ILLINOIS POLLUTION CONTROL BOARD
April 16, 1987

AMERICAN STEEL CONTAINER CO., PAIL SHOP,	)	
Petitioner,	)	
v.	)	PCB 86-22
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent,	)	
and	)	
AMERICAN STEEL CONTAINER CO., DRUM SHOP,	)	
Petitioner,	)	
v.	)	PCB 86-23
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

ERICA TINA HELFER APPEARED ON BEHALF OF PETITIONER; AND

LISA MORENO APPEARED ON BEHALF OF RESPONDENT.

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

On February 18, 1986, American Steel Container Co. (ASCC) filed two petitions for extensions until December 31, 1987 of prior variances from the volatile organic emissions limitations contained in 35 Ill. Adm. Code 215.204, 215.211 and 215.212. PCB 86-22 is a request for extension of the variance granted in PCB 83-115 for operations of the ASCC Pail Shop. PCB 86-23 is a request for extension of the variance granted in PCB 83-114 for operations of the ASCC Drum Shop. Amended petitions were filed in each action on April 15 and May 9, 1986.

On January 14, 1987, the Agency filed a Recommendation in each case that variance be denied. The Agency's opinion was that ASCC had failed to show satisfactory progress towards compliance

during the terms of the prior variances, had made a deficient showing concerning environmental impact of its excess emissions, and failed to produce satisfactory compliance plans demonstrating that compliance would be achieved by December 31, 1987.

Pursuant to Order of the Hearing Officer, these cases were consolidated for the purposes of testimony and hearing. A single hearing was held on January 20, 1987, at which no members of the public were present. Testimony was presented concerning both the ASCC Pail Shop and the ASCC Drum Shop by ASCC President Mark B. Spitz and by Harish Narayen, a member of the Agency's Field Operation Section. ASCC presented a new compliance plan which covers both its Pail Shop and its Drum Shop, which involves ducting of the emissions from the Drum Shop's spray booths and ovens to the existing drum incinerator and using what ASCC terms as the "bubble concept" or what is more properly the internal offset provision of 35 Ill. Adm. Code 215.207 to offset the emissions from the Pail Shop against the emission reductions to be achieved in the Drum Shop.

ASCC filed closing briefs in each action on February 24 and the Agency filed closing briefs on March 10, 1987. In each of its briefs the Agency stated that it continued to believe that variance should be denied, but that in light of the compliance plan presented at hearing, "the Agency does not maintain the same strong opposition to the variance extension that it held prior to the presentation of the compliance plan." (Briefs, p.2).

Prior to reaching the merits of this action, the Board will initially note that the Hearing Officer correctly stated that it was within his authority to consolidate these actions for the purpose of expeditiously conducting hearing, but that only the Board can consolidate them for decision. Based on the fact that the Drum Shop and the Pail Shop have contiguous locations and the inter-relationship of the proposed compliance plans, the two petitions were appropriately consolidated for hearing. Moreover, the Board finds that consolidation of these actions for decision is in the interests of administrative economy, and hereby so orders on its own motion.

THE ASCC FACILITY

ASCC is located at 4445 West Fifth Avenue, Chicago, Illinois. The area surrounding ASCC is primarily industrial with residential homes within a one or two block radius (R.6). ASCC has never received any complaints from any of its neighbors about emissions from its facility (R.7).

ASCC is a small privately held, family-owned company. The Pail Shop manufacturers new five-gallon steel pails. The Drum Shop manufacturers new fifty-five gallon steel drums and reconditions thirty and fifty-five gallon steel drums. ASCC's

customers use these steel containers for shipment of food, adhesives, paints, and specialty chemicals (R.7-8). ASCC president Mark Spitz has been employed at ASCC for 9 years and is involved in all aspects of ASCC's business from administration, manufacturing, sales and personnel to actual physical labor in the plant (R.8-9).

Pail Shop

The Pail Shop employs approximately twenty-five workers and shares approximately twenty clerical workers, supervisors, sales people, maintenance workers, and drivers with its drum shop located in the building to the west of it (R.7-13).

The average shift each day is from 7:00 a.m. until 3:00 p.m., five days a week, fifty-two weeks a year (R.14-15). The pail shop is presently running with excess capacity in that it has the capability of running a second shift if the business demanded it (R.15). The maximum capacity for the facility is six to seven thousand pails a day (R.15).

