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BEFORE THE ILLINOIS POLLUTION CONTROL BOAPAN 2 2 2004

IN THE MATTER OF:)	STATE OF ILLINOIS Pollution Control Board
PETITION OF CROWNLINE BOATS, INC.)	AS O4-OVI
FOR AN ADJUSTED FROM)	(Adjusted Standard - Air)
35 ILL. ADM. CODE 215.301)	

NOTICE

TO: Dorothy Gunn, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601

Carol Sudman, Hearing Officer Illinois Pollution Control Board 1021 N. Grand Avenue East P.O. Box 19274 Springfield, Illinois 62794-9274

Dale Guariglia Bryan Cave One Metropolitan Square 211 North Broadway, Suite 3600 St. Louis, Missouri 63102-2750

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the <u>RECOMMENDATION OF THE ILLINOIS EPA AND AN APPEARANCE</u> of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

Date: January 20, 2004

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By:_

Charles E. Matoesian

Assistant Counsel

Division of Legal Counsel

1021 North Grand Avenue East P.O. Box 19276 Spring field, IL 62794-9276 217/782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER



JAN 2 2 2004

BEFORE THE ILLINOIS POLLUTION CONTROL BOAR STATE OF ILLINOIS Pollution Control Board

IN THE MATTER OF:)	•
PETITION OF CROWNLINE BOATS, INC.)	AS 04-001
FOR AN ADJUSTED STANDARD FROM	<u> </u>	(Adjusted Standard-Air)
35 ILL. ADM. CODE 215.301)	
)	

RECOMMENDATION OF THE ILLINOIS EPA

The Illinois Environmental Protection Agency ("Illinois EPA") hereby submits its recommendation in the above captioned matter pursuant to the regulations of the Pollution Control Board ("Board") at 35 Ill. Adm. Code Section 104.416. The Illinois EPA recommends that the Board **GRANT** the petition of Crownline Boats, Inc., subject to the terms and conditions contained in this recommendation. In support of this recommendation, the Illinois EPA states as follows:

BACKGROUND

1. Crownline, Inc. ("Crownline") filed its Petition for Adjusted Standard ("Petition") on December 4, 2003, pursuant to Section 28.1 of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/28.1, and the regulations of the Board at 35 Ill. Adm. Code Section 104.402. The Petition requests that the Board grant Crownline an adjusted standard from 35 Ill. Adm. Code Section 215.301, the Use of Organic Material Rule, better known as the "8 lb/hr Rule" as it applies to the emissions of volatile organic material ("VOM") from Crownline's West Frankfort, Illinois, boat manufacturing facility. The 8 lb/hr Rule states:

No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission source, except as provided in Sections 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of this Subpart shall apply only to photochemically reactive material.

- 2. The Petition for Adjusted Standard stems from Crownline's request to use averaging to comply with the 8 lb/hr Rule for VOM as set forth in its application for Clean Air Act Permit Program ("CAAPP") permit (no. 96030137) received by the Illinois EPA on March 7, 1996. The request was followed by several meetings between the parties during which Crownline presented evidence that it could not reasonably comply with the 8 lb/hr Rule on a strict hourly basis, and that emissions averaging would result in no measurable negative impact on ambient air quality. (Pet. App. at 1). After reviewing the evidence, the Illinois EPA encouraged Crownline to file a Petition for an Adjusted Standard. This Petition covers the Crownline gelcoat and lamination areas, plus other boat manufacturing activities at the source.
- 3. On January 5, 2004, Crownline filed a Proof of Publication of Notice with the Board for this Petition. The notice appeared in the *West Frankfort Daily American* on December 10, 17, and 24, 2003.
- 4. Pursuant to 35 Ill. Adm. Code Section 104.416, the Illinois EPA is required to file a response to a Petition for Adjusted Standard within 45 days of filing.

