

ILLINOIS POLLUTION CONTROL BOARD
November 4, 1993

IN THE MATTER OF:)
)
JOINT PETITION OF DOUGLAS FURNITURE)
OF CALIFORNIA, and THE ILLINOIS) AS 93-3
ENVIRONMENTAL PROTECTION AGENCY) (Adjusted Standard)
FOR AN ADJUSTED STANDARD FROM)
35 ILL. ADM. CODE 218.204)

ROY L. BERNSTEIN, GOTTLIEB AND SCHWARTZ, APPEARED ON BEHALF OF
PETITIONER, DOUGLAS FURNITURE OF CALIFORNIA;

SHARON M. DAVIS APPEARED ON BEHALF OF PETITIONER, ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY.

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

This matter comes before the Board on a petition for
adjusted standard filed by Douglas Furniture of California
(Douglas Furniture) on March 9, 1993, and joined by the Illinois
Environmental Protection Agency (Agency) on August 5, 1993.

Joint petitioners request an adjusted standard from the air
emission control requirement at 35 Ill. Adm. Code 218.204 as that
requirement would otherwise apply to the touch-up coating
operations of the metal furniture coating line at Douglas
Furniture's facility located in Bedford Park, Illinois. Section
218.204 provides in pertinent part that no owner or operator of a
metal furniture coating line shall apply at any time any coating
in which the volatile organic material (VOM) content exceeds an
emission limit of 3.0 lb/gal (3.6 kg/L).

The Board's responsibility in this matter arises from the
Environmental Protection Act (Act) (415 ILCS 5/1 et seq.). The
Board is charged therein to "determine, define and implement the
environmental control standards applicable in the State of
Illinois"¹ and to "grant *** an adjusted standard for persons who
can justify such an adjustment"². More generally, the Board's
responsibility in this matter is based on the system of checks
and balances integral to Illinois environmental governance: the
Board is charged with the rulemaking and principal adjudicatory
functions, and the Agency is responsible for carrying out the
principal administrative duties.

Based upon the record before it and upon review of the
factors involved in the consideration of adjusted standards, the

¹ Act at Section 5(b).

² Act at Section 28.1(a).

Board finds that the joint petitioners have demonstrated that grant of an adjusted standard in the instant matter is warranted. The adjusted standard accordingly will be granted.

ADJUSTED STANDARD PROCEDURE

The Act at Section 28.1 provides that a petitioner may request, and the Board may impose, an environmental standard that is: (a) applicable solely to the petitioner, and (b) different from the standard that would otherwise apply to the petitioner as the consequence of the operation of a rule of general applicability. Such a standard is called an adjusted standard. The general procedures that govern an adjusted standard proceeding are found at Section 28.1 of the Act and within the Board's procedural rules at 35 Ill. Adm. Code Part 106.

Where, as here, the regulation of general applicability does not specify a level of justification required for a petitioner to qualify for an adjusted standard, the Act at Section 28.1(c) specifies four demonstrations that must be made by a successful petitioner:

- 1) Factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to that petitioner;
- 2) The existence of those factor justifies an adjusted standard;
- 3) The requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and
- 4) The adjusted standard is consistent with any applicable federal law.

PROCEDURAL BACKGROUND

This matter in based on mandates of the Clean Air Act designed to reduce ozone in the lower atmosphere through the control of VOM emissions. Among these mandates is the required application of reasonably available control technology (RACT)³ to certain VOM emission sources, such as operated by Douglas Furniture. The Illinois regulations that address the application

³ RACT regulations developed for the Chicago ozone non-attainment area occur at 35 Ill. Adm. Code 218.

of RACT within the Chicago area, and which are the subject of the instant petition, are found at 35 Ill. Adm. Code 218.

Among the Chicago area RACT regulations are rules applicable to coating operations, as found at 35 Ill. Adm. Code 218.Subpart F. The coating operation regulation at issue is at Section 218.204(g).

Douglas Furniture filed the instant petition on March 9, 1993. By order of April 22, 1993 the Board accepted the petition for hearing. In the same order the Board directed Douglas Furniture to address certain matters pertaining to the past and future search for compliant coatings.

