ILLINOIS POLLUTION CONTROL BOARD
June 4, 1992

GENERAL MOTORS CORP.,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 88-193
	)	(Variance)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
	)	
Respondent.	)	

STEVEN J. LEMON and JAMES RUSSELL of WINSTON & STRAWN APPEARED ON BEHALF OF THE PETITIONER;

PENNI LIVINGSTON, ASSISTANT COUNSEL, APPEARED ON BEHALF OF THE RESPONDENT.

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

This matter is before the Board on a petition for variance filed November 30, 1988, by General Motors (GM). The petition seeks a variance from the emission limits for carbon monoxide from cupolas as specified in 35 Ill. Adm. Code 216.381. Section 216.381 limits the concentration of carbon monoxide in gases emitted from cupolas to 200 parts per million (ppm). The variance is requested for GM's Central Foundry Division in Danville, Illinois. An amended petition was filed by GM on June 1, 1989. Hearings were held on March 2, 1990, and June 24, 1991, in Danville, Illinois. The Environmental Protection Agency (Agency) filed its recommendation on July 11, 1990. GM filed a post hearing brief on August 7, 1991.

BACKGROUND

GM operates an iron foundry in Danville, Vermilion County, Illinois, manufacturing iron castings for the automotive industry including brake drums, bearing caps, differential carriers, water pumps and brake rotors. (Pet. at 1.) The foundry is located approximately 1.5 miles from downtown Danville, in an area that is predominately agricultural, with some residential sections. (Tr. B[1] at 18.) Vermillion County has been designated by U.S. EPA as either an attainment area or "unclassified" for carbon monoxide. (Tr. B at 18.) See 40 CFR 81.314 (1990).

General Motors contributed more than $80.7 million to the Danville-area economy in 1990. (Tr. B at 17.) In 1990, the

[1] Tr. A references the March 2, 1990 transcript. Tr. B references the June 24, 1991 transcript.

average number of employees on GM's payroll at Danville was 1323.

The foundry produces 891 tons per day of iron castings. (Tr. B at 18.) Divisions of GM account for 94% of the sales while the rest is sold to other automotive manufacturers such as Ford and Chrysler. (Tr. B at 22.) GM presently is using two cupolas (Cupola #2 and #3) in its foundry operation. (Tr. B at 18.) A cupola is a vertical shaft furnace which is fed or "charged" with layers of metallics, coke and limestone (as flux). (Tr. B at 24.) The shaft is 120 feet tall and up to 132 inches in diameter. (Tr. B at 24.) Cupola melting is used by GM to melt scrap metal. (Tr. B at 23.) Approximately 220,000 tons of scrap metal are remelted and made into castings each year. (Tr. B at 23.)

Typical cupola exhaust gasses can contain 13 to 27 percent carbon monoxide. (Tr. B at 27.) This is the equivalent of 130,000 to 270,000 ppm. (Tr. B at 27.) In a cupola, high carbon monoxide levels and specific carbon dioxide ratios are important to the metallurgical properties of the iron. (Tr. B at 27.) These levels can be minimized by proper selection of fuels, charge material and by major facility changes but cannot be eliminated. (Tr. B at 27.)

In July of 1988, emissions tests of the cupolas showed carbon monoxide emissions from both cupolas were in excess of 200 ppm. (Tr. B at 29.) Carbon monoxide was present at a concentration of 8,317 ppm for Cupola #3 and 4,563 ppm for Cupola #2. (Tr. B at 29.) Subsequent test showed carbon monoxide concentrations as high as 16,053 ppm for Cupola #3. (Tr. B at 29.) As a result of these tests, GM initiated an aggressive plan to modify the system beyond the state-of-the art contemplated by the regulations. (Tr. B at 30.) In November 1988, GM filed this variance in order to continue the operation of the foundry while it implemented corrective action to reduce the concentration of carbon monoxide in its emissions. (Tr. B at 36.)

In a petition for variance the petitioner's burden of proof is to establish that denial of the variance would cause an arbitrary and unreasonable hardship. (Section 35(a) of the Act.) To establish arbitrary and unreasonable hardship the petitioner must prove that the economic hardship resulting from a denial of the variance would outweigh the injury to the public from a grant of the petition. (Caterpillar Tractor Co. v. Ill. Pollution Control Board (3rd Dist. 1977), 48 Ill. App. 3d 655, 363 N.E.2d 419.)

The Agency believes that GM has met the burden of proof and recommends that the variance be granted. To determine if the variance should be granted the Board will look at the following topics: compliance plan, hardship, environmental impact and consistency with federal law.

COMPLIANCE PLAN

Included with the variance petition was a compliance plan describing various activities to bring the emissions within compliance. (Tr. B at 36.) In June of 1989, GM filed an amended petition to provide a more recent, and thorough, compliance plan. (Tr. B at 37.) GM has completed the compliance plan submitted with the original and amended petitions. (Tr. B at 39.) While these modifications have significantly reduced emissions, compliance has not been achieved. (Tr. B at 39.) Emissions have dropped from a high of approximately 18,000 ppm to below 2,000 ppm. (Tr. B at 39.)