DESCRIPTION OF THE FACILITY

- 5. The Crownline facility is located in West Frankfort, Hancock County, Illinois. (Pet. App. at 4). Crownline employs approximately 500-600 people in its facility and produces approximately 15 to 20 fiberglass boats per day. <u>Id</u>. The Illinois EPA accepts Crownline's description of its facility and process and incorporates by reference Section II. D of the current Petition.
- 6. A new MACT standard for boat manufacturers becomes effective on August 23, 2004. 40 CFR Part 63, Subpart VVVV. Crownline is already in compliance with this new MACT standard. (Pet. App. at 6). To comply with the MACT standard, Crownline replaced its air atomized guns with

flow-coat guns in its lamination operation, introduced a lower Hazardous Air Pollutant ("HAP") content resin (35% as compared to 42%), and switched to a gelcoat with a HAP content of 33.4%.

COMPLIANCE ALTERNATIVES

- 7. Crownline asserts in its Petition that its operations were not contemplated by the 8lb/hr Rule, which was established in 1971. <u>Id</u>. at 11, 12. Crownline states that the "factors relating to boat building" are "significantly different from most manufacturing operations which emit organic material," and "emission data from boat building was not even available to the Board until after 1991." <u>Id</u>. Moreover, fiberglass boat production is a batch-type process involving the application of layers of "skins" to a boat frame. <u>Id</u>. Because materials are not applied continuously, but rather in steps, VOM emissions are not constant and even. Crownline states that emission controls are more economically feasible where processes are continuous. <u>Id</u>.
- 8. Finally, Crownline asserts the requirements of OSHA's worker protection regulation at 29 CFR 1910 prevent compliance with the 8 lb/hr Rule. <u>Id</u>. at 13. OSHA rules require workplaces that emit styrene to "maintain an in-plant work area atmosphere...of less than 100 ppm." <u>Id</u>. Crownline has thus installed a ventilation system "that exhausts approximately 654,000 cubic feet of plant air every minute." <u>Id</u>. Because of the enormous rate of air transfer, Crownline asserts that add-on emission controls are fiscally impractical. <u>Id</u>. Crownline further asserts that the Board in 1971 could not have possibly anticipated the promulgation of the OSHA rules. <u>Id</u>.
- 9. Crownline obtained the services of Advance Environmental Associates, LLC ("AEA"), to assess the technical and economic feasibility of compliance alternatives. <u>Id</u>. at 6. The alternatives considered were "(1) reducing VOM content in production materials; (2) using alternative operating procedures and methods; and (3) installing end-of-the-pipe emission control technologies." <u>Id</u>.

Crownline claims that other than end-of-the-pipe emission controls, "many of the alternatives investigated would not allow it to comply with the 8 lb/hr Rule on a strict hourly basis." <u>Id</u>. Further, Crownline declares that it could not identify any compliance alternatives to reduce VOM emissions from the use of adhesives, laquer and caulks. <u>Id</u>.

- 10. Crownline contends that end-of-the-pipe emission controls are not economically feasible. Crownline estimates up-front capital costs at \$7 to \$14 million with annualized costs ranging from \$4.5 million to \$6 million, and a cost per ton of VOM removed of \$35,000 to \$58,000. Id. at 8. Crownline explains these figures in Section 4.3 of the *Technical Document in Support of a Petition By Crownline Boats, Inc. for an Adjusted Standard* ("*Technical Document*") appended to the Petition. Id. In Crownline's estimation, the main reason for these high costs is the ventilation system required by the OSHA regulations. Id. Lastly, as Crownline notes, when developing the MACT standard, one of the factors the United States Environmental Protection Agency ("USEPA") considered was that with one partial exception, no boat manufacturer uses tailstack emission control technologies to reduce HAP emissions. Id. at 7.
- 11. Crownline also investigated alternative production methods which could result in reduced VOM emissions. These included "open moulding" methods such as using "rollers for resin application, pre-preg materials, in-house resin impregnation, and vacuum bagging." Id. at 6, 7. "Closed moulding" methods included "resin transfer molding, resin infusion, and the patented Virtual Engineered Composites ("VEC") technology." Id. at 7. Crownline states that these alternatives were all found to be technologically or economically impractical and explains its reasoning in Section 4.2 of the *Technical Document*. Id.
- 12. Crownline has already reduced VOM concentration in its production materials in order to

comply with the forthcoming MACT standard. <u>Id</u>. Compliance with the MACT does not yield compliance with the 8 lb/hr Rule. Crownline states that reduction of styrene in the resins, beyond that required by the MACT, is not technically feasible while maintaining product integrity. <u>Id</u>.