The pails manufactured by ASCC are all lined in some form, thirty to forty percent with a pigment lining and the remainder with a rust inhibitor (R.26,65). Each pail is manufactured with pre-purchased steel, cut into the size required by the customer's order, and run through a grinder, where the edges are ground to make the weld easier (R.19). The steel is then seamed by a welder and sent through a beater flanger, where the top edges are rolled down and hoops are formed around the pail to strengthen it (R.20). The pail is then inverted and the bottom is placed on and seamed by the welder to the side of the pail (R.20). Once this is done, the pail is turned upright, and sent to the air welder, where two ears are put onto the side walls (R.20). Then each pail is sent to a testing location where it is submerged in water and tested for leaks (R.20). If the pails do not contain leaks, they are sent to the internal spray booth where, depending upon customer requirements, the pail would be lined with either a rust inhibitor or a pigmented lining system (R.20). If lined, the pail would proceed through the curing oven before being sent on through the exterior spray booth, through the exterior curing oven, and to a station where the handles are put on the pails (R.20-21). Finally, the pails are palletized and loaded on trailers for shipment to ASCC's customer (R.21).

The pail shop has one interior and one exterior spray booth and one interior and one exterior curing oven (R.21). The paint spray system used is made by a company called Kraco (R.49).

All new pails are manufactured by customer order and specifications; ASCC does no warehousing or manufacture for inventory (R.30). In order to accomplish efficient production,

ASCC has attempted to maintain a minimum size of production of a thousand pail units (R.30).

ASCC must meet customer specifications for coating and lining with respect to mar resistance, chemical resistance and FDA approval, as well as whether the lining should be straight phenolic, modified phenolic, straight epoxy, modified epoxy, or clear epoxy (R.30-32,66-68). If ASCC did not satisfy these customer requirements, it could lose business as well as subjecting itself to product liability claims (R.31-33).

ASCC Drum Shop

The Drum Shop employs approximately fifty workers and, as noted above, shares approximately twenty clerical workers, supervisors, sales people, maintenance workers, and drivers with its pail shop located in the building to the east of it (R.7-13).

The drum shop runs two shifts each day, the first from 7:00 a.m. until 3:30 p.m. and the second from 3:30 p.m. to 8:30 p.m. five days a week, fifty-two weeks a year (R.14-15). The first shift runs reconditioned drums; the second shift runs reconditioned tight lead drums and new drums (R.14-15). The drum shop is presently running with excess capacity in that it has the capability of running a third shift if the business demanded it (R.15). The maximum capacity for the facility is sixteen to eighteen hundred drums a day (R.15).

The plant runs approximately 50% each of open head and tight head drums, thirty to forty percent of which are lined (R.5,62-63). Each new drum is manufactured with pre-purchased steel, which has been phosphatized at the mill so that unlined drums do not need an additional coating (R.62-63). The steel is cut into the size required by the customer's order, and run through a grinder, where the edges are ground to make the weld easier (R.61). The steel is then seamed by a welder on the sides and bottom (R.61). If the drum is to be lined with a pigmented lining system, it is sent to the internal spray booth where, depending upon customer requirements, the drum would be lined with some type of pigmented lining system (R.17-18). If lined, the drum would then proceed through the interior curing oven before being sent on to a testing location. Each drum, lined or unlined, is sent to a testing location where it is submerged in water and tested for leaks (R.17). If the drums do not contain leaks, they are then sent through the exterior spray booth, through the exterior curing oven, and, finally, the top is placed on the drums and they are loaded on trailers for shipment to ASCC's customer (R.17-19).

Reconditioned drums are processed similarly. First, however, the drum would be placed on a conveyor to the rear of the plant where the head is removed (R.16). The drum proceeds

along the conveyor to the incinerator where the drum is heated in a gas fired burner to remove any contents and to remove any materials from the outside of the drum (R.16-17). The drum is then sent through a horizontal or vertical wheel abrader, where steam is shot into the drum to further clean it (R.17). After cleaning, the drum is lined with a rust inhibitor (R.17). If the drum is a tight head drum and not to be further lined, it would proceed to a seamer which welds a new head back on the drum; if the drum is an open head drum and not to be further lined, a used head is put on the drum (R.17). If the drum is to be lined with a pigmented lining system, the procedure is much the same as with new drums (R.17-18). Following these procedures, each drum is sent to a testing location where it is submerged in water and tested for leaks (R.17). If the drums do not contain leaks, they also proceed through the stages of exterior coating, curing and loading as do the new drums (R.17-19).

The drum shop has one interior and one exterior spray booth and one interior and one exterior curing oven (R.19). The paint spray system used is made by a company called Nordsum (R.49).

