ILLINOIS POLLUTION CONTROL BOARD
May 3, 1984

VAN LEER CONTAINERS, INC.,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 83-133
	)	
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
	)	
Respondent.	)	

MR. RICHARD SANDERS (VEDDER, PRICE, KAUFMAN & KAMMHOLZ) APPEARED ON BEHALF OF PETITIONERS.

MR. PETER ORLINSKY (ATTORNEY-AT-LAW) APPEARED ON BEHALF OF RESPONDENTS.

OPINION AND ORDER OF THE BOARD (By J. Theodore Meyer):

On September 14, 1983 then Petitioner, Inland Steel Container Company, filed a Petition for Variance for the existing coating operation at its steel drum manufacturing facility located at 4300 West 130th Street, Chicago, Cook County, Illinois. Therein, variance from then Rules 205(n)(1)(J), 205(j)(1) and 104(h)(1) of the Board's Chapter 2: Air Pollution was requested. That Chapter, since codified, is now contained in 35 Ill. Adm. Code: Chapter I, Subtitle B, and those particular rules are found in Part 215: Organic Material Emission Standards and Limitations at Sections 215.204(j): Emission Limits for Manufacturing Plants; Section 215.212: Compliance Dates and Geographic Areas; and Section 214.212: Compliance Plans. Inland Steel Container Company filed an Amended Petition on November 23, 1983. The Illinois Environmental Protection Agency (Agency) filed its Recommendation on January 11, 1984 and hearing was held on January 17, 1984. At hearing and before the Board, Inland Steel Container Company filed a Motion for Substitution of Petitioner due to the recent purchase of the facility by Van Leer Containers, Inc. (Van Leer) on December 30, 1983. The Board granted the motion on January 26, 1984 contingent upon the filing of a properly amended Petition identifying the current Petitioner, incorporating by reference those parts of the prior petitions still accurate and including any necessary changes of fact. Petitioner, Van Leer, filed a Second Amended Petition satisfying the Board's order on February 15, 1984.

Petitioner's facility, which employs approximately 400 persons, includes coating operations for both the exterior and

interior of metal pails, intermediate size containers, and drums. Petitioners' customers use the containers to package products which range from sensitive flavorings and oils to corrosive cleaners, paints, petroleum products, toxic pesticides, herbicides and aggressive chemical intermediates. The containers' interior coatings or linings are usually spray applied using clear coatings. Extreme performance coatings are applied to the exteriors either by spraying or by using multi-color flat lithography. With the adoption of Section 214.204(j), the interior (clear) coatings must contain no more than 4.3 pounds per gallon (lbs/gal) of volatile organic material (VOM), and the exterior coatings must contain no more than 3.5 lbs/gal of VOM. Of course, compliance may be instead achieved using control equipment pursuant to Section 215.205, or alternatively demonstrated using the internal offset provisions set out in Section 215.207 or the alternative control strategies rules found in Part 202. Pursuant to Sections 215.212 and 215.211, respectively, a compliance plan was to have been submitted to the Agency on August 19, 1983 and compliance achieved by December 31, 1983. It is not clear from the record whether a compliance plan was timely filed. Nevertheless, Van Leer alleges that it cannot comply at this time due to the unavailability of compliance coatings. Its predecessor, Inland Steel Container Company, considered alternatives to coating reformulation including stack incineration, carbon absorption, and electrostatic spray coating. They either proved to be too costly or technically unsuitable for the current operation. (Pet. p. 9). Therefore, Van Leer seeks variance from the three rules in order to continue producing industrial shipping containers.

The coatings currently used by Van Leer were formulated to comply with the general rule for VOM control, Section 215.301 [formerly Rule 205(f)]. They were developed at an increased cost of $54,000 to $80,000 per year, depending on volume (Pet. p. 7). The following table lists the total VOM emissions from Petitioner's facility using these coatings for the years 1978 through 1982, as compared to the emissions which would be allowable under Section 215.204(j).

