

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PETITION OF CROMWELL-PHOENIX, INC.)	AS 03-05
FOR AN ADJUSTED STANDARD FROM)	(Adjusted Standard - Air)
35 ILL. ADM. CODE 218.204(c))	

NOTICE

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

Bradley Halloran, Hearing Officer
 Illinois Pollution Control Board
 James R. Thompson Center
 100 West Randolph Street, Suite 11-500
 Chicago, Illinois 60601

Eric Boyd
 Lorena Neal
 Seyfarth Shaw
 55 E. Monroe Street, Suite 4200
 Chicago, Illinois 60603-5803

PLEASE TAKE NOTICE that I have today filed with the Office of the Pollution Control Board the RECOMMENDATION of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

Date: July 14, 2003

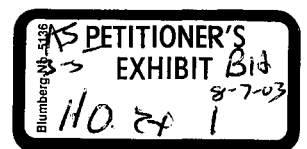
ILLINOIS ENVIRONMENTAL
 PROTECTION AGENCY

By: _____

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THIS FILING IS SUBMITTED ON
 RECYCLED PAPER



BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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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 Cromwell-Phoenix, Inc., subject to the terms and conditions contained in this recommendation. In support of this recommendation, the Illinois EPA states as follows:

BACKGROUND

1. Cromwell-Phoenix, Inc. ("Cromwell") filed its Petition for Adjusted Standard ("Petition") on May 29, 2003, pursuant to section 28.1 of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/28.1, and the regulations of the Board under 35 Ill. Adm. Code Subpart D Section 104.402. The Petition requested that the Board grant Cromwell an adjusted standard from the volatile organic material ("VOM") emission limitation of 35 Ill. Adm. Code Part 218, Subpart F, Section 218.204(c), as it applies to the VOM emissions from Cromwell's corrosion inhibiting ("CI") packaging materials production facility in Alsip, Cook County, Illinois.
2. This Petition for an Adjusted Standard results from Violation Notice A-2001-00265 issued by the Illinois Environmental Protection Agency ("Illinois EPA") on November 20, 2001, and follows an inspection of the Alsip facility. One of the allegations in the Violation Notice was that

Cromwell failed to demonstrate compliance with the reasonably available control technology ("RACT") emission limitation set forth in 35 Ill. Adm. Code 218, Subpart F, concerning paper coating operations. Following several telephone conferences with representatives of the Illinois EPA, Cromwell submitted a Compliance Commitment Agreement ("CCA") on February 19, 2002. The CCA stated that the VOM in Cromwell's products do more than act as a vehicle for active ingredients. Rather, the VOM act as a paper softener, improving paper folding qualities and aid in the transfer of corrosion inhibitor compounds to the wrapped metal parts over a length of time. Thus, the VOM are actually designed to stay in the paper product. Cromwell further notified the Illinois EPA that while it was trying to find alternative coating materials which would comply with RACT, a reformulation might impair product quality and actually increase VOM emissions. The increase would be due to the need for dryers to remove excess water from the paper.

3. The Illinois EPA responded with a CCA rejection on March 7, 2002, and a Notice of Intent to Pursue Legal Action on March 19, 2002. Further negotiations ensued, with the result that Mr. David E. Bloomberg, a coatings specialist with the Illinois EPA's Air Quality Planning Section, visited the Cromwell facility on May 9, 2002. Based upon Mr. Bloomberg's findings, and subsequent discussions between Cromwell and the Illinois EPA, the parties agreed that a petition for adjusted standard was warranted.

4. Cromwell filed an application for a Clean Air Act-Permit Program ("CAAPP") permit with the Illinois EPA on March 29, 2002. The application asserts that Cromwell is a minor source under the CAAPP and Cromwell seeks a lifetime operating permit. The CAAPP permit application is currently under consideration.

5. On June 10, 2003, Cromwell filed a Proof of Publication of Notice with the Board for this

adjusted standard petition. The notice appeared in the *Chicago Tribune* on May 31, 2003. On June 19, 2003, the Board found that Cromwell's notice met the requirements of Section 28.1 of the Act and of 35 Ill. Adm. Code Section 104.408. The Board further found that the Cromwell petition met the requirements of 35 Ill. Adm. Code Section 104.406 and accepted the matter for hearing.

6. 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

7. Available information indicates the Cromwell facility is located in Alsip, Cook County, Illinois. (Pet. App. at 4). Cromwell is an Illinois corporation and employs 31 people in its 98,000 square foot building. *Id.* The Cromwell facility emits approximately five to six tons of VOM per year. *Id.* at 14. Of this, less than five tons come from CI production operations. *Id.* The Illinois EPA accepts Cromwell's description of its CI packaging materials production facility and process description and incorporates by reference Section D of the current Petition.