PROPOSED ADJUSTED STANDARD

- 13. Crownline has requested an Adjusted Standard from the Board's air pollution control requirements found at 35 Ill. Adm. Code Section 215.301, insofar as that regulation applies to the VOM emissions from Crownline's production facility in West Frankfort, Illinois. The Illinois EPA recommends that the Board **GRANT** Crownline's petition, and requests that the Board allow Crownline to operate its boat production facility so long as it complies with the following conditions:
- a. Crownline shall operate in full compliance with the National Emission Standards for Hazardous Air Pollutants for New and Existing Boat Manufacturing Facilities, set forth at 40 CFR Section 63 Subpart VVVV, as may be amended in the future.
- b. Operation in full compliance with the National Emission Standard for Hazardous Air Pollutants for New and Existing Boat Manufacturing Facilities, set forth at 40 CFR Section 63 Subpart VVVV, as may be amended in the future, shall be in lieu of compliance with the 8 lb/hr Rule found at 35 Ill. Adm. Code Section 215.301.
- c. Crownline shall continue to investigate boat production methods with a reduced VOM content and, where practicable, shall substitute current coatings with lower VOM content coatings as long as such substitution does not result in a net increase in VOM emissions. Crownline shall be required to do any test which the Illinois EPA specifically recommends that they do. An annual report summarizing the activities and results of these investigatory efforts shall be prepared by Crownline and submitted to the Illinois EPA Bureau of Air, Compliance and Enforcement

Section.

- d. The relief granted in this proceeding shall be limited to the emission activities at the Crownline West Frankfort facility as of the date of this filing.
- e. Crownline shall operate in full compliance with the Clean Air Act, its CAAPP, the Illinois Environmental Protection Act and other applicable regulations not otherwise discussed herein.

ENVIRONMENTAL IMPACT

- 14. Crownline estimates that at its current production rate of 15 to 20 boats per day, its facility will emit approximately 200 tons/yr of VOM if it complies with the forthcoming MACT. <u>Id</u>. at 10. Compliance with the 8 lb/hr Rule would yield an expected 144 tons of VOM based upon estimated 2003 production data. <u>Id</u>. Compliance with neither the MACT nor the 8 lb/hr Rule would yield an estimated 245 tons/yr of VOM emissions for similar production figures. <u>Id</u>.
- 15. AEA prepared an Ambient Air Quality Impact Analysis which estimated Crownline's impact on ozone formation in south central Illinois. <u>Id</u>. at 9. Discussed in detail in Section 5 of the Technical Document, the analysis showed that the potential impact from Cromwell's operations would not cause an ozone concentration at the nearest monitor (Dale, Illinois-25 miles distant) in excess of the NAAQS of 0.12 ppm. <u>Id</u>. at 9, 10. The Illinois EPA does not dispute this analysis.
- 16. In addition, Crownline presents a valid point when it states that if it could somehow capture VOM emissions and release them uniformly, rather than in bursts, it could comply with the 8 lb/hr Rule while not reducing emissions at all. <u>Id</u>. at 10.
- 17. Crownline asserts that no cross-media impact is expected from the granting of the adjusted standard. <u>Id</u>. at 11.

18. Considered together, the batch process nature of the business which produces VOM emissions in spurts, the fact that the Section 215.301 rule did not anticipate an operation like Crownline's, compliance with the forthcoming MACT standard a year early, and the high cost of add-on control technology due in part to OSHA requirements, favor an adjusted standard for Crownline.