All new drums are manufactured by customer order and specifications; ASCC does no warehousing or manufacture for inventory (R.30). In order to accomplish efficient production, ASCC has attempted to maintain a minimum size of production of one hundred drum lots (R.30).

ASCC must meet customer specifications for coating and lining with respect to mar resistance, chemical resistance and FDA approval, as well as whether the lining should be straight phenolic, modified phenolic, straight epoxy, modified epoxy, or clear epoxy (R.30-32,66-68). If ASCC did not satisfy these customer requirements, it could lose business and be vulnerable to severe product liability claims (R.31-33).

MARKET PRICES AND CONDITIONS

In general, the market for steel shipping containers is under severe competitive pressures with too much capacity and not enough demand (R.26). In addition, manufacturers from New Jersey and Cleveland are shipping their product into the Chicago market, contributing to the already flooded supply of pails (R.29).

The pail industry has not had a price increase in almost five years (R.26). The present market price for a new pail, depending on the type is between $1.90 and $2.50 per pail (R.26). This price is down approximately $0.50 per pail from the price per pail three years ago (R.28).

Similarly, the new and reconditioned drum industry has not had a price increase in almost five years (R.26). The present market price for a new drum, depending on the type, is between

$14.00 and $20.00 per drum (R.25). The present market price for a reconditioned drum, depending on the type, is between $9.00 and $15.00 per drum (R.25). These prices are down approximately $0.50 to $1.00 per drum from the price per drum three years ago (R.28).

Moreover, the competition in the marketplace is further complicated by manufacturers of non-steel shipping containers. ASCC faces competition from like-manufacturers as well as competition from manufacturers of fiber containers, tote tanks, plastic containers, bulk containers, and wagons (R.36). These non-steel types of shipping containers, particularly tote tank and plastic containers, have been a severe depressant on the pricing structure of steel pails (R.27). ASCC states that the growth outlook for steel containers is fair to bleak in comparison to non-steel containers (R.27). As an example, ASCC has lost between ten and twenty percent of its market share to non-steel shipping containers (R.27).

ASCC FINANCIAL CONDITION

Adding to the effect of the general market conditions on ASCC's business and the decreased prices which can now be charged for its product, is the increased costs that ASCC has had to bear over the past three to five years. Direct labor costs in the form of salaries for laborers have increased by two to three percent in the last five years, electric, gas and water utility bills have significantly increased, liability insurance has increased six fold since five years ago, and waste disposal costs have climbed four hundred percent in the same time period (R.37). ASCC's cost of materials such as steel and coatings have also increased each year (R.68-69).

On the other hand, ASCC's income from sales has decreased over the years and its return on investment is categorized by Mr. Spitz as "nebulous" (R.36-37). Overall, the company's after-tax profit has decreased each year from that of the year before (R.38).

PAST COMPLIANCE EFFORTS

ASCC has explored use of powder coatings, electrostatic application, water-based coatings, use of methylene chloride, afterburners, vapor recovery, and carbon absorption as means of attaining compliance (R.51-56). However, its investigation has primarily been concentrated in a testing program for high solids, low VOC exterior coatings (R.38-50). ASCC has hoped to find exterior coatings sufficiently low in VOC content and suitable for its customer's requirements, thereby allowing for offset of the VOC content of its interior linings, pursuant to Section 215.207.

In this regard, ASCC has looked at and tested high solid coatings from at least six to twelve different companies, including W. C. Richards, Pioneer, Whittaker, Vaspar, Federal Paint and Shields Coatings (R.38-39). In order to handle these high solids paints, which are much more viscous than the paints otherwise used by ASCC, ASCC was required to purchase new heaters and pumps at a cost of approximately $12,000.00 (R.48-49). Trial runs of these coatings have been primarily with black and white paint; colors such as blue, green, red and orange are not readily available in high solids, low VOC contents (R.38-39).

Between April 1, 1985 and the date of the hearing in this matter, ASCC had performed test runs on various paints, the results of which are documented in detail in the Quarterly Reports submitted to the Agency pursuant to the Board's prior variance orders, (Exhibit D to Amended Petition for Variance; Attachments B and C to Agency Variance Recommendation of IEPA; Exhibits to May 9 Supplement to Amended Petition for Variance). These test have been run on the drums manufactured by ASCC rather than the pails because the company believes that any findings from the tests run on the drums are easily convertible to use for the pails. ASCC further believes that testing of the drums is "synonymous" with testing of the pails; Mr. Spitz stated that paints that test well or poorly on the drums would test the same on the pails (R.43-44,75).

