

ILLINOIS POLLUTION CONTROL BOARD
December 4, 1980

AMERICAN CAN COMPANY,)
)
 Petitioner,)
)
 v.) PCB 80-169
)
ILLINOIS ENVIRONMENTAL PROTECTION)
AGENCY,)
)
 Respondent.)

OPINION AND ORDER OF THE BOARD (by I. Goodman).

On September 19, 1980 Petitioner sought variance from the following air pollution control rules of the Board for its Englewood plant in Chicago, which manufactures metal containers for a variety of uses: Rules 104(c), 205(j), 205(m)(1)(B)(ii) and (iii), 205(m)(1)(C)(iii), and 205(n)(1)(B) of Chapter 2. Grant of variance will enable the Illinois Environmental Protection Agency (Agency) to issue an operating permit and to submit the variance as a SIP revision (see §110 of the Clean Air Act, 42 U.S.C. §7410, et seq.).

The plant, a 5-story, 1,875,000-square-foot structure, is located on 20 acres of land at 6017 South Western Avenue. It operates 24 hours per day, 7 days per week. Petitioner's processes consist of coating sheets of metal and applying sealing compounds to produce metal containers (cans) for such products as paint, food, motor oil, and aerosols. Petitioner's 123 lines apply 100 different coatings and compounds to metal sheets and pre-formed ends. Following application, the coatings and compounds are cured in dryers and ovens which drive off volatile organic materials (VOM) through exhaust stacks and into the atmosphere (Rec.,p.2). A total of 412,677 gallons of coating and compound materials were applied during the year 1979 during the four types of coating operations (overvarnish; sideseam spray coating; end sealing compound; and interior and exterior sheet base coating) (Pet.,p.12).

Petitioner has introduced low solvent materials (LSM) into its processes as they have developed within its coating industry, including water-borne materials, high solids, and ultraviolet curables. Of the 39 coating materials presently used, 4 comply with the VOM emission limitations in Rule 205(n)(1)(B) and 35 do not (Pet.,p.13).

The nearest Agency air monitoring station is at Lindbloom High School, 6130 South Wolcott Avenue, Chicago, approximately one mile southeast of the facility. The area is generally a

mixed residential-commercial-industrial area, with residences located directly west of Petitioner's plant.

During April through October of 1979, Agency samples at the high school indicated that only 5 of 4,308 samples evidenced violations of the 0.08 parts per million (ppm) Illinois Ambient Air Quality Standard (IAAQS)¹, and none exceeded the federal standard of 0.12, for photochemical oxidants (ozone). Petitioner's VOM emissions contribute to those ozone concentration levels because the emissions are photochemically reactive; as such, under certain weather conditions they contribute to the formation of ozone. Although high ozone levels can have adverse health effects, especially upon the elderly and people with respiratory and cardiac problems, the Agency's Recommendation states that granting an extension of Rule 205(m)(1)(B)(iii)'s final compliance date of October 1, 1982 to December 31, 1984 should not cause any increased adverse health effects (Rec., p.6). This is because Petitioner's total VOM emissions should continually decrease from their present annual 593.5-ton level to a level of 235.9 tons annually by 1985, some 50 tons less than the maximum allowable level by December 31, 1982 under Rule 205(n)(1)(B) of 286.4 tons. Petitioner has projected that on December 31, 1982 its emission level will be 347.8 tons (Pet., p.5).

Petitioner also seeks a ruling from the Board that its Compliance Program (CP) and Project Completion Schedule (PCS), required by Rules 104(g)(4) and 205(m)(1)(A) to have been filed with the Agency on or before February 1, 1980, were timely filed on January 28, 1980. Due to the apparent inconsistencies noted in the dates and language of the rules, and the proximity of the date of filing, the Board will rule that the CP and PCS were timely filed.