Douglas Furniture originally filed as sole petitioner in this matter. However, on August 3, 1993 the Agency filed a motion, in which Douglas Furniture concurred, requesting that it be joined as a petitioner. That motion was granted by Board order of August 5, 1993. The presence of the Agency as joint petitioner is additionally reflected in the caption of today's opinion and order.

Hearing was held in Bedford Park on August 9, 1993 before hearing officer Todd Parkhurst. Douglas Furniture presented witnesses Dr. Kenneth Yen Fong and Mr. Joseph Prestia. No members of the public attended the hearing.

FACILITY/OPERATIONS DESCRIPTION

Douglas Furniture's facility is located in Bedford Park, Cook County, Illinois. The facility is engaged in the manufacture of both wood and metal furniture. Approximately 450 workers are employed at the facility.

The Bedford Park facility has a number of permitted VOM emission sources. Douglas Furniture observes that the aggregate allowable VOM emissions for the Bedford Park facility in 1992 were approximately 110 tons, whereas actual emissions were 52.7 tons. (Petition at p. 9.) VOM emission sources include a permitted metal furniture coating operation, a permitted wood furniture coating line, a vacuum barrel distillation system used to reclaim wash solvents, and various miscellaneous sources that are collectively permitted. (Petition at p. 5.) Only the metal furniture operation is the subject of the instant adjusted standard.

The metal furniture operation consists of a two-stage metal wash tunnel, two-turbine-driven electrostatic disk spraybooths, a hand-operated spraybooth, baking oven, and cooling-drying tunnel/quality control station. (*Id.*) The principal coatings are applied in the "front portion" spraybooths; touch-up coatings are applied in the cooling-drying tunnel/quality control

operation⁴. Touch-up coatings constitute approximately three percent of the coatings used in the metal coating operation. (Tr. at 44.) Only the touch-up coatings are the subject of the instant adjusted standard.

The purpose of the touch-up operation is to coat small areas of product that escaped coating in the spraybooth operation, thereby maintaining overall coating quality and saving the entire part from having to go back through "front portion" coating operation. (Tr. at 57.) The touch-up coatings must have a high-gloss enamel finish that matches the "front portion" baked-on coatings. (Tr. at 64.) The coatings also must be available in the colors matching the primary coatings. (Tr. at 71.)

At the time the petition in this matter was filed, Douglas Furniture applied its touch-up coatings using coatings contained in aerosol spray cans. (Tr. at 6.) Douglas Furniture now mostly uses a cup gun application system (Tr. at 71-72), which produces lower VOM emissions both because the cup gun uses an air rather than a VOM propellant and because the coatings may be applied more accurately and hence in lesser volume (Tr. at 50). Nevertheless, Douglas Furniture is still not able to obtain or use touch-up coatings that meet the 3.0 lb/gal VOM limit.

Emissions from the touch-up operation in excess of those that would be produced with use of 3.0 lb/gal coatings are approximately 924 pounds per year, or 3.5 pounds per day. (Petition at p. 9; Tr. at 41.) These excess emissions are not expected to vary significantly year-to-year. (Tr. at 53.)

Douglas Furniture contends that the touch-up coating operation at its Bedford Park facility presents several differences from the factors considered by the Board in adopting the rule of general applicability. Among these are the troublesome properties of high-solids coatings applied to intricate metal furniture components, and the special requirements associated with touch-up coatings. (Petition at p. 14-16.)

⁴ There is apparently dispute between the joint petitioners as to whether the metal furniture coating operation comprises one or two coatings lines for the purposes of compliance with Section 218.205. Douglas Furniture maintains that the operation constitutes a single coating line (Petition at 3, 9; Tr. at 9); the Agency apparently contends that the touch-up operation constitutes a coating line distinct from that of the "front portion" operations (Tr. at 8). The joint petitioners do not request that the Board resolve this dispute, and the Board does not today address it.

COMPLIANCE EFFORTS

Douglas Furniture has undertaken various efforts to reduce VOM emissions from the metal furniture operation, including both the "front portion" operation and the touch-up operation. The "front portion" operation is now in full compliance with the VOM limitations; maximum VOM contents for coatings used there range from 2.2 to 2.9 lb/gal (Tr. at 44).

