ILLINOIS POLLUTION CONTROL BOARD March 22, 1985

IN THE MATTER OF:)) CORRECTION OF 35 ILL. ADM. CODE) R83-36 215,204(a)(1))

ADOPTED RULE. FINAL OPINION AND ORDER.

OPINION AND ORDER OF THE BOARD (by B. Forcade):

On December 2, 1983, Ford Motor Company ("Ford") filed a petition, with over 200 supporting signatures, seeking to have the Board amend 35 Ill. Adm. Code 215.204(a)(1). That regulation limits volatile organic material emissions from coatings lines at automobile or light duty truck manufacturing plants in Cook County. The regulation, which was formerly Rule 205(n)(1)(A) of Chapter 2: Air Pollution, was adopted by the Board on August 23, 1979, in proceeding R78-3 and 4.

On December 23, 1983, the Illinois Environmental Protection Agency ("Agency") filed a motion to dismiss this rulemaking claiming that the Board had retained jurisdiction in R78-3 & 4, and that the relief Ford was requesting could be addressed with a clarifying statement in the prior rulemaking. On January 3, 1984, Ford responded to the Agency's motion to dismiss, stating in essence, that the mechanism for the change (clarifying statement in R78-3 & 4, or new regulation) was not important so long as the substance of the requested change was properly evaluated by this Board. The Board, by Order of October 18, 1979, vacated its decision to retain jurisdiction in R78-3 & 4. Since the Board no longer had jurisdiction in R78-3 & 4, the Agency's motion to dismiss was denied.

On March 16, 1984, Ford moved to schedule hearings promptly in this matter. The Board held two hearings on May 24, 1984; the morning hearing was held in Chicago, the afternoon hearing was held in Bolingbrook. On June 4, 1984, the Department of Energy and Natural Resources ("DENR") made a finding that an Economic Impact Statement was not necessary in this proceeding. On July 18, 1984, the Economic and Technical Advisory Committee concurred with DENR's finding. The public comment period was closed on June 29, 1984, by Hearing Officer Order.

The Board wishes to acknowledge the contributions of David G. Mueller who was the Hearing Officer and administrative assistant for this rulemaking.

In a related matter, Ford filed on August 4, 1983, a petition seeking in part a variance from the same regulation which it here petitions to modify. On April 27, 1984, and May 29, 1984, the Board granted Ford a variance from the applicable regulation, pending final Board action in this matter.

A brief overview will simplify the subsequent regulatory discussion. In an effort to control the emission of materials that may lead to ozone formation, the Board has adopted several regulations. In R78-3 & 4, 35 PCB 246 (August 23, 1979), the Board adopted emission limitations that apply to, inter alia, coating lines for automobile manufacturers and require installation of reasonably available control technology Those limitations are expressed in pounds of volatile ("RACT"). organic material per gallon of coating, excluding water. Water is excluded because it is not a VOM. In developing those limitations, the Board relied in part on concepts, data, and assumptions contained in United Stated Environmental Protection Act ("USEPA") publications called control technique guidelines ("CTG's").* One such concept is transfer efficiency which is the ratio of the amount of coating solids transferred onto the surface of a part or product to the total amount of coating solids used. Ford and the Agency assert that the original CTG presumed a transfer efficiency of 40% and that this Board relied on that transfer efficiency in establishing the relevant regulation. Ford and the Agency further assert that a 40% transfer efficiency is incorrect, that the correct transfer efficiency is 30%, and that USEPA has admitted the error. Ford has petitioned for this regulatory change to bring the Board's regulation into conformity with actual practice in the industry and existing USEPA polity.

The existing regulation provides as follows:

Section 215.204 Emission Limitations for Manufacturing Plants

No owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water, delivered to the coating applicator:

a) Automobile or Light Duty Truck Manufacturing Plants

1)	In Cook	County	kg/l	(lb/gal)
	Prime	coat	0.14	(1.2)

The CTG at issue here is USEPA, OIAQPS Guidelines, Control of Volatile Organic Emissions from Existing Stationary Sources -Volume II: Surface Coating of Cans, Coils, Paper, Fabrics, Automobiles, and Light-Duty Trucks at iv and vii [EPA-450/2 77-008) (OAQPS No. 1.2-073) May 1977] (hereinafter "CTG").

Prime surfacer coat 0.34 (2.8)

(Board Note: The prime surfacer coat limitation shall not apply if by December 31,1982, a limitation of 0.38 kg/l (3.2 lb/gal) is achieved and the prime surfacer coat is applied with a transfer efficiency of not less than 55 percent.)

Top coat 0.34 (2.8)

(Board Note: The limitation shall not apply if by December 31, 1985, a limitation of 0.43 kg/l (3.6 lb/gal) is achieved and the top coat is applied with a transfer efficiency of not less than 65 percent.)

Final repair coat 0.58 (4.8)

(Board Note: The limitation shall not apply until December 31, 1985.)

It appears that the Ford plant in Chicago is the only facility subject to 35 Ill. Adm. Code 215.204(a)(1). At the Ford facility vehicle bodies first receive a prime coat by an electrocoat painting process. The prime coating operation is not at issue here. After baking, the prime coated vehicles are conveyed to the prime surfacer operation and then to the top coat operation. These two operations are at issue here.