In general, ASCC has continually found over the years that high solids, low VOC content coatings are unacceptable due to poor drying, lack of abrasion and mar resistance, and poor gloss to the finish (R.41-42). Additionally, the high solids coatings were twice as thick as other enamels, providing problems in application as well as costs (R.41-42). Based upon the tests run by ASCC, the high solid coatings do not meet industry standards for requirements for appearance and use (R.43).

Further, high solids coatings costs $12 to $15 per gallon as compared to $5 to $6 per drum (gallonage unspecified) for coatings presently used by ASCC. The enamel presently used coats approximately two to three truck loads of product per drum. Thus, in order to break even and bear this increased cost, ASCC asserts it must be able to coat four to six truckloads of product per drum with high solids coatings (R.42). However, ASCC has not been able to achieve this result in practice (R.70). ASCC has found, therefore, that in addition to all the application, appearance, and customer approval problems it has experienced, the actual costs of using high solids coatings would be fifty to one-hundred percent higher than the cost of using its present coatings (R.47-48,76). The increased cost cannot be passed on to its customers, and ASCC asserts it cannot operate at a profit if such costs cannot be passed on to customers (R.48).

ASCC has done very little testing on interior coatings. Mr. Spitz stated that until approximately six months ago "there was nothing that met the VOC requirements" and therefore, "there wasn't any sense in doing any testing of something that didn't meet the VOC levels" (R.45). Whittaker, however, has recently begun marketing a water-based interior coating with 3.8 to 4.0 lbs/gal VOC content (R.45). ASCC ran fifteen gallons of this product through its system and sprayed about six drums with it. It took some MEK (methyl ethyl ketone) rubs after the drums were cured to see if the lining system adhered to the steel. The initial findings of the lining were "not bad" (R.45,64-65). However, ASCC states that the problem was in the fact that the coating is water-based (R.40,45,65).

In this regard, ASCC has found numerous problems with water-based coatings and linings. ASCC has previously tested water-based exterior coatings and found the gloss, adhesion, and mar resistance to be unsatisfactory and the product tends to spin around when loaded on the trucks (R.71).

More significantly, however, water-based coatings are completely incompatible with the present solvent system in use at ASCC. In order to use water-based coatings or linings, ASCC would need to completely revamp its lining and coating system (R.40). Unless the entire line is purged before and after running a water-based paint, the entire system may become contaminated (R.40,46). The cost of converting its system is one that ASCC asserts it cannot bear (R.45). Thus, ASCC believes that until the paint companies are able to offer water-based coatings and linings in the full range of product, such as clear phenolic, pigmented phenolic, epoxy pigmented phenolic, clear epoxies, and rust inhibitors, use of one of these water-based products alone places ASCC at a tremendous risk of contamination (R.40,45-46).

Equally important to ASCC is the fact that the manufacturers of water-based products are unwilling or unable to guarantee the product and thereby provide the necessary assurances regarding product liability (R.40,45-46). ASCC asserts that it is not, nor should it be, in a position to bear that cost burden either (R.45).

As mentioned above, ASCC has in the past explored other methods of complying with VOC regulations. All of the past efforts have proved fruitless. Powder coating machines produced totally unfavorable results, including the failure of the coating material to resist harsh chemical exposure required of the containers and the unacceptable obliteration of poison labels or customer use directions appearing on the containers (R.49-54, Exhibit A to Amended Petition for Variance). The cost of electrostatic application is asserted to be prohibitive due to high installation and maintenance costs relative to the marginal

removal of emissions. In addition, this technique is essentially infeasible for exterior coating because of the multi-color application. Also, interior coating could not be applied with electrostatics because the joint between the bottom and the side of the container will cause "grounding out" and the paint will not penetrate into the corner joint (R.49-54; Exhibits A and B to Amended Petition for Variance). The use of methylene chloride or 1,1,1-trichloroethane is not possible since direct exposure of these materials to the necessary baking temperatures produces hydrochloric acid, and possibly phosgene gas, which are toxic and corrosive. Entirely new ovens would be required in order to switch to these solvents (R.49-54; Exhibit A to Amended Petition for Variance). Vapor recovery is not feasible due to the various blends of solvents needed for the wide variety of coatings and carbon absorption is not feasible because of the high volume of air used by the process equipment and insufficient space for such a system (R.49-54; Exhibits A and B to Amended Petition for Variance). While all of these methods were explored prior to the granting of the initial variances, ASCC knows of no factors, conditions or reasons why these findings or results would have changed since that time, other than the distinct possibility that utility and capital costs would have increased (R.54).

