

ILLINOIS POLLUTION CONTROL BOARD
January 5, 1989

THE EUREKA COMPANY,)
)
 Petitioner,)
)
 v.) PCB 88-85
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

GREGORY D. COLLINS, COLLINS & FLYNN, APPEARED ON BEHALF OF THE PETITIONER, THE EUREKA COMPANY; AND

JAMES J. O'DONNELL, APPEARED ON BEHALF OF THE RESPONDENT, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

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

This matter comes before the Board upon a request for variance initially filed on May 10, 1988, and amended August 17, 1988, by The Eureka Company (Eureka). Eureka requests variance from 35 Ill. Adm. Code 215.204(j)(5) which regulates volatile organic compound (VOC) emissions for manufacturing plants with miscellaneous metal parts coating processes.

On November 7, 1986, the Agency issued two permits for VOC emissions from Eureka's two paint shops. These permits terminated on October 22, 1991 and included a compliance program to be achieved by December 31, 1987. Eureka subsequently encountered difficulty in meeting compliance by that date and petitioned the Board for a five year variance on May 10, 1988. On May 19, 1988, the Board accepted Eureka's petition and set the matter for hearing but noted that the petition provided "indefinite plans for compliance without a particular time-table for ultimate compliance". (Board Order 88-85, May 19, 1988) On August 17, 1988, Eureka filed an amended petition which requested a 42 month variance and included a time-table with ultimate plans for compliance. The Agency's recommendation of August 25, 1988, was to grant the variance with the conditions contained in Eureka's amended petition. Hearing was held August 25, 1988; no members of the public were present.

The Facility

The Eureka plant is located in Bloomington, McLean County. The facility is located in an industrial, commercial and residential area and is zoned for "heavy industry". McLean County is an ozone attainment county and is not contiguous to a non-attainment county. Eureka employs an average of 1,200 employees in the manufacturing of vacuum cleaners at its Bloomington plant. (Pet. at 2)

VOC emissions come from two separate paint shops located in Eureka's Bloomington plant. In each shop (known as Department 31 and Department 32), miscellaneous metal parts are painted with solvent based alkyd baking enamel. (Pet. at 3) Each shop has four automatic electrostatic spray booths and two manual air spray booths. Paint from mixing rooms next to each shop is pumped through transfer lines into the shops. After the parts are coated, they flow into a baking oven to dry. (Pet. at 4)

Paint usage records, cited in Eureka's petition, indicate that Eureka used an average of 4,026 gallons of solvent based alkyd baking enamel per month from May through December, 1987. (Pet. at 4) Taking into account the 23 different colors used during those months, the average emission in pounds of VOC per gallon of paint was 4.87, in violation of the 3.0 lb/gal VOC emission limits under 35 Ill. Adm. Code 215.204(j)(5). Eureka and the Agency agree that the annualized VOC emissions from the plant are 117.6 tons, which is 45.13 tons of excess VOC emissions. (Pet. at 4, Agency Rec. at 4, R. at 92, 93) According to Eureka, ozone concentrations in their area have only exceeded the 0.125 ppm limit in one monitoring during the last three years and that was by 0.001 ppm. (Pet. at 5)*

Past Compliance Efforts

In 1980, Eureka began testing high-solids paints. However, Eureka suspended testing from late 1981 until February, 1985. Eureka provides two reasons for this suspension in its petition for variance: "the anticipated compliance date of December 31, 1982 was extended until the end of 1987, and due to the fact that it was thought that 'compliance' might not be required in attainment areas." (Pet. at 8)

