

ILLINOIS POLLUTION CONTROL BOARD
February 9, 1984

ITT - BELL & GOSSETT FLUID)
HANDLING DIVISION,)
)
 Petitioner,)
)
 v.) PCB 83-120
)
 ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Respondent.)

MR. GUS J. ATHAS APPEARED ON BEHALF OF ITT-BELL AND GOSSETT FLUID HANDLING DIVISION.

MR. PETER E. ORLINSKY APPEARED ON BEHALF OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

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

This matter comes before the Board upon a petition for variance filed on August 23, 1983 and amended petitions filed on September 14, October 13 and 19, and November 14, 1983 on behalf of ITT-Bell & Gossett (ITT). The Illinois Environmental Protection Agency (Agency) filed a recommendation that variance be granted subject to certain conditions on December 6, 1983. Hearing was held on December 8, 1983 at which ITT and the Agency, but no members of the public, appeared. At hearing ITT indicated its acceptance of the recommended conditions (R. 5 and 9).

ITT requests variance from old Rules 205(n)(1)(J) and 205(j)(1) of Chapter 2: Air Pollution. The recent codification of these rules has resulted in their renumbering as 35 Ill. Adm. Code 215.204(j) and 215.211(a) of Subtitle B. Variance is requested until December 31, 1984.

Since little evidence was presented at hearing in this matter, the Board's decision is necessarily based largely upon the documents which have been filed. However, those filings were not accompanied by supporting affidavits (since that is not required when hearing has been requested) and were not introduced as exhibits at hearing. In order to have sufficient evidence in the record on which to base a decision, the Board requested ITT to submit an affidavit in support of its pleadings. That affidavit was filed with the Board on February 2, 1984.

ITT owns and operates a facility in Morton Grove which manufactures pumps, motors, heat exchangers, and other miscellaneous hydronic equipment. The pump and heat exchanger manufacturing operations include fabrication, cleaning, testing, painting, and assembly. The motor manufacturing operations include fabrication and cleaning of the outside shell as well as fabrication, cleaning, insulating, wiring, and varnish impregnation of the motor stator.

Included in the manufacturing processes are six electrostatic spray booths used to apply paint and two dip tanks used for varnish impregnation. The spray booths and the dip tanks are emission sources of volatile organic compounds (VOC's) and as such are subject to the Section 215.204(j). However, since ITT expects the dip tanks to be in compliance with that section by its effective date of December 31, 1983 [as established by Section 215.211(a)], the present petition concerns only the six spray booths.

ITT's plant is located in a mixed industrial and residential area. Areas to the north, south, and west are industrial while the area directly east is residential. The nearest residence is located approximately 100 feet east of the facility and Niles West High School is approximately ½ mile Southeast. No area residents have complained about the plant. The area is classified as nonattainment for ozone. However, the nearest ozone monitoring station (located at 9800 Lawler in Skokie which is approximately 5 miles to the northeast) did not register any violations of the ambient air quality standard of 0.12 ppm during 1982 or 1983.

ITT utilizes approximately 20 different coatings in its paint spray booths and has calculated its annual usage of paint to be 13,119 gallons with an average VOC content of the bulk of the paint being 5.49 lb/gal. The average VOC content of its gray paint is 5.78 lb/gal. The Agency calculated VOC emissions from the facility to be approximately 40 tons/year and further calculated that upon the effective date of Section 215.214(j), its VOC emissions will be subject to a limit of approximately 24 tons/year, necessitating a reduction of approximately 40%.

During 1983 ITT has been working both internally and with its coating suppliers to develop the necessary technology to reduce VOC emissions. To date, the efforts have been partially successful, but have not resulted in compliance. ITT, therefore, studied the installation of afterburners and carbon absorption systems as alternative means of achieving compliance. Both options were, however, rejected due to prohibitive costs for installation, operation and maintenance.

ITT proposes to achieve compliance by reformulating its coatings to high solids and/or water-based paints and is

currently testing various coatings in its spray booths. It alleges that it will be able to complete the development work on the reformulations by October 1, 1984, and attain full scale operation utilizing the reformulated coatings by December 31, 1984. It further alleges that denial of its variance would constitute an arbitrary and unreasonable hardship in that the only means of achieving immediate compliance is through the installation of prohibitively expensive control equipment or by closing down the spray booths until reformulated paints have been developed.