Efforts to reduce VOM emissions from the touch-up operation have included reducing the need for touch-up by improving the quality of the "front portion" coating application. (Tr. at 33, 57-70.)

Efforts to reduce VOM emissions from the touch-up operation have also included the aforementioned change from coating using canned aerosol sprays to a cup gun operation. VOM content of the aerosol sprays were 5.8 lbs/gal; VOM content of the cup gun coatings are between 4.6 and 5.0 lbs/gal. (Tr. at 43-44.) The next effect of the lower VOM content and the use of lesser volumes of coatings with the cup gun has caused the overall VOM emissions from the touch-up operation to decrease by 75 percent. (Tr. at 43.)

Douglas Furniture has also contacted various coating manufacturers in search of suitable compliant coatings. (Tr. at 34-36.). Based on this survey, Douglas Furniture observes that it is unaware of any suitable touch-up coatings that meet the 3.0 lb/gal limit. (Petition at p. 10-11.

Douglas Furniture has further conducted a study of controlling touch-up operation emissions through the use of add-on controls. To control the approximately one-ton of excess emissions from the touch-up operation was estimated to require controls costing approximately \$250,000 to \$350,000 and having an annual operation cost of \$80,000 to \$150,000. (Petition at p. 12.)

Based on its various compliance analyses and efforts, Douglas Furniture contends that there is no reasonably available or economically feasible method to comply with the VOM limitations of Section 218.204(g). Douglas Furniture further contends, and the Agency agrees, that the standard as proposed within the instant adjusted standard constitutes the true RACT for the Douglas Furniture touch-up coating operation.

For its part, the Agency also adds that it believes that Douglas Furniture has undertaken substantial efforts to find feasible alternatives for its touch-up operations (Tr. at 86-87), and that Douglas Furniture in so doing has justified its need for and the appropriateness of granting the adjusted standard (Tr. at 18.)

HEALTH AND ENVIRONMENTAL EFFECTS

Joint petitioners contend that grant of the requested adjusted standard would not produce health or environmental effects any more adverse than those considered by the Board in adopting the 3.0 lb/gal rule of general applicability. (Tr. at 10.) The health and environmental effects considered in the general rule are those proposed for compliance with RACT; since the adjusted standard is RACT, the environmental consequences of the adjusted standard are the same as those considered for the rule of general applicability.

Joint petitioners further contend that any impact of the difference between the general rule and the adjusted standard is de minimis, and can have little or no adverse environmental impact. Douglas Furniture observes (Petition at p. 14), and the Agency concurs (Tr. at 18), that the VOM emissions at issue are very small with respect to the VOM loadings in the Chicago area and even in the Bedford Park and surrounding heavily industrialized southwest Chicago area.

CONSISTENCY WITH FEDERAL LAW

Joint petitioners observe their request for a facility-specific SIP/FIP revision is clearly contemplated by the federal rules at 40 CFR 52.741(e). (Petition at p. 17.)

CONDITIONS

Joint petitioners request that the grant of adjusted standard be subject to certain conditions relating to the quantity of emissions and coating use. (Petition at p. 12-13; Tr. at 19.) Those conditions are attached to today's grant of adjusted standard as conditions (1)-(3). The Board intends that these conditions be substantively the same as the conditions identified at hearing by the joint petitioners.

The Board has also added further conditions. Included in paragraph 2 of the Board's "more information" order of April 22, 1993, was the following request:

...the Board requests comments on the inclusion of additional language in the proposed adjusted standard that would provide a mechanism and timetable for contacting paint vendors, paint testing, notification of the Agency and the Board of the test results, and the expiration of the adjusted standard if a compliant paint is found. (see e.g. In the Matter of: Petition of DMI, Inc. for Site-Specific Air Regulations, 35 Ill. Adm. Code 215.215 (February 6, 1992), R91-9 at 5-6.)

At hearing Douglas Furniture accepted the DMI approach, indicating that it was willing to continue its efforts to find a compliant coating, and to report to the Agency every six months. (Tr. at 13, 77-78, 84.) Accordingly, conditions (4)-(8) are included as conditions to the grant of adjusted standard.