Year	Actual Emissions	Allowable Emissions	Excess
	(IN TONS)		
1982	590	417	173
1981	715	485	230
1980	685	473	212
1979	855	600	255
1978	819	636	183

The Petitioner alleges in the Amended Petition that during 1982 approximately 158,125 gallons of exterior coating and 112,600

gallons of interior coating were used. The average VOM content of the interior coatings was 5.29 lbs/gal, producing emissions totalling 267 tons. The average VOM content of the exterior coatings for the same period was 4.56 lbs/gal, totaling 323 tons (Pet. p. 6). The Agency, in its Recommendation, calculated that the 1982 emissions were 229 tons and 357 tons, respectively. (Rec. at p. 3). This discrepancy, as well as a discrepancy in figures estimating allowable emissions, was discussed at hearing. Petitioner alleged that the Agency's calculations for the exterior coatings failed to take into account a 10 percent reduction in emissions due to internal combusion in the ovens. (R. 9-10). The Agency did not refute this at hearing. Petitioner agreed with the Agency calculations for interior coatings, admitting that an error had been made in solid gallon calculations for the interior coatings. (R. 11).

Internally, Petitioner's predecessor has attempted to formulate, in cooperation with resins suppliers, interior coatings within the compliance limit. These efforts, along with external attempts, have been unsuccessful to date because, according to Petitioner, the high molecular weight resins required to provide adequate storage life do not exist (Pet. p. 4.). The interior coatings must satisfy the variety of customer needs described above. In 1982 alone, Petitioner was required to apply 45 different lining materials on an even greater number of single, double and combination coat specifications. (Pet. p. 3, Ex. IV). After consultations with the United States Environmental Protection Agency on December 13, 1983 and various coating manufacturers, the Agency is in agreement with Petitioner that interior coatings within Section 215.204(j) compliance levels are not readily available. (Rec. pp. 4-5).

The problems encountered in developing interior linings satisfactory to the variety of customers' specifications are not as difficult with respect to developing exterior coatings. Over the last three years over 70 laboratory trials of high solid coatings have been conducted. Seven line trials have likewise been undertaken and the drum paint booth modified at a cost of $25,000 (Pet. p. 8, Ex. VI). Further modifications at that booth were anticipated by the end of 1983, bringing the cost to $36,000. Compliance coatings for the black and white exterior coatings, which constitute 62% of exterior spray paints, have been developed and were to be in use by December 31, 1983. (Pet. p. 8). By that date, Petitioner was to have eliminated a second pail shift, further reducing emissions. A second booth for drum parts has been purchased at the cost of $85,000. It is designed to reduce overspray and solvent emissions but actual reductions figures will not be known until it is put on on-line. (Pet. p. 8).

Petitioner's compliance plan is primarly premised on reducing the VOM content of the exterior coatings sufficiently below the Board's limitation so as to offset the excess attributable to the

interior coatings. In addition to the progress achieved by December, 31, 1983 Petitioner anticipates that by December, 31, 1984 it will have converted to 3.5 lbs/gal coatings for black, white and gray spray paints and will have reduced the clear varnish at its pail operations to 4.0 lbs/gal. By December 31, 1985, it anticipates that all colors of exterior coatings used will meet the 3.5 lbs/gal level. The remaining two years of the time requested are alleged necessary so that with the research begun now, it will be able to sufficiently reduce emissions through one or a combination of the following eight methods in order to be in compliance with both the exterior and interior coating limitations. Petitioner will explore 1) reducing all exterior spray paints to 3.0 lbs/gal; 2) converting the exterior pail coating operation to electrostatic spray; 3) developing a more efficient overspray collection system at all spray booths; 4) improving the oven's natural incineration; 5) developing lower solvent interior coatings, 6) eliminating final varnish passes by developing no varnish bases and inks resistant to fabrication abrasion; 7) improving spray gun transfer efficiency; and 8) changing to roller coating of pail body stock. (Pet. pp. 14-15).

The Agency agreed that the investigated alternative methods of compliance such as stack incineration and carbon absorption were not workable. It further stated that compliance could only be achieved, at this time, if afterburners were installed. Since afterburners consume natural gas and do not have to be operated during the non-ozone season, pursuant to Section 214.106, the Agency believed annual VOM emissions would be greater than if the paints are reformulated. However, the Agency argued that Petitioner should accelerate its comliance efforts. (Rec. p. 5).