The prime surfacer coat is applied to the vehicles using hand held conventional (non-electrostatic) and high voltage automatic application (spray) equipment. This coating improves surface appearance and corrosion protection. The vehicle is then conveyed to a bake oven. After the oven the vehicle is conveyed to the topcoat line where enamel is applied in a spray booth by hand held conventional and electrostatic spray guns. A second color may be added later for tutone vehicles (Stip. Facts, 6-13).

Obviously, if more of the sprayed solids remain on the vehicle (a higher transfer efficiency), then less material is needed per vehicle. Thus, the VOM content of the material and the transfer efficiency are key variables in determining overall VOM emissions.

For the limitation of concern here, prime surfacer coat and topcoat, it is obvious that the Board placed heavy reliance on the CTG and adopted the CTG limitation of 2.8 lbs VOM/gallon (R78-3 & 4, August 23, 1979, 35 PCB at 255, 258). However, the Board did not specifically articulate the transfer efficiency that applied to that limitation in either the regulation or the opinion. Likewise, the USEPA CTG does not articulate a specific transfer efficiency for the 2.8 lbs VOM/gallon limitation. In 1979, USEPA circulated a memorandum stating some past confusion regarding the appropriate transfer efficiency and concluded that a 30% transfer efficiency was appropriate for 2.8 lbs VOM/gallon (Stip. Facts, Ex. 6). A 1981 policy statement by USEPA in the <u>Federal Register</u> stated that 30% transfer efficiency was acceptable for 2.8 lbs VOM/gallon (Stip. Fact, Ex. 8). Also, 40 CFR 60.393 (Performance Tests and Compliance Provisions) provides for a transfer efficiency of 30% (Stip. Facts, Ex. 7). These determinations by USEPA were based on extensive review of what transfer efficiencies were in fact achievable for the automotive industry.

Relying on this rationale, the Board on October 12, 1984, adopted a Proposed Rule, First Notice amending 35 Ill. Adm. Code 215.204(a)(1) to reflect a 30% transfer efficiency. First notice of this proposal was published at 8 Ill. Reg. 21486 on November 2, 1984. The first notice comment period expired on December 17, 1984. Two comments were received. The first was from the Administrative Code Unit pertaining to format for publication in the <u>Illinois Register</u>. These comments did not address any language in the regulation. The second was a one page comment filed by Ford on November 27, 1984, supporting adoption of the proposed rule as written.

By Order of the Board, dated January 10, 1985, the proposed rule was submitted to the Joint Committee on Administrative Rules ("JCAR"). JCAR's second notice review commenced on January 17, 1985. On February 21, 1985, JCAR issued a Certification of No Objection to Proposed Rulemaking, ending the second notice period on the rulemaking.

The Board notes that during the pendancy of this regulatory matter, USEPA has begun action on the variance proceeding (PCB 83-105) which granted Ford a 30% transfer efficiency pending outcome of this regulation. On February 25, 1985, USEPA proposed to approve the 30% transfer efficiency as a revision to the State Implementation Plan for Ozone, 50 FR 7619. USEPA's proposal found the 30% transfer efficiency to be reasonably available control technology ("RACT"). This supports the Board's determination today that 30% transfer efficiency is appropriate.

ORDER

The Board hereby adopts the following amendment to 35 Ill. Adm. Code 215.204(a)(l) and instructs the Clerk of the Board to file this rule with the Secretary of State:

35 Ill. Adm. Code 215.204(a)(1) is amended as follows:

Section 215.204 Emission Limitations for Manufacturing Plants No owner or operator of a coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water, delivered to the coating applicator:

a) Automobile or Light Duty Truck Manufacturing Plants

1)	In Cook	County		kg/l	(lb/gal)
	Prime	coat		0.14	(1.2)
	Prime	surfacer	coat	0.34	(2.8)

(Beard Note: The prime surfacer coat limitation shall not apply if by December $3\frac{1}{7}$, 9827 a limitation of 0.38 kg/l (3.2 lb/gal) is achieved and the prime surfacer coat is applied with a transfer efficiency of not less than 55 percent.)

(Board Note: The prime surfacer coat limitation is based upon a transfer efficiency of 30 percent. The prime surfacer coat limitation shall not apply until December 31, 1982.)

Top coat 0.34 (2.8)

(Board Note: The limitation shall not apply if by Becember 31_7 19857 a limitation of 0.43 kg/l (3.6 lb/gal) is achieved and the top coat is applied with a transfer efficiency of not less than 65 percent.)

(Board Note: The limitation is based upon a transfer efficiency of 30 percent. The topcoat limitation shall not apply until December 31, 1985.)

Final repair coat 0.58 (4.8)

(Board Note: The limitation shall not apply until December 31, 1985.)

IT IS SO ORDERED

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Order was adopted on the 22^{-1} day of <u>March</u>, 1985, by a vote of <u>6-0</u>.

Dorothy M. Gunn, Clerk

Dorothy M. Gunn, Clerk Illinois Pollution Control Board