On March 28, 1980 the Agency denied the CP and PCS on the ground that they did not demonstrate compliance with the deadlines in Rule 205(m)(1)(B)(ii) and (iii) (initiation and completion, respectively, of process modification), as required by Rule 104(c). Under Rule 205(j) the deadline for compliance with the emission limitation in Rule 205(n) is December 31, 1982. On June 13, 1980, the day after its previous operating permit had expired, Petitioner applied for a new permit. On July 9, 1980 the Agency denied it for failure to submit an adequate CP under Rule 104. Petitioner seeks a three-year variance from Rule 205(j)'s compliance deadline of December 31, 1982, which would protect Petitioner from Rule 104(a)'s prohibition of operating its facility without an approved CP and PCS, and from Rule 205(m)(1)(B)'s process modification initiation and completion deadlines.

¹On September 15, 1980 the Agency proposed to raise the IAAQS to the federal level of 0.12 ppm. (See the Board's proceeding R80-11.)

Petitioner states as its reasons for inability to comply with the emission limitation in Rule 205(n)(1)(B) basically that the introduction of LSM into its can manufacturing processes is complex and time-consuming. Often coatings are submitted to Petitioner's customers for further testing and for approval; disapproval would necessitate refinement of the material, and further customer disapproval is not unlikely. Additionally, many of Petitioner's coatings are submitted to the U. S. Food and Drug Administration for testing and approval. A change in the coating material can adversely impact the quality of a container's contents in many ways. Often inventories are scrapped after production in bulk has begun. These circumstances can be costly as well as time-consuming to Petitioner. (See Pet.,pp. 15-17.)

Petitioner's compliance plan consists of five measures, with the contingent measure of installing and operating additional catalytic incinerators by November 1, 1985 (Pet.,pp.19-25). One measure is the continued introduction of LSM into Petitioner's processes. Petitioner estimates that by 1985 at least 96% of its operations will use LSM, but total VOM emissions will be 416.6 lbs., which is greater than the limitation in Rule 205(n)(1)(B) of 286.4 tons annually. The second measure, continued use of ultraviolet curable varnishes, is a project Petitioner inaugurated in 1974 and continues to research as the relevant equipment continues to evolve. A 41-ton reduction projection was given from the continued application of these varnishes between 1982 and 1985 (Pet.,p.31).

Petitioner argues that Rule 205(n)(4)'s internal offset (bubble) provision is considerable by the Board as a part of its compliance plan to reduce emissions. This is true; the purpose of the offset provision is to allow "the flexibility to overcomply on the lines where it is possible and to use this overcompliance as an offset on the lines where the technology to comply either does not exist or is very expensive." (See Opinion and Order in R78-3, -4 dated August 23, 1979, at p. 22.) However, the rule merely states that if its offset provisions are met, a violation of the limitation in Rule 205(n)(1) by one or more coating lines is not an actionable violation. However, the use of the word "credits" in Rule 205(n)(4)(C) is with reference to RFP demonstrations and to permits for new or modified major sources locating in non-attainment areas.

From Petitioner's fourth measure, transferring those production processes using high solvent materials "which are less likely to be replaced with [LSM] in the immediate future and also a significant portion of the coating operations [on certain lines] that are not equipped with control equipment," Petitioner projects a 205.6-ton reduction in emissions (Pet.,p.22-4). It is this transfer which will provide the flexibility the internal offset provision provides.

The last measure is to reschedule lines using high solvent materials for use with the five lines having catalytic incinerators. No estimation of reductions in VOM emissions was given.

Petitioner's Air Pollution Episode Action Plan provides sufficient safeguards during periods of high ozone concentrations in the Chicago area since it requires the cessation of production if necessary and a reduction of emissions during other, less critical, stages of alert.

Although Petitioner seeks a grant of variance through December 31, 1985, the Agency's recommendation is through December 31, 1984 only. The Agency cites the USEPA's opinion that although the adoption of low solvent coatings "is, in many cases, technology forcing, [there are] inherent long-term benefits [including] eliminating the need for abatement equipment and reducing concomittant (sic) energy requirements." The opinion continues, "[l]ead time for applying [LSM already developed] should not exceed two years" (see Pet., Ex.5, Attach.B, p.3). The Agency further states that it can find no reason why Petitioner could not accelerate its compliance schedule by one year, citing that Petitioner's CP and CPS asserted compliance by 1984.