In attempting to comply with 35 Ill. Adm. Code 215.204(j)(5), Eureka identified three possible options: 1) installation of a thermal incinerator as a control technology; 2) use of paints with a lower VOC content than the conventional paints in use at the time and 3) installation of a "bell" system to improve the use of high-solids paints, if chosen as the compliant coating. (Pet. at 25,26) Eureka rejected installation of thermal incinerators because the cost of installation and operation was beyond its financial means; the purchase price for each paint shop was estimated at \$1,365,000, plus an installation cost of \$175,000. The operational costs for each incinerator was estimated at \$49,580 per year. (Pet. at 25, Pet. Grp. Ex. 1) Additionally, Eureka asserts that there is some uncertainty whether the incinerators would be an effective method of compliance, given Eureka's particular exhaust design. Eureka asserts that the incinerator is most effective at a low exhaust air volume with high concentration of solvent vapor. In contrast, Eureka has a high exhaust air volume with a low concentration of solvent vapor. A study could be performed to ascertain an incinerator's potential effectiveness under those conditions for \$5,000, which would be credited towards purchase. (Pet. at 26) However, due to the overall costs, Eureka has

* Note: According to the Board's calculations, Eureka's annualized VOC emissions are in excess by 45.17 tons. Also, the ambient air quality standard for ozone is 0.12 ppm not 0.125 ppm (see 35 Ill. Adm. Code 243.125).

centered its compliance efforts primarily on the formulation of low VOC paints.

The bell system would not be used as control technology in order to directly reduce emissions but is used primarily to complement the use of high-solids paints. The bell system would replace Eureka's present spray gun system because it breaks the paint up into fine particles and produces a better "wrap" (edge coverage) when used with high-solids paints. Thus, the bell system increases the utility of high-solids paints by decreasing the amount of rejects produced and reduces the use of conventional paints with higher VOC content. Eureka has rejected installing the bell system presently due to cost concerns (approximately \$500,000 for both shops) and uncertainty regarding the bell system's actual ability to solve the "wrap" problem. (Pet. at 26)

Eureka investigated four possible compliant paints: high-solids, waterborne, powder coating and electrodeposition. Eureka decided that the waterborne paints were too costly and its finish was unacceptable. Powder coating had an unacceptable film appearance and handling problems. Finally, electrodeposition requires huge tanks, making color changes difficult, according to Eureka. Thus, high-solids were chosen as the best possibility of developing compliant coatings. (Pet. at 5-8)

Eureka explains in its petition that there were several problems in its attempts to adapt high-solids into its paint lines: paint formulation; incompatibility between high-solids and conventional paints in production runs; and equipment. In its Plan of Compliance, Eureka proposes several means of eliminating these problems in order to implement the use of compliant coatings.

Proposed Compliance Plan

Eureka's plan of compliance is set forth in its amended petition in three major stages over a 42 month period. The first eighteen months focus on the formulation of high-solids paints. Eureka will replace and upgrade equipment to increase the utility of compliant paints at a cost of approximately \$86,000. In addition to the equipment changes, Eureka will conduct a nationwide survey of coating suppliers for compliant coatings. There are milestone months and reporting commitments scheduled during this stage. Eureka will also study the feasibility of installing thermal incinerators in these first eighteen months. (Amended Pet. at 2-4)

The second stage begins after eighteen months. At that point, if compliant paints across Eureka's color spectrum have not been found, then Eureka will install a bell system or an incinerator in its paint shop with the highest volume of emissions. Eureka anticipates that the use of plastics will eliminate the need for the second paint shop. However, Eureka is not basing its ability to achieve compliance on the developing use of plastics because of the inherent difficulty in predicting actual figures which are dictated by "market factors such as overall growth and demand for plastic." (R. at 67). If Eureka does not shut down its second paint shop and does not have compliant coatings by the end of the 30th month, the plan will proceed to the final stage. (Pet. at 5,6)

In the final stage, months 31-42, Eureka agrees to install either a bell system or control technology in the second paint shop, if it is still in operation and not in compliance. If necessary, Eureka agrees to continue testing and formulation of paints throughout all three stages. Eureka agrees to be in compliance no later than at the end of the 42 month variance. (Amended Pet. at 7)

Alleged Hardship

Eureka asserts that it does not have enough high-solids paints which meet Agency limitations and Eureka's quality standards. (R. at 71) Therefore, Eureka insists that it must be able to use non-compliant paints in order to meet production demands during the variance period. (R. at 71) Consequently, Eureka's only means of achieving compliance right now is to purchase and install thermal incinerators, at a cost of over \$3 million for both paint shops. Eureka argues that this would be an arbitrary or unreasonable hardship. (R. at 71)

