

ILLINOIS POLLUTION CONTROL BOARD
July 24, 1980

BUNGE CORPORATION,)
)
 Petitioner,)
)
 v.) PCB 79-135
)
 ILLINOIS ENVIRONMENTAL PROTECTION)
 AGENCY,)
)
 Respondent.)

EDWARD CUNNINGHAM, BROWN, HAY & STEPHENS, APPEARED ON BEHALF OF PETITIONER.

REED NEUMAN, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by I. Goodman):

Bunge Corporation (Bunge) filed this petition for variance on July 2, 1979, requesting that the Board grant variance from the requirements and standards imposed by Rule 103(b)(2) and Rule 203(g)(1)(D) of the Board's Air Pollution Control Regulations (Regulations) for two coal-fired boilers located in Cairo, Illinois. On May 8, 1980 Bunge amended its petition in the alternative to request variance from Rule 103(b)(1) of the Regulations should the Board find the source involved herein to be classified a new source. Hearing was held on May 5, 1980. The Board has received no public comment on this petition.

Bunge owns and operates a soybean processing plant and grain elevator located in Cairo, Alexander County, Illinois. The facility employs about 110 persons and purchases 70% of its soybeans locally. Approximately 75,000 bushels of soybeans are crushed each day into soybean meal and soybean oil. Two spreader-stoker boilers with travelling grates utilizing approximately 90 tons per day of low sulfur coal are the source of process steam required by the facility. Only one boiler operates at a time; the other is used on a standby basis.

In 1977 when the boilers were originally installed, particulates were controlled with multiclone flyash arrestors and sulfur dioxide control was achieved through flue gas desulfurization using a scrubber.

In order to achieve full compliance with the regulations Bunge proposes to install by August, 1981 a baghouse at a cost of approximately \$2,400,000. In addition, Bunge proposes to install certain other equipment and make certain repairs which it has estimated will cost an additional \$575,000. In its petition Bunge notes that the Cairo area is sustaining a declining trend in population and has a 24% rate of unemployment.

In its recommendation of August 3, 1979 the Agency stated that although it did not find the program proposed by Bunge to be unreasonable, it was delayed in coming and that any hardship claimed by Bunge is self-imposed. In addition the Agency Recommendation urges that there is insufficient showing by Bunge that the ambient air quality of the region, and the national ambient air quality standards, will not be adversely affected by granting this proposed variance.

The Agency also stated that the variance request should be from Rule 103(b)(1) instead of 103(b)(2) because Bunge installed the boilers and started them up in November, 1977, which action qualifies the boilers as "new" emission sources under the definition of Rule 101 of the Regulations. The Board finds that Bunge's two boilers constitute new emission sources as defined in Rule 101 of the Board's Regulations.

ENVIRONMENTAL EFFECT

Given that Bunge's proposed construction schedule is reasonable and that the baghouse installation will result in compliance with the Board's regulations, the effect of the proposed variance on the environment and the hardship which will be sustained by Bunge should the proposed variance be denied must be considered. Exhibit 1, a copy of the Federal Register, Volume 45, No. 21, dated January 30, 1980, indicates that all of the counties within Air Quality Control Region 72 with the exception of Massac County have attainment statuses with respect to national ambient air quality secondary particulates standard. Exhibit 22 contains the results of Bunge's consultant's somewhat poorly designed effort to determine the effect of Bunge's emissions on the area. The results indicate a moderate effect on local ambient air quality and that the adverse effect on air quality diminishes rapidly in areas beyond Bunge's property boundaries.

In its recommendation the Agency noted that the nearest air quality monitoring reporting stations are operated by the Tennessee Valley Authority (TVA) in Metropolis (Massac County) and a State-owned facility at Massac County Hospital in Metropolis. The 1977 data for the two TVA sites indicated a level of 45 micrograms per cubic meter. The Massac County Hospital data were inconclusive statistically, but the Agency does not expect Bunge's emissions to have any effect due to the distance between Cairo and Metropolis.

Although this evidence concerning particulates emission levels is not clear, in considering other evidence in the record, including the volume of Bunge's emissions, the Board concludes that continued operation of the facility during construction of the proposed baghouse will not pose a threat to the ambient air quality in the region.