The Board agrees with the Agency. Petitioner's four measures were, generally, continuing measures for which no specific completion date could be projected. Furthermore, there was no statement in the petition for variance that compliance could only be achieved by 1985; there were merely statements that compliance could not be achieved by 1982. On the other hand, Petitioner's facility is a multi-product manufacturing plant. Petitioner refers to an intra-USEPA November 21, 1978 memorandum on RACT for can coating operations which discusses the technical or economic infeasibility of RACT on a case-by-case basis and the need for providing flexibility to the emission limitations (Pet., Ex.5, Attach.D, p.1). However, it was for precisely this reason that the Board adopted Rule 204(n)(4)'s internal offset provision. Petitioner in effect presently makes use of it by drying the high solvent materials in those of its lines equipped with incinerators and applying the degree of overcompliance to other noncomplying lines.

One of Petitioner's alternative means of complying with Rule 205(j) is the costly and energy-consuming installation of catalytic incinerators. Although this is a viable method technologically, such retrofitting is disfavored given the expected increasing development of LSM-related technology. It would furthermore be economically unreasonable to require the use of natural gas to fuel the control equipment not only because of the nonrenewable nature of the fuel but because the Englewood plant's physical characteristics preclude the use of heat recovery equipment.

Neither party here has estimated the extent of Petitioner's contribution to the ozone levels in Chicago, however difficult it might be to separate out the effects of motor vehicle emissions. For this reason, the monitoring data previously cited is rather unreliable in assessing environmental impact. However, the area contains both commercial and industrial, as well as residential, establishments, and therefore presumably many motor vehicles and other sources of VOM.

The Board will grant variance from Rule 205(j) through December 31, 1984 under certain conditions, and will order a revised schedule for submission to the Agency of the CP and PCS pursuant to Rule 205(m)(1)(B). Grant of variance will not, however, insulate Petitioner from any applicable noncompliance penalties pursuant to the Clean Air Act pending approval of the variance as a SIP revision.

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

ORDER

It is the Order of the Illinois Pollution Control Board that American Can Company be granted variance from Rule 205(j) through and including December 31, 1984 for VOM emissions from its Englewood plant in Chicago upon the following terms and conditions.

1. American Can Company shall submit its Compliance Plan and Project Completion Schedule to the Agency for approval pursuant to Rule 104(c). Such documents shall comply with the requirements of Rules 104 and 205(m)(1)(B) in all respects except as inconsistent with grant of this variance. The reporting required pursuant to Rule 205(m)(1)(B)(i) shall commence within 6 months of approval of both documents. American Can Company shall continue to initiate the five measures contained in its compliance plan, and shall complete all process modifications allowing the use of low solvent coatings by December 31, 1984. American Can Company shall meet the emission limitations in Rule 205(n)(1)(B) on or before December 31, 1984.

2. Beginning on January 1, 1981 and every third month thereafter, American Can Company shall submit written reports to the Illinois Environmental Protection Agency detailing the progress made pursuant to its Compliance Plan and Project Completion Schedule. Said reports shall include information on the quantity and solvent content of all coatings utilized during the reporting period, a description of the status of the reformulation program, and any other information which may be reasonably requested by the Agency. Said reports shall be submitted to the Agency at the following address:

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

3. The Illinois Environmental Protection Agency is authorized to grant American Can Company an operating permit for its Englewood plant in Chicago which is consistent with this variance and with the approved Compliance Plan and Project Completion Schedule.

4. Within 45 days of the date of this Order, American Can Company, by a duly authorized officer, shall execute a Certification of acceptance and agreement to be bound by all terms and conditions of this variance. This 45-day period shall be held in abeyance for any period during which this Order is appealed. Said Certification shall be submitted to the Illinois Environmental Protection Agency at the address in Paragraph 2 of this Order. The form of said Certification shall be as follows:

CERTIFICATION

I, (We,) _____, having read the Order of the Illinois Pollution Control Board in PCB 80-169 dated _____, understand and accept the Order and agree to be bound by all of its terms and conditions.

_____, Petitioner

_____, Authorized Agent

_____, Title

_____, Date

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 December 1980 by a vote of 5-0.

Christian L. Moffett

Christian L. Moffett, Clerk
Illinois Pollution Control Board