

ILLINOIS POLLUTION CONTROL BOARD  
March 23, 1989

MONSANTO COMPANY, )  
 )  
 Petitioner, )  
 )  
 v. ) PCB 88-194  
 )  
 ILLINOIS ENVIRONMENTAL )  
 PROTECTION AGENCY, )  
 )  
 Respondent. )

OPINION AND ORDER OF THE BOARD (by B. Forcade):

This matter is before the Board on the December 2, 1988 petition ("Petition") of Monsanto Company ("Monsanto") for a variance from 35 Ill. Adm. Code 215.966. Such variance would relate to Monsanto's emissions of volatile organic materials ("VOM") from its p-dichlorobenzene ("PDCB") flaking/block process at Sauget, St. Clair County, Illinois. The Illinois Environmental Protection Agency ("Agency") filed its variance recommendation ("Agency Recommendation") on January 18, 1989, urging the Board to grant the variance with conditions. The public hearing occurred February 10, 1989 at Sauget, Illinois. No member of the public attended. R. 31.

Background

Monsanto produces, inter alia, chlorinated benzenes at its W.G. Krummrich plant at Sauget, Illinois. This proceeding directly involves Monsanto's PDCB flaking/block process at that plant. The W.G. Krummrich plant is a major source of employment and revenue in the area. Monsanto has two domestic (outside Illinois) and five foreign competitors in PDCB production. Monsanto employs 41 persons in its PDCB flaking/block process. R. 21-23; Ex. 9.

PDCB is a co-product of benzene chlorination, together with o-dichlorobenzene ("ODCB") and chlorobenzene ("MCB"). Following chlorination, PDCB and ODCB are first separated from MCB, then PDCB is refined by separation from ODCB. In the PDCB flaking/block process, PDCB is molded into 24-pound blocks of high purity product. These are prepared for shipment as blocks (plastic wrapped on pallets) further processed for shipment as crushed material (in 55-pound bags) or a bulk liquid (in railcars or semi-trailers). PDCB is a solid at room temperature, but it readily sublimates to a vapor. R. 10-11; Ex. 8.

Monsanto has identified six VOM emissions sources in its PDCB flaking/block process (sources numbered 120, 130, 104, 105, 107, and 109). The aggregated VOM emissions from these sources is 476 tons per year: 460 tons of PDCB, 14 tons of ODCB, and 2 tons of MCB. R. 5 & 11-12; Ex. 8 at 3. St. Clair County is in a non-attainment area for ozone (Metropolitan St. Louis Interstate Air Quality Control Region). See 40 CFR 81.18 & 81.314 (1987). The nearest ozone monitor, in East St. Louis, Illinois, has registered one ozone excursion since 1986.

Monsanto's VOM emissions are not subject to regulation until April 1, 1989. Monsanto must then achieve an overall reduction of 81 percent of its uncontrolled VOM emissions. 35 Ill. Adm. Code 215.966 (1988) (adopted at 12 Ill. Reg. 7284, 7335 (Apr. 22, 1988), effective Apr. 8, 1988). To achieve compliance, Monsanto could install activated carbon controls at an initial capital cost of \$1,500,000 and an annual operating cost of \$7,000,000. The installation of these controls would first achieve compliance in March 1990. The only means by which Monsanto could achieve immediate compliance, by the April 1, 1989 effective date of Section 215.966, is to shut down its PDCB flaking/block process. Instead, Monsanto desires to install a new PDCB crystallization process that would achieve a 99.8 percent reduction of its uncontrolled VOM emissions by March 31, 1990\*. Monsanto commenced work on this new process in January 1988. It would result in overall annual VOM emissions of 1.1 tons from the PDCB process (the subject of the requested variance) and about 2.5 tons from its overall chlorinated benzene process. R. 5-7 & 13-18; Ex. 4, 6, 8 & 9.

### Discussion

The Board finds that a PDCB flaking/block process shutdown, directed towards achieving immediate compliance with 35 Ill. Adm. Code 215.966, could impose an unreasonable hardship on Monsanto. Monsanto maintains that a process shutdown, in order to achieve compliance by April 1, 1989, would impose an arbitrary and unreasonable hardship. It would result in direct financial losses, irreparable losses of business, and direct and indirect losses of jobs. Petition at 12-13; Ex. 9 at 4. The Agency agrees that a plant shutdown to achieve immediate compliance is "economically unreasonable." Agency Recommendation at 3.

\* In its December 2, 1988 petition, Monsanto projected a June 1990 completion date for this project and requested a variance until July 1, 1990. Petition at 8 & 15. The Agency disagreed with these dates, Agency Recommendation at 3-4, and Monsanto revised them to March 30, 1990. Ex. 9 at 5.

The record indicates that the requested variance offers the more viable means of achieving greater environmental benefits than are possible with add-on controls. Monsanto maintains that the installation of activated carbon controls would ultimately achieve a lesser reduction in VOM emissions than is possible with the new PDCB process. The addition of such add-on controls would constitute a substantial cost, and these controls would not achieve compliance at an earlier date than is possible with the new PDCB crystallization process. Petition at 11-12; Ex. 6. The Agency agrees that the date upon which compliance is possible with activated carbon controls is "not significantly different than the proposed plan." Agency Recommendation at 3. The Board finds that employing activated carbon controls on the existing flaking/block process would not result in the same degree of VOM emissions reduction as is possible with the new crystallization process. The Board also finds that such add-on controls would not likely achieve compliance at a materially earlier date than the proposed new process would allow.

The record further indicates secondary environmental benefits would arise through Monsanto's proposed variance compliance plan. Monsanto asserts that its new PDCB crystallization process would eliminate 25 to 40 tons of dichlorobenzene from its wastewater effluents each year. R. 14; Ex. 8 at 5. The Board believes that this secondary environmental benefit is desirable.