HARDSHIP

Bunge installed the two boilers in 1977 along with a multiclone dust arresting system in tandem with a flue gas desulfurization scrubber. At that time it was felt by all parties that the system would allow compliance with the Board's regulations. It was soon apparent that the forced draft system had been undersized and that the boilers could not function correctly unless the scrubber section was removed from the flue gas train (R.64). The sulfur problem was corrected through the use of low sulfur coal, but stack tests were not conducted then because of coal vendor problems caused by a strike and a very cold winter. The May, 1978 stack test indicated that emissions levels were higher than those allowed by the Board's regulations. A decision was made at that time to attempt to achieve compliance by "tinkering" with the system, that is, making adjustments both in the coal and the equipment to minimize particulate emissions. Bunge installed a vacuum ash system and changed a fuel specification to a higher Btu content and lower ash and fines content coal (R.67). A second test was conducted in September, 1978, which indicated a three-fold increase in particulate emissions levels instead of the expected reduction (R.71). The unexpected increase remains, for all practical purposes, unexplained (R.72).

At this time Bunge decided to investigate alternative actions. The option of switching to oil to fuel the boilers was closed in Bunge's estimation by a federal law concerning conversions to fuel oil and a dramatic increase in the oil price structure. Early in 1979 a consultant was engaged to do a complete cost study and analysis on bringing the boilers into compliance with the Board's regulations.

The consultant submitted the report in March of 1979 which resulted in a decision by Bunge to install a baghouse in the boiler exhaust train. It was at this time that Bunge filed the instant variance petition (R.76).

It is the Agency's opinion that the chronology outlined above proves only that Bunge has put itself in a bad position by making poor decisions, dragging its feet, and cutting too many corners. While conceding that the baghouse system represents a satisfactory solution to the problem, the Agency does not concede that Bunge had done all it could to comply prior to the baghouse commitment. The Agency, in effect, argues the prudent man standard, that Bunge has not acted in the same manner as that of a prudent man in Bunge's situation.

The Board disagrees. Certainly in retrospect it can be argued that Bunge has made some wrong decisions. The prudent man standard, however, does not demand that the conclusions and decisions be correct ones. It only demands that they be within the scope of what a reasonable man might have determined under similar conditions. The Board finds that Bunge's decisions, although incorrect, were indeed reasonable. The Board will therefore grant the variance requested under certain conditions.

In its recommendation the Agency points out that Bunge is requesting what amounts to totally uncontrolled emission levels during the period of the variance and therefore suggests certain conditions if the Board will decide to allow the variance. The Agency's position is well taken. The recommendations include monitoring, maintenance and reporting requirements, the abandonment of the flyash injection system on both boilers, and a performance surety bond in the amount of \$75,000. The Board will condition the variance upon these recommended requirements.

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

ORDER

It is the Order of the Illinois Pollution Control Board that Bunge Corporation be granted variance from the Illinois Pollution Control Board's particulate emission standards under Rules 203(g)(1)(D) and 103(b)(1) of Chapter 2: Air Pollution from July 2, 1979 until October 15, 1981 under the following conditions:

1. Bunge Corporation shall execute its proposed compliance plan as contained in the petition for variance herein filed July 2, 1979, which petition is hereby incorporated by reference as if fully set forth herein.

2. Bunge Corporation shall install at least two ambient air monitors for particulates in appropriate locations in and around the plant site, to be operated during the remaining term of this variance. The site location for the monitoring equipment is to be approved by the Illinois Environmental Protection Agency prior to installation.

3. Bunge Corporation shall submit monthly reports to the Illinois Environmental Protection Agency tabulating all data gathered by the air monitors noted above.

4. Bunge Corporation shall initiate a preventative maintenance program on its boilers and associated air pollution control equipment, said program to be approved by the Agency and to include a monthly report of all maintenance performed and any malfunctions experienced.

5. Bunge Corporation shall discontinue the use of the flyash injection system on both boilers until such time as it achieves compliance with the Board's particulate regulations.

6. Bunge Corporation shall submit to the Illinois Environmental Protection Agency's Region 3 office a quarterly report indicating construction completed during the previous quarter.

7. Within 45 days of the date of this Order, Bunge Corporation shall furnish to the Illinois Environmental Protection Agency a performance surety bond in the amount of \$75,000, said bond to be released upon timely completion of the compliance plan.

8. Within 45 days of the date of this Order, the Petitioner shall execute and forward to the Illinois Environmental Protection Agency, Variance Unit, 2200 Churchill Road, Springfield, IL 62706, an executed Certification of Acceptance and Agreement to be bound by all conditions of the variance. This 45-day period shall be stayed if Petitioner seeks judicial review of this variance pursuant to Section 41 of the Environmental Protection Act. The form of said certification shall be as follows:

CERTIFICATION

I (We), _____, having read and fully understanding the Order in PCB 79-135 hereby accept that order and agree to be bound by its terms and conditions.

_____, Petitioner

By _____, Authorized Agent

_____, Title

_____, Date

Mr. Werner concurs.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 24th day of July, 1980 by a vote of 5-0.

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