At hearing, that possibility was probed. Petitioner explained that converting all exterior colored coatings to compliance levels would take until the end of 1985 due to the difficulties experienced in spraying two high solid coatings at one time. Further reducing exterior coatings to a 3.0 lbs/gal level, and interior coatings below the current level, as well as engineering the other reduction methods were anticipated to take longer than two years. (R. pp. 14-17). Petitioner, as a formulator and paint buyer, claimed dependancy on outside suppliers, and stated that since it is not a large consumer, it could not effectively accelerate their suppliers' efforts. (R. p. 18). Furthermore, Petitioner pointed out that because 50 percent of the containers produced have interior linings and 60 percent require exterior lithography, it has difficulty in quickly achieving compliance through the internal offset provisions or an alternative control strategy. (Pet. p. 5).

Petitioner claims that failure to receive variance would force it to curtail its operation at this facility. It would have to either produce and use coatings which would not satisfy customer's specifications or install control equipment at an

expense which would reduce its competitiveness. The Agency agreed with Petitioner's assessment of hardship and that there would be no adverse impact on human, plant or animal life in the vicinity of the facility since Petitioner will be required to comply with its Episode Action Plan. (Rec. pp. 6-7).

The Board finds that Petitioner has demonstrated that compliance at this time with Sections 215.204(j) and 215.212 would impose an arbitrary or unreasonable hardship. However, the Board is anxious that reductions in VOM emissions continue as quickly as possible. Therefore, the Board will order that Petitioner use coatings with no greater VOM concentrations than currently applied, and that it abide by the compliance schedule it described in its Petition. Furthermore, the Board shall only grant variance until the end of 1985. Petitioner will be required to submit such a compliance schedule and routinely report its progress to the Agency. In granting this variance, the Board assumes that the reductions attributed to the discontinuation of the second pail shift and conversion to 3.5 lbs/gal high solids black and white drum coatings were in fact achieved by December 31, 1983.

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

ORDER

Van Leer Containers, Inc., Petitioner, is hereby granted variance from Sections 212.204(j), 215.211 and 215.212 in accordance with the following conditions.

1) Prior to December 31, 1984 Petitioner shall not allow the average volatile organic material content of its exterior coatings to exceed 4.56 lbs/gal, or that of its interior coatings to exceed 5.29 lbs/gal.

2) After December 31, 1984, Petitioner shall use only coatings with volatile organic material contents of 3.5 lbs/gal or less when spray-applying black, white or gray exterior coatings.

3) After December 31, 1984 Petitioner shall use clear varnish coatings on pails with a volatile organic material content of 4.0 lbs/gal or less.

4) After December 31, 1985, Petitioner shall use exterior coatings with 3.5 lbs/gal volatile organic material content or less at all exterior spraying operations.

5) During the course of this variance, Petitioner shall expeditiously develop reformulated coatings with reduced volatile organic materials for both its exterior and interior

coating operations, and develop ancillary facilities and equipment to reduce volatile organic emissions from its coating operation.

6) Within 45 days of this Order, Petitioner shall execute a Certificate of acceptance and Agreement to be bound to all terms and conditions of this Variance. Said Certificate shall be submitted to both the Illinois Environmental Protection Agency at 2200 Churchill Road, Springfield, Ilinois 62706 and the Pollution Control Board at 309 W. Washington, Chicago, Illinois 60606. The 45 day period shall be held in abeyance during any period this matter may be appealed. The form of said Certificate shall be as follows:

CERTIFICATION

_____, hereby accepts and agrees to be bound by all terms and conditions of the Order of the Pollution Control Board in PCB #_____dated_____.

_____
Petitioner

By_____
Authorized Agent

_____
Title

_____
Date

7) By July 1, 1984 and every third month thereafter, Petitioner shall submit written reports to the Agency detailing all progress made in achieving compliance with Section 215.204(j). Said reports shall include information on the names of replacement coatings and the manufacturers specifications including per cent solids by volume and weight, per cent VOC by volume and weight, density of coating, and recommended operating parameters, detailed description 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; progress in developing ancillary facilities and equipment which reduce volatile organic material emissions; and any other 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, IL 62706

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

8) Within 28 days of the Board's Final Order herein, Petitioner shall apply to the Agency for all requisite operating permits pursuant to Section 201.160(a).

9) This Variance shall expire on December 21, 1985.

IT IS SO ORDERED.

B. Forcade concurred.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 3rd day of May, 1984 by a vote of 6-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board