Information on the environmental impact of a variance is general in nature. ITT alleges, and the Agency agrees, that its VOC emissions (under present operations and 1982 usage rates) contribute 3.66% by weight to the total VOC emissions within a 6 mile radius of its plant and 16.6% within a 2 mile radius. Total 1982 VOC emissions are estimated at 48.4 tons per year. Further, data from the nearest ozone monitoring station show 3 days above the 0.12 parts per million ozone standard during both 1980 and 1981 and no exceedances in 1982 and 1983. Finally ITT's VOC emissions used to calculate total emissions and its contribution to area sources have been reduced by 13.2% due to reformulations which have brought its varnish dipping lines into compliance (R. 6-7).

The Board finds that ITT has been diligently attempting to achieve compliance with the VOC emission limitations, and the Board notes that when those standards were adopted it anticipated that some facilities would be forced to seek variances until the necessary technology was available (R80-5, Op., p.21, October 5, 1982, 49 PCB 87). Further, ITT has adequately demonstrated that its emissions of VOC's at its 1982 levels will not result in violations of the Environmental Protection Act or Board rules (except, of course, of the rules from which variance is requested). Since immediate compliance would entail large monetary expenditures for alternative control which would be unnecessary when reformulation is complete, the Board concludes that denial of variance would result in an arbitrary or unreasonable hardship.

ITT does not request, and the Agency does not recommend, any particular level of VOC emissions which should be allowed. Yet, some such level must be specified in order to protect the ozone air quality standard since that standard would surely be violated by some VOC emission level during the ozone season. Since VOC emissions are not of particular concern during the winter months, data concerning the expected VOC emissions during the ozone season, and an assessment of the environmental impact at those levels would be particularly useful at a minimum. Unfortunately,

the only data presented by ITT is based on 1982 production levels, and the Board's finding regarding the environmental impact of this variance is necessarily premised upon those levels with the assumption of uniform emissions during the year.

Therefore, in addition to the conditions recommended by the Agency (concerning reporting and permit requirements) the Board will impose a limit on VOC emissions of 8,100 lbs per month (the 1982 emission level divided by 12) for the months of April through October, inclusive, which represents the ozone season (see 35 Ill. Adm. Code 215.106). Due to a reduction in VOC emissions based upon higher transfer efficiencies and reformulations of the paint applied, this limitation should allow some increment of growth. If production levels are anticipated to increase emissions above this limitation another variance must be requested which substantiates the propriety of higher emission limitations.

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

ORDER

ITT-Bell and Gossett is hereby granted a variance from 35 Ill. Adm. Code 215.204(j) and 215.211(a) until December 31, 1984, subject to the following conditions:

1. ITT may not emit greater than 8,100 pounds per month of volatile organic compounds during the months of April through October, inclusive;
2. Within 28 days of the date of acceptance of this variance, and every third month thereafter ITT shall submit written reports to the Agency detailing all progress made in achieving compliance with 35 Ill. Adm. Code 215.204(j). Said reports shall include information on the quantity and VOC content of all coatings utilized during the reporting period, a description of the status of the reformulation program, and any other reasonable information which may be requested by the Agency. The reports shall be sent to the following addresses:

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

Environmental Protection Agency
Division of Air Pollution Control
Region 1, Field Operations Section
1701 South First Avenue
Maywood, IL 60153

- 3. Within 28 days of the date of acceptance of this variance ITT shall apply to the Agency for all requisite operating permits pursuant to 35 Ill. Adm. Code 201.160.
- 4. Within 45 days of the date of this Order, ITT shall execute a Certification of Acceptance and Agreement to be bound to all terms and conditions of the variance. Said Certification shall be submitted to the Agency at the addresses specified in condition 2, above. The 45 day period shall be held in abeyance during any period that this matter is being appealed. The form of said Certification shall be as follows:

CERTIFICATE

ITT-Bell & Gossett, hereby accepts and agrees to be bound by all terms and conditions on the Order of the Illinois Pollution Control Board in PCB 83-120, dated February 9, 1984.

Petitioner

By: Authorized Agent

Title

Date

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 9th day of February, 1984 by a vote of 7-0.

Christan L. Moffett
Christan L. Moffett, Clerk
Illinois Pollution Control Board