A consultant to GM suggested two additional modifications that could be made to the cupola operation to reduce emissions. (Tr. B at 40.) The first suggestion was to pull more air through the system and the second was to replace both cupolas and the fume control system. (Tr. B at 40.) The estimated cost of these modifications were $8.2 million and $52 million. (Tr. B at 40.) The consultant could not guarantee that these modifications would result in compliance with the 200 ppm carbon monoxide standard. (Tr. B at 40.)

GM does not consider these alternatives economically feasible and believes that a rule change is the best alternative to achieve compliance. (Tr. A at 12.) GM is presently pursuing a site-specific rule to change the emission limits for carbon monoxide in Vermilion County in R90-23, In the Matter of: General Motors Corporation Site-Specific Exception to 35 Ill. Adm. Code 216.381 for Ferrous Foundries in Vermilion County.

A variance by its nature is a temporary reprieve from compliance with the Board's regulations. (Monsanto Co. v. IPCB (1977), 67 Ill.2d 276, 367 N.E.2d 684.) A variance petitioner accordingly is required, as a condition to grant of variance, to commit to a plan that is reasonably calculated to achieve compliance within the term of the variance. (City of Mendota v. IPCB (3d Dist. 1987), 161 Ill. App. 3d 203, 514 N.E.2d 218.)

The filing of a proposal for site-specific relief is not a compliance plan, since it is a matter of speculation whether such regulatory relief may be granted. (Citizens Utilities Company of Illinois v. IPCB et al. (3rd Dist. 1985), 134 Ill. App. 3d 111, 479 N.E.2d 1213.) The pendency of a rulemaking does not stand by itself as grounds for grant of a variance. (Section 35(a) of the Act; Citizens Utilities Company of Illinois v. IPCB, supra; City of Lockport v. IEPA (September 11, 1986), PCB 85-50, 72 PCB 256, 260; General Motors Corporation, Electro-Motive Division v. IEPA (February 19, 1987), PCB 86-195, 76 PCB 54, 58; Alton Packaging Corp. v. IEPA (February 25, 1988), PCB 83-49, 86 PCB 289, 299.) The Board has held that difficulty in maintaining

compliance and uncertainty of success in achieving continued compliance are insufficient grounds for grant of a variance. (Marathon Oil Co. v. IEPA (January 9, 1992), PCB 91-173, ____PCB _____.)

However, the Board has found that in some exceptional circumstances variance may be granted even though petitioner does not have a final compliance plan. Included have been the circumstance where technology for compliance did not exist, and petitioner sought the time provided under the variance to search for new technologies (e.g., Mobil Oil v. IEPA (Sept. 20, 1984, 60 PCB 99; IPC, Clinton Plant v. IEPA (May 22, 1989), PCB 88-97, 100 PCB 181); where additional time was necessary for a proper assessment of environmental impact (e.g., Amerock v. IEPA (Nov. 11, 1985), PCB 84-62, 66 PCB 411; Zeigler Coal v. IEPA (Aug. 22, 1991), PCB 91-12, slip op.); or where the term of the variance was of an exceptionally short duration (e.g. General Motors - Electromotive Division v. IEPA (February 19, 1987), PCB 86-195, 576 PCB 59.) Moreover, in each of these exceptional circumstances the Board has required assurance, commonly through conditions attached to the grant of variance, that negative environmental impact during the term of the variance be minimal and temporary.

The Board finds that exceptional circumstances exist. While GM presently does not have a compliance plan, they have instituted the compliance plan submitted in the original petition and modified in the amended petition. GM believed that these modifications would bring the emissions within the limits. However, after making the modifications, the emissions were reduced but still exceeded the limitation. Additional research and testing would be required to obtain the technology that is economically feasible to reduce the emissions from GM's cupola to meet the 200 ppm standard. GM has sought to achieve compliance throughout this proceeding.

HARDSHIP

GM is claiming hardship because it has exerted every reasonable effort to bring the emissions of carbon monoxide from its cupolas in Danville into compliance. GM has expended $421,500 in attempts to achieve compliance. (Tr. B at 39.) The costs of additional modifications to the cupolas are between $8 million and $52 million with no assurance of the resulting reduction in emission of carbon monoxide.

ENVIRONMENTAL IMPACT

General Motors retained a consultant to perform computer modeling of the carbon monoxide emissions from the cupolas. (Tr.

B at 42.) Based on this modeling, GM believes that the ambient air in Danville, given a worst case scenario, will not be adversely affected by the emissions from the cupolas. (Tr. B at 42.) Assuming worst-case conditions, the tests showed that National Ambient Air Quality Standards would not be exceeded. (Tr. B at 43.)

CONSISTENCY WITH FEDERAL LAW

GM contends that the issuance of a variance would not be inconsistent with federal law, because there is no adverse environmental impact. (Tr. B at 47.)