The record supports a conclusion that the requested relief is consistent with federal law. Monsanto and the Agency both observe that Monsanto's PDCB flaking/block process VOM emissions will initially become subject to regulatory control under 35 Ill. Adm. Code Part 215 on April 1, 1989. Petition at 10-11; Agency Recommendation at 2. The U.S. Environmental Protection Agency ("USEPA") has not yet approved the proposed State Implementation Plan ("SIP") revision for new (April 1988) Section 215.966. Monsanto and the Agency agree that the proposed variance is not inconsistent with federal law, although it might require a SIP revision if the USEPA approves the pending Section 215.966 revision before this variance action is final. Petition at 13; Agency Recommendation at 2.

The record also supports a conclusion that a grant of variance will not adversely affect ambient air quality. Monsanto commits itself to maximum VOM emission rates of 483 tons per year for all its refined dichlorobenzene sources and 476 tons per year for those sources involved in this proceeding during the term of the variance. Monsanto maintains that these VOM emissions "will not cause any additional environmental impacts beyond the current operation, ..." and highlights the lowered emissions rates after installation of the new PDCB crystallization process. Petition at 9. The Agency believes that during the variance term "Monsanto's emissions should not cause any violations of the

[National Ambient Air Quality Standard for ozone]." Agency Recommendation at 2.

The Agency recommends a grant of the requested variance from Section 215.966, with certain conditions. R. 31; Agency Recommendation at 4. First, the Agency would limit the term of variance to the period from April 1, 1989 to March 31, 1990. Second, the Agency maintains that the information Monsanto has presented is inadequate to determine if Monsanto will achieve broader compliance with 35 Ill. Adm. Code 215. Subpart RR. Other sources in the plant, not mentioned in Monsanto's petition, are subject to this rule. The Agency recommends that Monsanto certify that all sources subject to Subpart RR (Sections 215.960 through 215.966) will comply by the end of the variance term. Finally, the Agency recommends that Monsanto submit quarterly progress reports as a condition of the variance. Agency Recommendation at 3-4. Monsanto is willing to accept these three conditions. R. 5 & 26-27; Ex. 9 at 5.

For the foregoing reasons, the Board will grant Monsanto the requested variance from Section 215.966 with the Agency-recommended conditions. The variance term will run from April 1, 1989 through March 31, 1990. Monsanto shall certify compliance with 35 Ill. Adm. Code 215. Subpart RR by March 31, 1990 for all sources at its plant that are subject to this Subpart, including those sources not part of this proceeding. Monsanto shall submit quarterly Subpart RR compliance progress reports to the Agency for all sources within its plant, beginning with the first calendar quarter of 1989 and ending after the first calendar quarter of 1990.

#### Other Matters

The Board's Opinion and Order of December 15, 1988 in the companion trade secrets docket, PCB 88-194 Docket A, included the following language:

The Board determines the claimed items of information are subject to protection as confidential information. The Board will protect this information pursuant to Part 120, Subpart C of Title 35 of the Illinois Administrative Code, until ... such a time as PCB 88-194B proceeding has terminated and Monsanto has requested the return of all copies of the variance petition containing the subject information.,

Also, Monsanto submitted a vial of PDCB crystals at hearing as "Petitioner's Exhibit No. 3." This type of exhibit does not reduce to paper and microfiche for ultimate record reduction and storage. Such physical exhibits therefore present a storage and

maintenance difficulty for the Board. The Board did not rely on the confidential information or the physical exhibit for today's decision.

The Board directs Monsanto to reclaim from the Clerk of the Board the confidential information and physical Exhibit No. 3, within 45 days, unless this matter is appealed. The Board directs the Clerk to execute appropriate documentation verifying the return of the materials to Monsanto.

The foregoing constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

The Board hereby grants Monsanto's p-dichlorobenzene flaking/block process (sources numbered 120, 130, 104, 105, 107, and 109) a variance from 35 Ill. Adm. Code 215.966 on the following conditions:

1. The variance term shall run from April 1, 1989 through March 31, 1990;
2. Monsanto shall certify to the Agency prior to the end of the variance term, its compliance with 35 Ill. Adm. Code 215. Subpart RR for all sources at its W.G. Krummrich plant;
3. Monsanto shall submit quarterly reports to the Agency relating its progress towards compliance with 35 Ill. Adm. Code 215. Subpart RR for all sources at its W.G. Krummrich plant; and
4. Within 45 days after the date of this Opinion and Order, Monsanto Company shall execute and send to:

Illinois Environmental Protection  
Agency  
Attention: Thomas Davis  
Enforcement Programs  
2200 Churchill Road  
Springfield, IL 62794-9276

a certificate of acceptance of this variance by which it agrees to be bound by the terms and conditions contained herein. This variance will be void if Monsanto Company fails to execute and forward the certificate within the 45-day

period. The 45-day period shall be in abeyance for any period during which the matter is appealed. The form of the certification shall be as follows:

CERTIFICATION

I, (We) \_\_\_\_\_, having read the Opinion and Order of the Illinois Pollution Control Board in PCB 88-194, dated March 23, 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

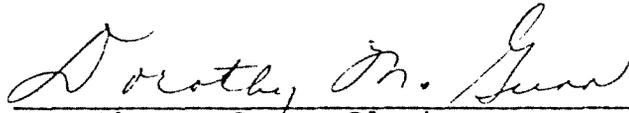
\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

Section 41 of the Environmental Protection Act, Ill. Rev. Stat. 1985, 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.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 23<sup>rd</sup> day of March, 1989, by a vote of 7-0.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board