STANDARD OF REVIEW

- 19. Section 28.1 of the Act states that the Board may grant individual adjusted standards from rules of general applicability whenever the Board determines that an applicant can justify an adjustment. In adopting a rule of general applicability, the Board may specify the level of justification required of a petitioner for an adjusted standard. If a rule of general applicability does not contain a level of justification that the petitioner must meet to obtain an adjusted standard, the requirements of Section 28.1(c) of the Act apply. Section 28.1(c) states that the Board may grant individual adjusted standards whenever the Board determines that:
 - (1) Factors relating to that petitioner are substantially and sufficiently different from the factors relied upon by the Board in adopting the general regulations applicable to that petitioner;
 - (2) The existence of those factors justifies an adjusted standard;
 - (3) The requested standard will not result in environmental or health effects substantially and sufficiently 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.
- 20. The regulation of general applicability from which Crownline seeks an adjusted standard, 35 Ill. Adm. Code Section 215.301, does not specify a level of justification that Crownline must satisfy to obtain an adjusted standard. Therefore, Crownline must satisfy the level of justification set forth

in Section 28.1(c) of the Act. As summarized below, the requested adjusted standard for Crownline's boat production operations is justified.

21. The Illinois EPA agrees with Crownline's analysis of the justification for its proposed Adjusted Standard as set forth in Section II.H of the Petition, and hereby incorporates that section by reference. The 8 lb/hr Rule at Section 215.301 simply did not anticipate the type of operation Crownline maintains. Unlike many other manufacturers, Crownline emits VOM in spurts as it applies a "skin" to the boat frame. What is more, reasonable alternative emission control technologies either do not result in compliance with the 8 lb/hr Rule or are prohibitively expensive due in no small part to the OSHA requirement for continual ventilation.

CONSISTENCY WITH FEDERAL LAW

22. The Board may grant the proposed adjusted standard consistent with federal law under Section 110 of the Clean Air Act, 42 U.S.C. Section 7410, which grants the individual states the authority to promulgate a plan for the implementation, maintenance, and enforcement of air quality standards, subject to approval by USEPA. Pursuant to federal law, states also have the authority to revise such a plan, subject to USEPA approval. By following its adjusted standard procedure with respect to the Board's federally authorized and approved air emission regulations, the Board is exercising the authority granted to the states through Section 110 of the Clean Air Act. If the requested adjusted standard is adopted by the Board, Illinois EPA has the authority and will submit the adjusted standard to USEPA as a SIP revision, thus complying with federal law.

HEARING

23. Crownline has requested a hearing before the Pollution Control Board.

WHEREFORE, the Illinois EPA recommends that Crownline's Petition for Adjusted Standard be **GRANTED**, and an order be entered adopting the adjusted standard with the specific language presented in this Recommendation.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Dated:

Charles E. Matoesian Assistant Counsel

Division of Legal Counsel

1020 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 627949276 (217)782-5544 (217)782-9807 Facsimile



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IN THE MATTER OF:)	
)	21.001
PETITION OF CROWNLINE BOATS, INC.)	AS 04-001
FOR AN ADJUSTED STANDARD FROM)	(Adjusted Standard – Air)
35 ILL. ADM. CODE 215.301)	

APPEARANCE

I hereby file my Appearance in this proceeding, on behalf of the Illinois Environmental

Protection Agency.

Charles E. Matoesian

Assistant Counsel

Division of Legal Counsel

DATED: January 20, 2004

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276 217/782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

STATE OF ILLINOIS)
) SS.
COUNTY OF SANGAMON)

PROOF OF SERVICE

I, the undersigned, on oath state that I have served the attached Recommendation of the Illinois EPA and an Appearance upon the person to whom it is directed, by placing it in an envelope addressed to:

TO: Dorothy Gunn, Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601

Carol Sudman, Hearing Officer Illinois Pollution Control Board 1021 North Grand Avenue, East P.O. Box 19276 Springfield, Illinois 62794-9276

Cynthia Simo

Dale Guariglia
One Metropolitan Square
211 North Broadway, Suite 3600
St. Louis Missouri 63102-2750

and mailing it by First Class Mail from Springfield, Illinois on January 20, 2004, with sufficient postage affixed.

SUBSCRIBED AND SWORN TO BEFORE ME

this 20th day of January, 2004

Notary Public

OFFICIAL SEAL
BRENDA BOEHNER
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRE. 11-14-2005