ASCC has also considered the use of afterburners in order to attain compliance with VOC regulations. The company hired Charles Licht, in 1983, to prepare cost figures for the installation of afterburners (R.54-55). According to his estimates, ASCC would have had to make a capital expenditure of $900,000 to install afterburners to control its coating lines and would face a cost of $611,250 per year for the cost of natural gas alone (R.55; Exhibit B to Amended Petition for Variance). ASCC knows of no factors which would have caused these figures to decrease since they were prepared and, in fact, believes they would have increased due to increased energy and capital equipment costs as well as recent tax law changes affecting depreciation schedules (R.55-56). Nevertheless, ASCC could not operate and continue in business with the cost associated with using an afterburner to control VOC emissions (R.56).

PROPOSED COMPLIANCE PLAN

Given the alleged lack of otherwise reasonably available control technology and the slow progress of the paint formulators towards reformulation, ASCC has recently initiated another program to achieve compliance with VOC regulations. While the actual plan would be implemented in ASCC's Drum Shop, the success of the plan would necessarily impact on the Pail Shop and its attainment of compliance.

Specifically, the main goal of the plan is to vent the fumes from the spray booths and the exterior ovens in the Drum Shop to the drum incinerator. This would involve redesign of the

interior spray booths and installation of some 300-400 feet of ductwork and possibly air pumps. Estimated costs of this work are anticipated to be between $50,000 and $75,000 (R.56-61,72-79). ASCC is working in conjunction with Allied-Hastings Barrel and Drum Service, Inc. in exploring and implementing this plan. (The Board notes that the plan was discussed and Allied-Hastings was granted variance in the Board's Opinion and Order in Allied-Hastings Barrel and Drum Service, Inc. v. IEPA, PCB 86-21, February 19, 1987.)

ASCC has already hired an expert consultant to prepare a feasibility study and begin planning the installation of the necessary ductwork, and fully expects this project to be completed by December 31, 1987 (R.58-59,72). Moreover, it is believed that this approach would reduce VOC emissions in the Drum Shop to a minuscule level (R.76). Therefore, by utilization of the "bubble concept" described in the VOC regulations, ASCC hopes to likewise bring its Pail Shop into compliance (R.44,60,75-76). ASCC believes that compliance by this means is especially likely because ASCC pail production today is significantly less than five years ago and is expected to continue to fall, thereby reducing the VOC emissions from the pail plant even lower than the level it is at today (R.43-44).

ASCC asserts that advantages of this compliance plan are obvious. The drum incinerator is already in place and in use (R.16,21-23), its temperature is constantly monitored (R.22), and the emissions from the incinerator go through an afterburner which is likewise constantly monitored and regulated at a minimum of 1400 degrees Fahrenheit (R.22). Finally, installation of new equipment would be limited to ducting and pumps to move the fumes to the incinerator, the cost of which is not expected to be even one-tenth the cost of an afterburner (R.57-58).

ASCC EMISSIONS AND ASSERTED ENVIRONMENTAL EFFECT

As aforementioned, the ASCC facility is located in Air Quality Control Region No. 67, Cook County, an area designated as non-attainment for the national ambient air quality standard for ozone.

Pail Shop Emissions

The VOM emissions from ASCC's coating operations are regulated pursuant to 35 Ill. Adm. Code 215.204(j). The VOM emissions attributable to the exterior coating of pails are governed by 35 Ill. Adm. Code 215.204(j)(3), which provides that VOM emissions from the application of extreme performance coatings to miscellaneous metal parts and products are not to exceed 3.5 lb/gal (.42 Kg/l), excluding water, delivered to the coating applicator. The VOM emissions attributable to the interior coating of pails are governed by 35 Ill. Adm. Code

215.204(j)(1), which provides that VOM emissions from the application of clear coatings to miscellaneous metal parts and products are not to exceed 4.3 lb/gal (.52 Kg/l), excluding water, delivered to the coating applicator. 35 Ill. Adm. Code 215.211 establishes December 31, 1983 as the date for compliance with 35 Ill. Adm. Code 215.204(j).