CONCLUSION

The Board finds that GM has presented adequate proof that immediate compliance with Section 216.381 of the Board's rules and regulations would impose an arbitrary or unreasonable hardship on GM. The hardship that would result from the denial of the variance outweighs any injury to the public that would result from granting the variance. GM has diligently sought to obtain compliance with the regulation. While GM has reduced its emission of carbon monoxide it has not achieved compliance. Additional measures to reduce emissions are not economically feasible. The grant of the variance will not have an adverse impact on the environment. Therefore, the Board will grant the variance.

Section 36(b) of the Act (Ill. Rev. Stat. 1989, ch. 111 1/2 par. 1036(b)) limits the length of the variance for a five year period. Therefore, the Board cannot grant the variance to be operative until the conclusion of the site-specific rulemaking. The Board will grant the variance for a period of five years or until the completion of the site-specific rulemaking whichever is earlier.

As a general rule, in the absence of unusual or extraordinary circumstances, the Board renders variances as effective on the date of the Board order in which they issue. (LCN Closers, Inc. v. EPA (July 27, 1989), PCB 89-27, 101 PCB 283, 286; Borden Chemical Co. v. EPA (Dec. 5, 1985), PCB 82-82, 67 PCB 3,6; City of Farmington v. EPA (Feb. 20, 1985), PCB 84-166, 63 PCB 97, 98; Hansen-Sterling Drum Co. v. EPA (Jan. 24, 1985), PCB 83-240, 62 PCB 387, 389 ; Village of Sauget v. EPA (Dec. 15, 1983), PCB 83-146, 55 PCB 255, 258 ; Olin Corp. v. EPA (Aug 30, 1983), PCB 83-102, 53 PCB 289, 291.) A variance is not retroactive as a matter of law, and the Board does not grant variance retroactivity unless retroactive relief is specially justified. (Deere & Co. v. EPA (Sept. 8, 1988), PCB 88-22, 92 PCB 91, 94 (citations omitted).)

Absent a waiver of the statutory due date, Section 38(a) of the Environmental Protection Act requires the Board to render a decision on a variance within 120 days of the filing of a petition. (See Ill. Rev. Stat. 1989 ch. 111 1/2, par. 1038(a) (amended from 90 days by P.A. 84-1320, effective Sept. 4, 1986).)

A principal consideration in the granting of retroactive relief is a showing that the petitioner has diligently sought relief and has made good faith efforts at achieving compliance. (Deere & Co. v. EPA (Sept. 8, 1988), PCB 88-22, 92 PCB 91, 94 (citations omitted).) GM has diligently sought relief, by implementing the compliance plan, conducting studies of the problem, applying for a variance and submitting a site-specific rulemaking proposal.

Therefore, the Board will grant the variance for a five year period beginning on March 31, 1989. The March date is 120 days after the filing of GM's original petition (November 30, 1990). This date was chosen instead of the date of the amended petition, because the amended petition was essentially an updated compliance plan based on studies that were performed since the initial filing of the petition. This variance begins March 31, 1989 and will expire on March 31, 1994.

Finally, the Board notes that the conclusions it reaches based upon the record of this variance proceeding do not necessarily reflect on the merits of GM's site-specific rulemaking proposal, currently pending before the Board in R90-23. The burdens of proof and the standards of review in a rulemaking (a quasi-legislative action) and a variance proceeding (a quasi-judicial action) are distinctly different. (Cf. Titles VII and IX of the Act; see also Willowbrook Development v. Pollution Control Board (2d Dist. 1981), 92 Ill. App. 3d 1074, 416 N.E.2d 385.) The Board cannot lawfully prejudge the outcome of a pending regulatory proposal in considering a petition for variance. (City of Casey v. IEPA (May 14, 1981), PCB 81-16, 41 PCB 427, 428.)

This opinion constitutes the Board's findings of facts and conclusions of law in this matter.

ORDER

General Motors Corporation (GM) is hereby granted a variance from the emission standards for carbon monoxide from cupolas specified in 35 Ill. Adm. Code 216.381. This variance applies to GM's Central Foundry Division Plant located in Danville, Vermilion County, Illinois, and is subject to the following conditions:

1. This variance begins on March 31, 1989, and expires on the earlier of: March 31, 1994, or the date of final action or any grant of GM's requested site-specific rule, currently pending before the Board in R90-23.

2. During the period of the variance the emission of carbon monoxide shall not exceed 2,000 ppm.

3. Within forty-five days of the date of this order, General Motors Corp., shall execute and forward to:

Division of Legal Counsel
Illinois Environmental Protection Agency
P.O. Box 19276
2200 Churchill Road
Springfield, Illinois 62794-9276

a certificate of acceptance and agreement to be bound to all terms and conditions of the granted variance. The 45-day period shall be held in abeyance during any period that this matter is appealed. Failure to execute and forward the certificate within 45-days renders this variance void. The form of certificate is as follows.

Certificate of Acceptance

I (We), _____, hereby accept and agree to be bound by all terms and conditions of the order of the Pollution Control Board in PCB 88-193, June 4, 1992,

_____
Petitioner

_____
Authorized Agent

_____
Title

_____
Date

IT IS SO ORDERED.

Section 41 of the Environmental Protection Act (Ill. Rev. Stat. 1989 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.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 4th day of June, 1992, by a vote of 7-0.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board