Noteworthy among these last conditions is the provision in Condition (8) that the adjusted standard expires when Douglas Furniture no longer needs an alternative RACT. It is the Agency's hope that a compliant coating(s) will be found and that therefore the need for an alternative RACT will in fact be removed. (Tr. at 18.) The Board shares this hope. The Board also notes that condition (8) provides that the adjusted standard expires two years after Douglas Furniture converts its touch-up operation to a compliant coating, rather than expiring concurrently with the fulfillment of Condition (7). This is to allow Douglas Furniture time to fully field-test the compliant touch-up coating in the marketplace. If problems arise, Douglas Furniture can report these to the Agency, without returning to the Board for another adjusted standard, which would otherwise be necessary.

Finally, the Board notes that joint petitioners at several places in the hearing record indicate support of a proposal to "include the adjusted standard within Section 218.204". (Tr. at 14, 19, 88.) An adjusted standard proceeding does not provide of bringing about a change in the text of a rule; that can only be done in a rulemaking proceeding. The Board believes that the joint petitioners' principal intent is to assure that it is only the VOM limitation at 218.204(g) for which adjusted standard is being given; other aspects of RACT, such as test methodologies and record-keeping would still apply. The Board intends likewise, and accordingly has given phrase to today's order that makes clear that only the emission limitation at 218.204(g) is subject to the standard adjustment.

CONCLUSION

Based upon its consideration of the record presented in this action, the Board finds that the joint petitioners have provided the justification required pursuant to Section 28.1 of the Act for an adjusted standard to be granted with conditions.

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

ORDER

A. Douglas Furniture of California (Douglas Furniture) is hereby granted an adjusted standard applicable to its facility located in Bedford Park, Illinois. Pursuant to this grant of

adjusted standard, the limitations of 35 Ill. Adm. Code 218.204(g) notwithstanding, Douglas Furniture shall comply instead with the following standards for the touch-up coating operation applied in the cooling tunnel of the metal furniture coating line:

- (1) Volatile organic material emissions for any touch-up coating may not exceed 6.0 lb/gal (0.72 kg/L) as delivered to the coating applicator, excluding water and any compounds specifically exempted from the definition of volatile organic material by Board regulation.
- (2) Total coating use of touch-up coatings may not exceed 70 gal/month and may not exceed 650 gal/year based on a 12-month rolling average.
- (3) Total volatile organic material emissions from the touch-up coating operation may not exceed 0.2 ton/month and may not exceed 2.0 ton/year based on a 12-month rolling average.

B. The following conditions also apply to this grant of adjusted standard:

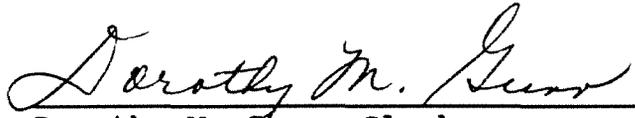
- (4) Douglas Furniture shall contact at least three (3) coating vendors each year in a continuing search for a compliant coating that can be used in its touch-up coating operation, including any coating vendors suggested by the Agency in writing delivered to Douglas Furniture by certified mail.
- (5) If any coating vendor provides Douglas Furniture with laboratory test results that demonstrate that Douglas Furniture may be able to use the vendor's coating in its touch-up operations as a substitute for the existing coating, Douglas Furniture shall conduct production tests on that coating.
- (6) Douglas Furniture shall submit a report to the Agency on or before each six-month anniversary of this grant of adjusted standard, during the full time when this adjusted standard is in effect, that includes a summary of Douglas Furniture's activities with respect to conditions (4) through 7, above.
- (7) If Douglas furniture locates a compliant coating that it can successfully use in its existing touch-up coating operation, and the net annual expense of using the compliant coating is not more than ten percent greater than the net annual expense incurred in the existing coating process, Douglas Furniture shall convert its present touch-up operation to the use of the compliant coating within 180 days after the final successful testing of such coating.

- (8) This adjusted standard shall expire two years after conversion to the touch-up coating complying with 35 Ill. Adm. Code 218.204(g).

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act, 415 ILCS 5/41 (1992), provides for appeal of final orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements. (See also 35 Ill. Adm. Code 101.246, Motions for Reconsideration.)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 4th day of November, 1993, by a vote of 6-0.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board