

ILLINOIS POLLUTION CONTROL BOARD
August 18, 1988

IN THE MATTER OF:)
)
PETITION TO AMEND 35 ILL. ADM.) R87-18
CODE PART 216, CARBON MONOXIDE)
EMISSIONS (Midwest Grain Products)
of Illinois)

PROPOSED RULE SECOND NOTICE

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

This matter comes before the Board upon a proposal for a site-specific rule change. The proposal seeks to amend 35 Ill. Adm. code 216.122 to exempt Midwest Grain Products of Illinois from the limitations set forth at 35 Ill. Adm. Code 216.121, which prohibits carbon monoxide emissions in excess of 200 parts per million corrected to 50 percent excess air. On May 19, 1988 the Board proposed for First Notice a rule which is substantially the same as that initially proposed. However, in noting several questions that remained outstanding, the Board's Opinion included suggested alternative language and requested comments by Midwest Grain Products of Illinois (Midwest) and the Illinois Environmental Protection Agency (IEPA).

Comments were submitted by both Midwest and the IEPA. Both contested the proposed alternative language -- but for different reasons. This opinion will address only the comments submitted by Midwest and IEPA. The Board's rationale for proposing this rule is set forth in the Proposed Opinion of May 19, 1988.

In its Opinion of May 19, 1988 the Board set forth the following as possible alternative language:

Section 216.122 Exception, Midwest Grain Products

- a) Emissions of carbon monoxide from the bubbling-bed fluidized bed combustion boiler of Midwest Grain Products of Illinois, located in Pekin, Illinois, shall not exceed 700 ppm corrected to 50% excess air during periods of load changes. No more than 12% of the operation hours during any continuous 30-day period shall exceed the 200 ppm of CO corrected to 50% excess air emission limitation of Section 216.121.

On June 2, 1988, Midwest filed its response to the Board's request for comment. Midwest states that it would be impossible to guarantee compliance with the suggested alternative rule for

two reasons. Initially, Midwest states that much of its recent reduction of carbon monoxide is the result of using "one specific type of coal". Midwest further states that there is no guarantee that this coal will always be available: "we must have an alternate . . . supply if we are to continue operations . . . if it became necessary to use the alternate coal, it may be impossible to comply with the proposed alternate rule".

Secondarily, Midwest states that it is impossible to maintain low CO levels during load swings, when CO levels can rise above 700 ppm for short periods of time. Midwest notes that load swings are mandated by several factors, including the following:

- (a) the process using the boiler's steam output
- (b) maintenance requirements
- (c) necessary shutdowns for cleaning
- (d) sales and production requirements

In summary Midwest reaffirmed its stated intention to "do everything possible to minimize CO levels" and reaffirmed confidence in its ability to comply with the rule as originally requested.

On August 8, 1988 the IEPA filed its response to the Board's May 19, 1988 Order. In responding to the suggested alternative language the IEPA stated as follows: "While the Agency is not opposed to the current wording . . . (it) suggests that a one-hour averaging time be applied to the 700 ppm CO limit so as to smooth out any short excesses over 700 ppm.

The Agency's comments noted some difficulty in determining what was or was not a "load change" as set forth in the suggested alternate rule. The comments stated that "even if the boiler were being held at a constant load, there would be some amount of fluctuation which would constitute a "load change". Determining compliance with such a rule would be extremely difficult, if not impossible."

In recognizing the Board's concerns regarding sporadic, temporary exceedances the Agency's comments noted that use of the one-hour averaging period would be consistent with the modeling demonstrations, which relied upon one-hour averages in demonstrating no significant impact upon ambient air quality.

Finally, the Agency's comments recommended the following language as an alternative to the Board's suggested alternative language:

The standard for carbon monoxide of Section 216.121 does not apply to emissions from the fluidized bed combustion boiler of Midwest Grain Products of Illinois, located in Pekin,

Illinois, where the emission of carbon monoxide shall not exceed 700 parts per million, corrected to 50 percent excess air. Compliance shall be based upon a one-hour average.

The Agency's suggested language addresses the Board's concerns about exceedances of the 700 ppm limitation without creating the difficulties referenced by Midwest in its June 10, 1988 finding. Therefore the Board adopts the proposed language from IEPA.

ORDER

The Board hereby proposes the following for Second Notice, which are to be filed with the Joint Committee on Administrative Rules.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 216
CARBON MONOXIDE EMISSIONS

SUBPART A: GENERAL PROVISIONS

Section
216.100 Scope and Organization
216.101 Measurement Methods
216.102 Abbreviations and Conversion Factors
216.103 Definitions
216.104 Incorporations by Reference

SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section
216.121 Fuel Combustion Emission Sources
216.122 Exception, Midwest Grain Products

SUBPART C: INCINERATORS

Section
216.141 Incinerators
216.142 Exceptions

SUBPART N: PETROLEUM REFINING AND
CHEMICAL MANUFACTURE

Section
216.361 Petroleum and Petrochemical Processes
216.362 Polybasic Organic Acid Partial Oxidation Manufacturing
Processes

SUBPART 0: PRIMARY AND FABRICATED METAL PRODUCTS

Section

216.381 Cupolas

Appendix A Rule into Section Table

Appendix B Section into Rule Table

Appendix C Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 206: Carbon Monoxide Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 3 Ill. Reg. 47, p. 92, effective November 8, 1979; amended at 4 Ill. Reg. 24, p. 514, effective June 4, 1980; codified at 7 Ill. Reg. 13579; amended in R87-18 at ___ Ill. Reg. _____, effective _____.

SUBPART B: FUEL COMBUSTION EMISSION SOURCES

Section 216.122 Exception, Midwest Grain Products

The standard for carbon monoxide of Section 216.121 does not apply to emissions from the fluidized bed combustion boiler of Midwest Grain Products of Illinois, located in Pekin, Illinois, where the emission of carbon monoxide shall not exceed 700 parts per million, corrected to 50 percent excess air. Compliance shall be based upon a one-hour average.

(Source: Added at ___ Ill. Reg. _____, effective _____)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Proposed Opinion and Order was adopted on the 18th day of August, 1988 by a vote of 6-0.

Dorothy M. Gunn, Clerk
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Illinois Pollution Control Board