Pursuant to Condition 3 of the PCB 83-115 variance, by December 31, 1984, the ASCC Pail Shop was ordered to reduce the VOM content of its exterior and interior coatings to 4.2 lbs./gal. and 5.6 lbs./gal., respectively. However, ASCC's quarterly reports indicate that this goal was not achieved:

Coating	Average VOM Content in lbs./gal.		
	1984	1985	1986
Exterior	4.42	4.48	4.32
Interior	6.30	6.39	6.32

Although, as noted above, the limitations of Section 215.204(j), are expressed in lbs/gal, the Agency computes emissions in lbs/yr or tons/yr for purposes of the State Implementation Plan. The Pail Shop's actual and "allowable" emissions between 1982 and 1986 were calculated as follows:*

	1982	1984	1985	1986
"Allowable" Emissions				
lbs VOM/yr	45,066	32,001	31,858	33,037
tons VOM/yr	22.5	16.0	15.93	16.52
Excess Emissions				
lbs VOM/yr	81,472	41,595	43,423	48,731
tons VOM/yr	40.74	20.8	21.7	24.37
Percentage VOM Reduction (required for compliance with Section 215.204(j)	64.7	56.5	57.7	59.60

* The Board notes that the figures set forth on page 7 of the Agency's Recommendation in PCB 86-22 are so patently incorrect as to be obvious typographical errors. In this and the succeeding table, the Board has used the figures as set forth in Attachment A to the Recommendations, which are the figures referenced by the Agency in the text. The calculations for 1984 are based on ASCC's first Quarterly Report, which covered the period August 20, 1984 through September 30, 1984, the only data submitted for the year 1984. The ASCC prorated this data over 365 days. The calculations for 1986 are based on the information contained in the Quarterly Reports covering January 1 through September 30, 1986, prorated over 365 days.

Drum Shop Emissions

The VOM emissions from ASCC's coating operations are regulated pursuant to 35 Ill. Adm. Code 215.204(j). The VOM emissions attributable to the exterior coating of drums are governed by 35 Ill. Adm. Code 215.204(j)(3), which provides that VOM emissions from the application of extreme performance coatings to miscellaneous metal parts and products are not to exceed 3.5 lb/gal (0.42 Kg/l), excluding water, delivered to the coating applicator. The VOM emissions attributable to the interior coating of drums are governed by 35 Ill. Adm. Code 215.204(j)(1), which provides that VOM emissions from the application of clear coatings to miscellaneous metal parts and products are not to exceed 4.3 lb/gal (0.52 Kg/l), excluding water, delivered to the coating applicator. 35 Ill. Adm. Code 215.211 establishes December 31, 1983 as the date for compliance with 35 Ill. Adm. Code 215.204(j).

Pursuant to Condition 3 of the PCB 83-114 variance, by December 31, 1984, the ASCC Drum Shop was requested to reduce the VOM content of its exterior and interior coatings to 4.2 lbs./gal. and 5.0 lbs./gal., respectively. However, ASCC's quarterly reports indicate that this goal was not achieved:

Coating	Average VOM content in lbs./gal.	
	1985	1986
Exterior	4.34	4.38
Interior	4.81	4.84

The Drum Shop's actual and allowable emissions between 1982 and 1986 were calculated by the Agency as follows:

	1982	1984	1985	1986
"Allowable" Emissions				
lbs VOC/yr	98,076	142,761	114,366	125,144
tons VOC/yr	49.04	71.4	57.18	62.57
Excess Emissions				
lbs VOC/yr	111,093	73,052	62,848	72,790
tons VOC/yr	55.6	36.53	31.4	36.4
Percentage VOC Reduction (required for compliance with Section 215.204(j)	53.1	33.85	35.5	36.77

ASCC Assertions

As indicated above, ASCC calculates its excess VOC emissions for the Drum Shop in 1986 to be 36.4 tons/yr., and for the Pail Shop to be 24.37 tons/yr. (Pet. Exh. 1A and 1B) The discrepancy between ASCC's calculations and those of the Agency was not

addressed in this record; at hearing, ASCC used the larger figures in eliciting testimony concerning environmental impact.

ASCC asserts that the environmental effects of its excess emissions is minimal given the "generally low level of excess emissions", particularly as contrasted with those from other sources: ASCC notes that the Drum Shop's 36.4 tons per year and the Pail Shop's 24.37 tons per year of excess VOC emissions are, respectively, equal to 0.050% and 0.036% of the hydrocarbons emitted by mobil (vehicular) sources on a summer weekday in Chicago (R.90-95).

ASCC asserts that the records of the IEPA's ozone monitoring stations show that ASCC's VOC emissions are not interfering with Illinois' attainment of the ambient air quality standard for ozone. The IEPA's Air Quality Bulletins for the 1983, 1984 and 1985 ozone seasons show a clear downward trend at the monitoring stations closest to ASCC in the number of days the ozone air quality standard was exceeded (Petitioner's Exhibits 2,3 and 4). ASCC notes that at the monitoring station closest to ASCC, located at 1820 S. 51st St. in Cicero, the number of days where the ozone was greater than 0.12 ppm went down from four in 1983 to zero in 1986 (R.87-89).

