

ILLINOIS POLLUTION CONTROL BOARD
June 6, 1975

ARCHER-DANIELS-MIDLAND COMPANY,)
a corporation,)
Petitioner,)
v.) PCB 74-350
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,))
Respondent.)

OPINION AND ORDER OF THE BOARD (by Dr. Odell)

On September 24, 1974, Archer-Daniels-Midland Company (ADM) filed a Petition For Variance with the Illinois Pollution Control Board (Board). Petitioner sought a variance from Rules 103, 202, and 203 of the Air Pollution Regulations (Chapter Two) for 90 days for its truck pits and truck meal load-out area and nine months for its cooling tower. During that period Petitioner planned to install new pollution control equipment to control the excessive amounts of air-borne pollution.

ADM, located at 3883 Faries Parkway, Decatur, Illinois carries out varied activities including the operation of a soybean solvent extraction plant, a corn germ solvent extraction plant, and a vegetable oil refining operation. The facilities produce refined soybean and corn oil and soybean and corn germ meal. The facility processes 100,000 bushels of soybeans per day and 240 tons of corn germ per day. An additional 150 tons of soybeans all used daily in a soybean expeller operation.

Petitioner stated that the Illinois Environmental Protection Agency (Agency) had advised it that its cooling tower located at the south end of the facilities was discharging a water-vegetable oil emulsion. ADM had also been notified that grain dust or related products were being emitted from two truck dump pits on the west end of the facilities. Petitioner had no knowledge "of any exact quantity of any discharge." ADM noted that the Agency had received complaints about its plant.

ADM planned to control its cooling tower discharge by installing a new tower costing \$265,000. Petitioner planned to equip the two truck dumps with negative air systems to prevent the escape of fugitive particles. The system was expected to cost \$11,400.

Petitioner believed that it would be an unreasonable hardship to deny the variance. The plant has been in operation for over 30 years. Approximately \$25,000,000 has been spent in improving the facility over the last ten years. Four per cent of this money has been used for pollution control equipment. Two

hundred employees received wages totaling \$2,600,000 annually. ADM is a major processor in central Illinois and annually purchases materials totalling more than \$250,000,000.

On September 27, 1974, the Board requested that the Petitioner state precisely the provisions of the rules from which the variance was sought. On October 7, 1974, the Agency filed its objection to the grant of a variance and requested a hearing pursuant to Section 37 of the Illinois Environmental Protection Act (Act).

ADM filed an Amended Petition on October 24. Variance was sought from Rules 202(b) and 203(f)(1) and (2) of Chapter Two. Petitioner also stated that a Marley Series 15, cross-flow cooling tower (Model 454-204) had been ordered at a cost of \$430,000.

The Agency filed its Recommendation of denial on December 11, 1974. First, the Agency believed that a variance was also needed from Rules 102 and 203(a) of Chapter Two and Section 9(b) of the Act because "several possible emission sources at ADM west plant do not have operating permits. In addition, Petitioner may be in violation of process weight rates for several possible emissions sources." Second, the Agency stated that the proposed compliance plan would not solve the pollution problem at the cooling tower or the truck load-out area. Third, several emissions sources "contribute to a 9(a) problem, but Petitioner has suggested no control scheme for these sources." Fourth, other possible areas of pollution problems exist at:

"(a) The bulk meal truck load-out and storage bin vents which have no control equipment presently. Required control efficiency could be met with a baghouse of 99% efficiency.

"(b) The bulk meal rail load-out, which has no control equipment despite a process through-put of about 100 tons per hour. This unit also would require a baghouse.

"(c) The steam jet knock-out tank, which is used for product recovery during soybean oil hydrogenation. The amount of emissions from this unit is unknown, but potentially includes spent nickel catalyst, vegetable oil particulates, and unidentified filter aid.

"(d) The transfer housing between elevators A and B, which has no control equipment presently.

"(e) The corn germ rail receiving pit, which has no control presently.

"(f) The screen houses on grain dryers which have twenty-four mesh screen of no control value. Screen houses on grain dryers should have at least fifty mesh screens.

"(g) The feed mill truck load-out spout, which has no control equipment presently. However, ADM has promised to remove the source.

"(h) A temporary vacuum cleanup unit with a cyclone collector of estimated efficiency of 67.5% according to AP-42. This unit should have a control efficiency of 99% to eliminate the possible nuisance problem.

"(i) The elevator B transfer points at the north and south ends of the grain belts and the two wet grain storage bin vents, which have no effective control presently."

Fifth, during an Agency inspection on October 2, 1974, the following housekeeping deficiencies were observed:

"(a) At the north end of elevator B transfer housing, piles of grain dust on the floor were as deep as twelve inches. Dust also coated the window sills and frames. Although no grain was being transferred at the time, emissions from the dust piles were observed.