Asserted Environmental Effect of Emissions

Eureka asserts that the variance will not have a significant environmental impact because: a) its facility is in an attainment county and not contiguous to a non-attainment county; b) monitored ozone levels show that its past emissions have not caused ozone problems; and c) its actual emissions will not increase during the term of variance. (R. at 19). The Agency notes that its records do not contain any citizen complaints or inquiries regarding Eureka's facility (Agency Rec. at 2) and concludes that "Eureka's emissions should not cause any violations of the NAAQS." (Agency Rec. at 3)

Agency Recommendation

The Agency recommends that the Board grant the variance with the conditions proposed by Eureka in its Amended Petition. The Agency also requests that Eureka make progress reports to the Agency every three months for the duration of the variance. (Agency Rec. at 5)

Conclusion

The time lost by, and Eureka's less than fully persuasive reasons for, the suspension of its compliance efforts from late 1981 until February 1985 suggest that Eureka's hardship in significant measure is self-imposed. Further, the Board notes the absence of any explanation by Eureka for its failure to timely file the variance petition before the December 31, 1987 deadline. However, since early 1985, Eureka has worked diligently to come into compliance. On balance, the Board is persuaded that it is most important that Eureka get on a firm compliance plan. In so saying, the Board cautions Eureka that it will not look kindly on any failure by Eureka to diligently pursue and achieve compliance during the term of this variance.

Regarding Eureka's proposed conditions, the Board has re-drafted some of them to better insure enforceability. The Board also has declined to include two agreed upon conditions. First, Eureka proposed that the Board retain jurisdiction in this matter. The Board declines to do so. Neither Eureka nor

the Agency explained why retaining jurisdiction was advisable in this matter and the Board does not itself discern what compliance benefits would accrue from retaining jurisdiction. Given the nature of some of the conditions, the Board does perceive a potential need for the Board to resolve disputes that might arise over whether certain required steps have in fact been complied with. There are ways to bring such issues to the Board apart from an enforcement action, e.g., a variance petition.

Next, the Board declines to add as a condition to the variance Eureka's agreement not to file for a site-specific rule change. Site-specific petitions are separate proceedings, and the Board would address the merits of such a petition in that proceeding. The Board emphasizes, however, that the filing of a site-specific petition in no manner would relieve Eureka from compliance with the terms of this variance.

In light of the above considerations, as well as the insignificant environmental impact during the term of this variance, the Board finds that Eureka has presented adequate proof that compliance with 35 Ill. Adm. Code 215.204(j)(5) would impose an arbitrary or unreasonable hardship. Accordingly, variance relief with conditions will be granted for the time requested.

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

ORDER

Petitioner, The Eureka Company ("Eureka"), is hereby granted variance from 35 Ill. Adm. Code 215.204(j)(5) for its facility located in Bloomington, Illinois, subject to the following conditions:

1. This variance will expire July 5, 1992 or at such earlier time as compliance is achieved with VOC limitations. If at any time during the period of this variance, Eureka achieves compliance under 35 Ill. Adm. Code 215.204(j)(5), with or without use of the internal offset rule, Eureka shall notify the Illinois Environmental Protection Agency ("Agency") at the following address:

Environmental Protection Agency
Division of Air Pollution Control
Control Programs Coordinator
2200 Churchill Road
Springfield, IL 62706

By the end of this variance, Eureka shall be in compliance with the VOC regulation applicable to its paint shops.