Agency Recommendation

As earlier stated, the Agency's reasons for recommending denial of variance are contained in its Recommendation and its brief, which the Board construes as an amended Recommendation. In its post-hearing brief, as to the proposed compliance plan, the Agency has stated that it believes the re-ducting of Drum Shop emissions to be "a promising concept for achieving compliance in the Drum Shop". As to the feasibility of achieving compliance in the Pail Shop through offset of any excess emission reductions from the Drum Shop, the Agency has taken no position as ASCC has presented no data concerning control efficiency of the proposed Drum Shop system.

Agency concerns regarding past efforts at compliance and environmental effect of ASCC's excess VOC emissions have remained constant. As demonstrated by the foregoing emissions tables, ASCC did not achieve the reductions in VOC content of its coatings required in the PCB 83-114 and PCB 83-115 variances. The excess emissions from the Pail Shop were significantly reduced between 1982 and 1984, but rose from the 1984 level in both 1985 and 1986. The excess emissions from the Drum Shop were also significantly reduced between 1982 and 1984; while further reductions were made in 1985, in 1986 excess emissions closely approached the 1984 level.

Concerning environmental effect of these excess emissions, the Agency takes strong exception to ASCC's comparison of its

emissions to the total motor vehicle emissions for the six counties in the Northeastern Illinois region. The Agency notes that using this approach, a source emitting 500 tons per year of excess emissions could argue that its emissions had no impact, since they amount to "only" 0.76% of total emissions from mobile sources. While the Agency agrees that monitored emissions for ozone exceedances has decreased, it points out that the ozone standard has not been attained--that is, the average number of exceedances for the past three years has not been less than or equal to 1.

The Agency's primary concern is that Allied-Hastings' description of the relationship between its excess emissions and overall hydrocarbon emissions is insufficient to prove that its excess emissions will not interfere with attainment of the ozone standard in Cook County. The Agency asserts that the company has made no real reductions in its own emissions to correspond to the decrease in monitored exceedances of ozone.

The company's alleged failure to make this demonstration leads to the Agency's concern about consistency of grant of variance with federal law. The Agency notes that 35 Ill. Adm. Code 215.204(j) is a part of the RACT II rules which are awaiting USEPA approval as a part of the State Implementation Plan (SIP). Any variance in effect at the time the SIP is approved would be required to be submitted to USEPA for approval as part of the SIP. The Agency doubts that ASCC has made a strong enough demonstration to allow for approval by USEPA consistent with the Clean Air Act.

Notwithstanding its negative Recommendation, the Agency has suggested various conditions in the event the Board determines to grant the requested variances. Bearing in mind the Clean Air Act's December 31, 1987 compliance deadline and the inter-relationship of emission reduction in the Drum Shop with achievement of compliance in the Pail Shop through emissions offset, the Agency suggests that ASCC 1) make a firm decision concerning implementation of the re-ducting approach no later than June 30, 1987, 2) that the Drum Shop apply for a construction permit no later than July 31, 1987, 3) that the Pail Shop apply for a permit pursuant to Section 215.207 no later than August 15, 1987, and 4) that monthly progress reports be submitted detailing the efforts made toward compliance as well as data necessary to evaluate compliance by use of an offset.

BOARD CONCLUSION

The Board agrees with the Agency's contention that comparison of a stationary source's excess VOC emissions with the emissions of mobile sources in the six-county Northeastern Illinois area is not determinative of lack of environmental effect; the Board and the courts have rejected similar analytical

approaches made by petitioners seeking to hook-on to overloaded sewage treatment plants who have asserted that their added flows would represent but a fraction of 1% of the total flows to the plant. See, e.g. Willowbrook Development Corp. v. IPCB, 92 Ill. App. 3d 1074, 416 N.E. 2d 385 (2nd Dist. 1981). However, given the acknowledged difficulty of determining the contribution of any one source to ozone exceedances in the general area in which ASCC is located, submittal of extensively modeling studies would contribute little to this record. See Allied-Hastings, supra, at p. 8. ASCC's environmental showing has been adequate.

ASCC has also adequately explained its failure to run separate tests for complaint coatings in the Pail Shop: i.e., that customer requirements for pails are similar to those for drums, and that coatings were tested in the Drum Shop. ASCC's testimony concerning the depressed condition of the steel container industry as well as other conditions which affect the company's economic situation is unrebutted.