COMPLIANCE ALTERNATIVES

8. Cromwell asserts in its Petition that its operations were not contemplated by the regulations at 35 Ill. Adm. Code, Part 218, Subpart F. (Pet. Application at 8). More specifically, unlike conventional coating operations where VOM solvents are used as carriers of pigments and other solids, and the VOM solvents are intended to be evaporated, the VOM components in Cromwell's CI solutions are intended to remain in the CI packaging products in order to perform their essential CI functions. (*Id.* at 8, 9). Accordingly, Cromwell, by design, seeks to retain the VOM components in the product. *Id.* at 9. A high molecular weight, low volatility VOM was therefore selected by Cromwell to enhance retention in the product. *Id.*

9. The Paper Coating rules found at 35 Ill. Adm. Code 218, Subpart F, were predicated upon the belief that solvent acts as a carrier and evaporates after the paper has been coated and the associated resins or pigments impregnated within the paper. Cromwell uses liquid organic components to impregnate the paper, but these are components intended to remain in the paper because of their CI effect. They are thus an integral part of the product. (Pet. App. 9 - 10). Cromwell asserts that its process retains over 95% of the organic liquids applied, whereas in conventional coating operations virtually all solvents are driven off from the product (96% or more). (Pet. App. at 10). Accordingly, less than 10% of Cromwell's products require the use of infra-red ("IR") dryers. (Pet. App. at 6). IR drying is only needed when the product contains excess water which needs to be driven off. Id.

10. An alternative to VOM use would involve the use of extra water in the CI solution. Cromwell claims that to have excess water present in its CI inhibiting products is undesirable. Id. Excess water causes the fibers of the paper products to expand and become wrinkled and welted. Id. This makes the product difficult to handle and prevents the paper from getting a good wrap on the metal items being protected by the CI paper. Id. at 11. Cromwell asserts that increased water usage on the CI paper product would have a negative impact on the economic viability of the CI production operations. Id. As such, if additional water were used to replace some of the VOM present in the CI solution, additional heated drying operations would be necessary to drive off the excess water. Id.

11. Cromwell asserts that this would cause additional VOM emissions as the VOM components of the CI solution would evaporate along with the water. Id. When coupled with the energy requirements of the dryers, reformulated CI solution would result in higher net emissions of VOM and reduce or eliminate any environmental benefits from reduced VOM usage. Id.

12. Cromwell obtained the services of a consultant, ERM, Inc., to assess the technical and

economic feasibility of installing add-on control devices. (Pet. App. at 12). The consultant determined that the feasible control options were oxidation and a combination adsorption/oxidation system. Id.

13. Cromwell asserts that the RACT analysis of ERM, Inc. (Pet. Exhibit A) found the cost of installing add-on oxidation or adsorption/oxidation controls at Cromwell to be excessive. Id. The analysis found that the least expensive option would cost approximately \$25,000 per ton of VOM controlled. (Pet. App. Exhibit A at 9). Compliance demonstrations would add to this cost. Id. at 12. The Illinois EPA finds this analysis acceptable.

PROPOSED ADJUSTED STANDARD

14. Cromwell has requested an adjusted standard from the Board's air pollution control requirements found at 35 Ill. Adm. Code Subpart F, Section 218.204(c), insofar as that regulation applies to the VOM emissions from Cromwell's CI packaging materials production facility in Alsip, Cook County, Illinois. The Illinois EPA recommends that the Board **GRANT** Cromwell's petition, and requests that the Board allow Cromwell to operate its CI packaging materials production operations so long as it complies with the following conditions:

1. The total actual VOM emissions from the entire Cromwell Alsip facility shall not exceed 25 tons per year.
2. The Versil Pak wax laminating coatings shall continue to meet the applicable VOM content limitations under 35 Ill. Adm. Code Part 218, Subpart F.
3. The web fed and sheet fed CI coating and printing lines shall use only CI solutions which, as-applied, do not exceed 8.3 lbs. VOM per gallon, less water.
4. Cromwell shall operate in full compliance with all other applicable provisions of 35

Ill. Adm. Code Part 218, including but not limited to, Subpart F.

5. Cromwell shall continue to investigate CI coatings with a reduced VOM content and, where practicable, shall substitute current coatings with lower VOM content as long as such substitution does not result in a net increase in VOM emissions. An annual report summarizing the activities and results of these investigatory efforts shall be prepared by Cromwell and submitted to the Illinois EPA Bureau of Air, Compliance and Enforcement Section.