2. During the period of this variance from January 5, 1989 until July 5, 1990:

- A. Eureka shall purchase and install any equipment necessary to achieve compliance including new air make-up machines, paint pumps, paint heaters and upgrade its associated parts washer cleaning process.
- B. Eureka shall continue testing, data collecting and sharing results with its vendors.
- C. Eureka shall provide listing of detailed coating specifications and testing procedures to the Agency.
- D. Eureka shall make a detailed survey of coating suppliers using a comprehensive directory of formulators and suppliers to the coating industry.
- E. Eureka shall send out a letter to all suppliers and formulators identified from the above survey, giving the detailed coating specifications and testing procedures by March 5, 1989.
- F. Eureka shall call the suppliers not responding and document the reason(s) for no response, after April 5, 1989.
- G. Eureka shall compile a listing of all suppliers and responses, including all correspondence, by May 5, 1989.
- H. Eureka shall schedule and conduct the necessary tests for possible compliant coatings identified by the above-mentioned survey, by March 5, 1990.
- I. If compliant coatings have not been found for all Eureka's 23 colors, Eureka shall compile all test results for all colors where compliant coatings have not been found, by April 5, 1990.
- J. Eureka shall give priority in paint formulation and testing to the two non-compliant colors that Eureka uses most and shall identify these colors to the Agency.
- K. Eureka shall supply copies of all documents prepared under items 2(E), 2(G) and 2(I) to the Agency.
- L. Eureka shall continue its study of technically feasible control technology, as well as the bell system, as a means of achieving compliance with or without high-solids paint. Eureka shall conclude its study and its results shall be sent to the Agency by July 5, 1990.

3. If compliant coatings across Eureka's color spectrum have not been found by July 5, 1990:
 - A. Eureka shall purchase and install a bell system in its paint shop with the highest volume, if Eureka determines that the bell system will be effective under the studies conducted in item 2(L) above. If the bell system is not installed, Eureka shall determine alternative methods of compliance, including but not limited to the purchase and installation of control technology.
 - B. Unless Eureka installs control technology, it shall continue its paint formulation and testing program. If compliant coatings have not been found by July 5, 1990, Eureka shall engage the services of a coating consultant and have a thorough review made of all the work done and data compiled on paint formulation for all colors not in compliance.
 - C. Eureka shall paint at least 80% of all its handle sockets with high-solids paint meeting Board limitations.
4. If Eureka has not come in compliance with 35 Ill. Adm. Code 215.204(j)(5) by July 5, 1991, and if its second paint shop is still in existence:
 - A. Eureka shall install a bell system in its second paint shop, if installation in the first paint shop has proved effective. However, if Eureka installed control technology in its first paint shop, it shall install like controls in the second shop to bring Eureka into compliance.
 - B. Eureka shall continue its testing and formulation process and shall perform any further tests as directed by the coating consultant referred to in item 3(B).
5. Beginning April 5, 1989, and every third month thereafter, Eureka shall submit written reports to the Agency detailing all progress made in achieving compliance with Section 215.204(j)(5). To the extent these activities involve testing for replacement coatings, said reports shall include information on the names of replacement coating and the manufacturer's specifications, including percent solids by volume and weight, percent VOC by volume and weight, percent water by volume and weight, density of coating, and recommended operating parameters; detailed description of each test conducted including test protocol, number of runs, and complete original test results; the quantities and VOC

content of all coatings utilized during the reporting period; the quantity of VOC reduction during the reporting period; and any other related information which may be requested by the Agency.

- 6. Within 45 days after the date of this Order, Eureka shall execute a Certificate of Acceptance and Agreement to be bound to all terms and conditions of the variance. Said Certification shall be submitted to James T. O'Donnell, Enforcement Attorney, at the address specified in paragraph one. The 45-day period shall be held in abeyance during any period that this matter is being appealed. Failure to execute and forward the Certificate within 45 days renders this variance void and of no force and effect as a shield against enforcement of rules from which variance was granted. The form of said Certification shall be as follows:

CERTIFICATION

I, (We) _____, having read the Opinion and Order of the Illinois Pollution Control Board in PCB 88-85, dated January 5, 1989, understand and accept the said Opinion and Order, realizing that such acceptance renders all terms and conditions thereto binding and enforceable.

Petitioner

Authorized Agent

Title

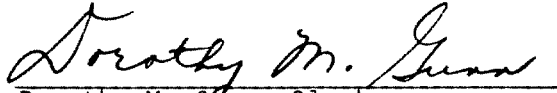
Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1987, ch. 111-1/2, par. 1041, provides for appeal of final Orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

IT IS SO ORDERED.

J. D. Dumelle concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 5th day of January, 1989, by a vote of 7-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board