

paint which has an average VOC of approximately 5.25 lbs./gallon. (Pet. 3). Accordingly, there are about 333.7 tons of annual VOC emissions from the paint tanks. (Rec. 2). However, since the Board's rule on surface coating, which has a final compliance date of December 31, 1982, establishes a 3 lbs./gal. maximum limit on the VOC component of paints used in metal furniture coating, the dip tank annual VOC emissions are limited to 190.7 tons under Rule 205(n)(1)(G) of Chapter 2. Concurrently, Rule 205(m)(1)(B) of Chapter 2 requires that Lyon submit an acceptable compliance program to the Agency along with progress reports on the use of low solvent coating technology which demonstrate the initiation of process modifications to allow the use of low solvent coatings by April 1, 1982 and the completion of process modifications to allow the use of low solvent coatings by October 1, 1982.

Lyon has thoroughly investigated all presently known methods of reducing VOC emissions and achieving compliance with applicable regulations, including the use of water-borne paints, powder coatings, incineration, and continuous coaters. (Pet. 5; Ex. 3). The Petitioner has concluded that the best, although most costly and technically difficult, compliance method involves the application of high solids coatings by electrodeposition which is expected to cost \$4,700,000 for installation at its main plant in Montgomery, Illinois and is estimated to have an installation cost of \$2,700,000 at its other similar plant in York, Pennsylvania. (Pet. 6).

Because a suitable "off the shelf" electrodeposition system is unavailable and extensive rearrangement and remodeling will be required at both plants, Lyon plans to install the highly customized, unique electrodeposition system in 3 phases to minimize production losses, avoid employee layoffs, utilize its own specialized engineering personnel, and spread out financial payments. (Pet. 7-11; Ex. 4-6). In Phase 1, Lyon will install the Montgomery monorail electrodeposition system for small parts and complete the first electrodeposition line at the Montgomery plant by March of 1983. In Phase 2, the Petitioner will install a second monorail system in its York facility, utilizing the experience and knowledge gained in the prior installation, and complete the York line by April of 1984. In Phase 3, Lyon will install the second Montgomery system, which is the most complicated and which requires the most testing (as it is a plunge/dip/walking beam electrodeposition arrangement), and complete the second Montgomery line by May of 1985. (Pet. 7-13). Because the Petitioner anticipates numerous start-up problems and the need for "debugging" of the equipment, its strategy and compliance schedule provides for the installation of the simplest line first and the most complex line last, so that its design and construction expertise can be cumulatively enhanced in order to successfully solve any problems which may develop. (Pet. 7-13; Ex. 6).

The Agency has calculated that, upon final completion of Lyon's electrodeposition lines, the plant emissions will only be 35% of the allowable emissions, so that the Petitioner will have achieved not only compliance, but will be significantly under the allowable emission rate. (Rec. 4). In the interim period, emissions will be gradually reduced to achieve the best technical compliance possible consistent with the equipment being installed. By the end of Phase 1 of the equipment installation program in March of 1983, the Agency estimates that VOC emissions will be about 221.5 tons/yr., and this will be systematically reduced to 67 tons/yr. by the end of Phase 3 of the program in May of 1985. (Rec. 4). Accordingly, three months after the original compliance date of December 31, 1982, the Montgomery facility will have emissions which exceed the VOC limits by 16%, but this percentage will subsequently be incrementally reduced and soon eliminated as the installation of equipment progresses. (Rec. 4). Moreover, during periods of high ozone concentration, the Petitioner has agreed to comply with its episode action plan to limit emissions, which will prevent any potentially adverse health effects on the elderly and persons with respiratory and cardiac problems from photochemically reactive hydrocarbons which contribute to ozone formation. (Rec. 4). The proximity of an ozone monitoring station, which is in Wheaton about 15 miles northeast of Lyon's plant, will help to insure against environmental problems. (Rec. 5).

Because the Montgomery facility is located in a mixed residential and industrial area and there are some homes located directly east of the plant, the Agency conducted a door-to-door survey of various residents to ascertain whether any nearby people had objections concerning the operations of Lyon's plant or its variance request. There were no objections. (Rec. 4). Additionally, the Agency has noted that the Petitioner: (1) has been diligently attempting to reduce its VOC emissions since at least 1978; (2) has adequately demonstrated that a sequential, rather than simultaneous, construction program is necessitated because of financial and engineering constraints; (3) will ultimately achieve 65% overcompliance when all equipment is installed and working efficiently, and (4) will provide sufficient safeguards during periods of high ozone concentration (which are expected to occur infrequently in the area of the plant based on previous history) by utilizing an episode action plan. (Rec. 5).

Moreover, it is recognized that compliance in two separate jurisdictions (i.e., Illinois and Pennsylvania), given the technical complexities and economic impact of physically handling the replacement of existing engineering systems and the concurrent installation of two large, new, fully-operational, customized electrodeposition systems that are unique in their application to the Petitioner and are not available anywhere else at the present time, is physically impossible. Additionally, the Petitioner has indicated that this situation is exacerbated by the present economic climate of high

interest rates, turbulent financial markets, and an earnings decline of almost 30% during 1980 which has adversely affected Lyon's ability to raise the necessary funds. (Pet. 6-7).

The Agency has recommended that the Board grant the requested variance, subject to specified conditions. The Board finds that denial of the variance would impose an arbitrary or unreasonable hardship upon Petitioner, and agrees with the Agency's conclusion that an extension of Lyon's compliance deadline is appropriate. Accordingly, the Board will grant the requested variance, subject to conditions which are delineated in the Board's Order.

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

ORDER

The Petitioner, Lyon Metal Products, Inc., is hereby granted a variance from Rules 205(m)(1)(B) and 205(n)(1)(G) of Chapter 2: Air Pollution Control Regulations until May 31, 1985, subject to the following conditions:

1. Within 28 days of the date of this Order, and every third month thereafter, Petitioner shall submit written reports to the Agency detailing all progress made in achieving compliance with Rule 205(n)(1)(G) of Chapter 2. These reports shall include information on the quantity and VOC content of all coatings utilized during the reporting period, a description of the status of the reconstruction program, and any other pertinent information which may be requested by the Agency.
2. Within forty-five days of the date of this Order, Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Enforcement Programs, 2200 Churchill Road, Springfield, Illinois 62706, a Certificate of Acceptance and Agreement to be bound to all terms and conditions of this variance. This forty-five day period shall be held in abeyance for any period this matter is being appealed. The form of the certificate shall be as follows-

CERTIFICATION

I, (We), _____, having read the Order of the Illinois Pollution Control Board in PCB 81-184,

dated _____, 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.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 4th day of February, 1982 by a vote of 4-0.

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