6. The relief granted in this proceeding shall be limited to the equipment and emission sources at the Cromwell Alsip facility as of July 14, 2003, and which were identified in the CAAPP application as filed on March 29, 2002.

7. Cromwell shall operate in full compliance with the Clean Air Act, Illinois Environmental Protection Act and other applicable regulations not otherwise discussed herein.

8. Cromwell shall continue to report all annual emissions to the Illinois EPA commensurate with the requirements of 35 Ill. Adm. Code Part 254.

ENVIRONMENTAL IMPACT

15. The intent of the regulations promulgated under 35 Ill. Adm. Code Part 218 is to implement RACT for VOM sources in the Chicago ozone nonattainment area.

16. The Cromwell facility emits approximately five to six tons of VOM per year. *Id.* at 14. Of this, less than five tons come from CI production operations. *Id.*

17. The genesis of this adjusted standard is the unique circumstances of the Cromwell CI operations. Unlike the typical paper coating facility, Cromwell wants to retain the VOM in the paper product. This unusual situation means that the typical VOM reduction techniques would lead to greater overall VOM emissions. Cromwell maintains, and the Illinois EPA agrees, that adding water

to the CI solution would increase VOM emissions from this process due to the subsequent need to drive off the added water and the concomitant evaporation of VOM. Cromwell further maintains that its analysis identified two forms of control options, oxidation and a combination carbon adsorption/oxidation system, which although technically feasible, would result in high installation costs and high costs per ton of VOM reduced. Id. at 12.

18. Overall, it is the confluence of these unique circumstances that allows the Agency to recommend that the Board grant this adjusted standard. Considered together, the low VOM emissions, the fact that the Subpart F rules did not anticipate an operation like Cromwell's, the increased VOM emissions from a lower VOM CI solution, and the high cost of add-on control technology, favor an adjusted standard for Cromwell.

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 Cromwell seeks an adjusted standard, 35 Ill. Adm. Code §218.204(c), does not specify a level of justification that Cromwell must satisfy to obtain an adjusted standard. Therefore, Cromwell must satisfy the level of justification set forth in Section 28.1(c) of the Act. As summarized below, the requested adjusted standard for Cromwell's corrosion inhibiting paper operations is justified.

21. The Illinois EPA agrees with Cromwell's analysis of the justification for its proposed adjusted standard as set forth in Section H of the Petition, and hereby incorporates this section by reference. The Paper Coating Rules at Section 218.204(c) simply did not anticipate the type of operation Cromwell maintains. Unlike most manufacturers, Cromwell needs the VOM to remain in the paper product. Thus, it is in Cromwell's interest to keep VOM emissions low. In addition, currently identified alternatives to the VOM solution such as a reduced VOM content would most likely increase VOM emissions. This results from the presence of additional water, which cannot remain in the paper product. Because the water must be eliminated, or driven off, additional dryers would need to be installed. Unfortunately, driving off the water would inadvertently drive off additional VOM. (Pet. App. at 15). What is more, the identified emission control technology, namely oxidation and a combination carbon adsorption/oxidation-system, involve high installation and VOM reduction costs. Such costs exceed the requirements of RACT.

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. §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. Cromwell has requested a hearing before the Pollution Control Board.

WHEREFORE, the Illinois EPA recommends that Cromwell'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

By: 

Charles E. Matoesian
Assistant Counsel
Division of Legal Counsel

Dated: July 14, 2003

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STATE OF ILLINOIS)
) SS.
COUNTY OF SANGAMON)

PROOF OF SERVICE

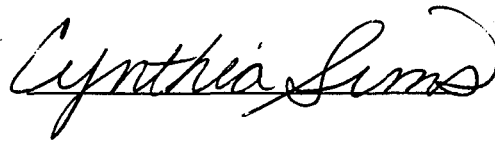
I, the undersigned, on oath state that I have served the attached Recommendation upon the person to whom it is directed, by placing it in an envelope addressed to:

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

Bradley Halloran, Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60661

Eric Boyd
Lorena Neal
Seyfarth Shaw
55 E. Monroe Street, Suite 4200
Chicago, Illinois 60603-5803

and mailing it by First Class Mail from Springfield, Illinois on July 14, 2003, with sufficient postage affixed.



SUBSCRIBED AND SWORN TO BEFORE ME

this 14th day of July, 2003

Stephen C. Ewert
Notary Public

