any required operating permits by October 24, 1984 pursuant to Section 201.160(a).

3. On, or before, October 1, 1985, the Petitioner shall apply to the Agency for the renewal of all requisite operating permits pursuant to the internal offset provisions contained in Section 215.207.

4. During the pendency of this variance, the Petitioner shall adhere to its compliance program as specified in paragraph six of the Agency's Recommendation.

5. Within 45 days of the date of this Order, the Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Division of Air Pollution Control, Compliance Assurance Section, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This 45-day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows:

CERTIFICATE

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 84-23 dated September 20, 1984, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

_____
United States Can Company

_____
By: Authorized Agent

_____
Title

_____
Date

IT IS SO ORDERED.

Board Member B. Forcade concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 20th day of September, 1984 by a vote of 6-0.

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