On the other hand, ASCC has not, as the Agency correctly notes, made the progress towards emission reductions which it had anticipated in 1983; the average VOM content for some coatings used in both the Drum and Pail Shops has risen fractionally since 1984. The Board also notes that the PCB 83-114 and PCB 83-115 variances expired on December 31, 1985 at which time the facilities' operating permits expired. This record does not indicate when or whether renewal operating permits were applied for, although the Board notes that the Agency could not have lawfully issued a permit absent extension of variance beyond December 31, 1985. The Board also notes that ASCC did not apply for extension of the prior variances until close to two months after they had expired, although it was clear as early as January 1, 1985 that it was having little success in discovering suitable replacement coatings.

However, considering the "promising" nature of the compliance plan proposed, ASCC's excess emissions level and economic situation, the Board concludes that denial of variance would impose an arbitrary or unreasonable hardship. Variances are granted to both the Drum Shop and the Pail Shop through December 31, 1987 from 35 Ill. Adm. Code 215.211, 215.212 and 215.204(j). These variances will be subject to conditions similar to those suggested by the Agency, to which ASCC has not objected. However, the Board will accelerate the compliance timetable, as it agrees with Mr. Spitz' assessment that "to be in compliance by the end of the year...depending upon the type of installation put in [the Drum Shop, ASCC] would have to have it going by summer or early fall at the latest" (R.72). Early construction is particularly necessary given the need to compile control data from the Drum Shop in order to determine what emissions reductions, if any, will be required in the Pail Shop even if "bubbling" is feasible. In the event this accelerated

compliance timetable is technically infeasible, ASCC may apply for an adjustment by way of motion for reconsideration.

The company will also be required to reapply for operating permits for the existing facilities, as well as to timely apply for all needed permits to construct and operate the proposed emissions ducting system.

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

ORDER

1) American Steel Container Co., (ASCC) Drum Shop and American Steel Container, Pail Shop are each hereby granted variance from 35 Ill. Adm. Code 215.211, 215.212 and 215.204(j), subject to the following conditions:

A. This variance will expire on December 31, 1987 or at such earlier time as compliance is achieved with VOC limitations;

B. On or before July 1, 1987, ASCC shall either 1) apply to the Agency for a construction permit to effectuate re-ducting of VOC emissions from the existing coating lines and spray booths to the existing incinerator in the Drum Shop, or 2) advise the Agency that it does not intend to pursue compliance by this method;

C. Installation of necessary equipment to accomplish any re-ducting shall be completed as expeditiously as is practicable but in no event later than 90 days after the date of issuance of the construction permit;

D. As expeditiously as is practicable, but no later than 60 days of the date of this Order, ASCC shall apply for permits to operate its existing Drum Shop and Pail Shop. Upon completion of installation of the equipment described in subparagraph B) above, ASCC shall timely apply for any necessary modifications to these operating permits, including any application for an emissions offset permit pursuant to Section 215.207;

E. Until such time as ASCC demonstrates that both the Drum Shop and the Pail Shop are in compliance with the VOC emission limitations either individually or jointly by way of offset, ASCC shall continue testing for compliant interior and exterior coatings, and shall report results to the Agency as provided in subparagraph (F)(3) below;

F. 1) Beginning July 1, 1987, and every month thereafter, ASCC shall submit written reports to the Agency

detailing all progress made in achieving compliance with Section 215.204(j);

2) To the extent these compliance activities involve testing for replacement coatings, said reports shall include information on the names of replacement coating and the manufacturers specifications including percent solids by volume and weight, per cent VOC by volume and weight, percent water 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; and any other information which may be specified by the Agency in writing;

3) To the extent these compliance activities involve offset of emissions of the Drum Shop and the Pail Shop, said reports shall include data concerning daily coating material usage, daily actual and allowable emissions, and any other information which the Agency shall specify by writing as necessary to enable it to evaluate compliance activities pursuant to 35 Ill. Adm. Code 215.204(j) and 215.207;

4) 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

G. During the term of this variance, the average VOC content for internal and external coatings in the Drum Shop and Pail Shop shall not exceed the levels for 1986 as set forth in the foregoing Opinion.

2) Within 45 days of the date of this Order, ASCC shall execute a Certification of Acceptance and Agreement to be bound to all terms and conditions of the variance. Said Certification shall be submitted to the Agency at each of the addresses specified in paragraph 4. 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:

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 86-22 and PCB 86-23 (consolidated), dated April 16, 1987, understand and accept the said Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

_____
Petitioner

_____
By: Authorized Agent

_____
Title

_____
Date

IT IS SO ORDERED.

B. Forcade dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 16th day of April, 1987 by a vote of 5-1.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board