"(b) A baghouse on the east side of the elevator B transfer housing had apparently been clogged with dust and emptied on the roof. At the time of observation, the dust was caked and not likely to be blown into the atmosphere. However, it appears that substantial emissions from this collected dust occurred before rain caked the remainder.

"(c) On the west side of elevator B transfer housing, stacks of caked beans and dust on the top of each elevator storage bin were stacked as deep as sixteen inches.

"(d) Emissions raised by trucks on ADM west plant's yards and roadways were substantial."

Sixth, during August, 1974, several of Petitioner's emission sources were in excess of the opacity limitations of Rule 202(b) of Chapter Two:

"(19) On August 5, 1974, Agency personnel observed emissions of 39% average opacity emanating from a small storage bin next to the food mill at ADM west plant.

"(20) On August 13, 1974, Agency personnel observed emissions of 44.5% average opacity emanating from a soybean storage bin vent at the first bin at the north end of the plant.

"(21) On August 15, 1974, Agency personnel observed emissions of 42% average opacity from a bin being loaded pneumatically from a truck and also observed emissions of 31% average opacity from a doorway in the transfer housing area."

Seventh, the Agency stated that "scores of complaints" had been received against ADM. These were attached to the Recommendation (Ex. C) and were first received by the Agency on October 26, 1973. Also included in Ex. C (page 1) is an Agency letter dated October 30, 1973, acknowledging receipt of a complaint from a local citizen.

Information on the national ambient air quality standards for particulates was included in the Recommendation. The Agency stated that:

"(25) Repeated samplings of air quality in the Decatur region at the Agency's two sampling stations indicate that ambient air quality in this area is consistently worse than the primary ambient air quality standard for particulates of 75 micrograms per cubic meter of air. The 1972 annual average was 81 micrograms per cubic meter for the station at 22nd Street and Division Street in Decatur; the 1972 annual average was 83 micrograms per cubic meter of air for the station at 300 East Garfield Street in Decatur. The 1973 annual averages for these two stations were 112 and 65 micrograms per cubic meter of air, respectively."

A hearing was held on April 2, 1975, in the Macon County Courthouse, Decatur, Illinois. A Stipulation (Ex. 1) and Additional Stipulation of Fact (Ex. 2) were entered into evidence. They provided:

1. A program of compliance at the cooling tower to be completed by August 1, 1975, (Ex. 1, pages 2, 3) at an approximate cost of \$450,000 (Ex. 2, page 7).

2. A program of compliance for the truck dump pits and bulk meal load-out to be completed by March 1, 1975 (Ex. 1, page 5) and March 15, 1975 (Ex. 1, page 6) respectively, at an approximate cost of \$15,000 (Ex. 2, page 8).

3. A program of compliance for the bulk meal rail load-out area to be completed by September 1, 1975 (Ex. 1, page 7) at an approximate cost of \$85,000 (Ex. 2, page 8).

4. Questions raised by the Agency regarding the steam jet knock-out tank used for the hydrogenation process have been satisfied. No control equipment is necessary (Ex. 1, page 7).

5. A program of compliance for the transfer housing (overhead bridge between Elevator "A" and Elevator "B") to be completed by October 1, 1975 (Ex. 1, page 8) at an approximate cost of \$50,000 (Ex. 2, page 8).

6. Questions raised by the Agency regarding the corn germ rail receiving pit have been satisfied. No control equipment is necessary (Ex. 1, page 9).

7. Petitioner agreed to modify the screen houses on the grain dryers "to comply with the Board's new grain-handling regulations within the time specified in such regulations when the same go into effect" (Ex. 1, page 9). Cost was estimated at \$128,000 (Ex. 2, page 8).

8. Discontinuance of use of the feed mill truck load-out spout (Ex. 1, page 9).

9. Discontinuance of use of the temporary vacuum cleanup unit unless it is connected to an adequate dust collection system (Ex. 1, page 9).

10. A program of compliance for the Elevator "B" transfer

points by installation of a fabric filter dust collection system to be completed by March 1, 1975 (Ex. 1, page 10) at an approximate cost of \$20,000 (Ex. 2, page 8).

11. The compliance program shall also include installation of atmospheric fabric bin vents on the two west grain storage tanks to be completed by April 1, 1975 (Ex. 1, page 10) at an approximate cost of \$2,000 (Ex. 2, page 9). The total estimated cost of the stipulated control program is \$750,000. ADM agreed to apply for all construction and operation permits and to observe good house-keeping practices on odors and emissions.

Citizens were present, but none testified against the compliance program. The parties indicated that most of the work that was scheduled prior to this hearing has already been completed (R. 19, 20).

ADM is undertaking a substantial program of compliance, which favors the grant of the variance. However, Petitioner has not established reasons why attempts at compliance were delayed until recently. Petitioner had knowledge in the fall of 1973 that its neighbors were complaining about its activities but approximately one year passed before ADM prepared its compliance plan. Petitioner's delay means that it is not entitled to protection from an enforcement action before it filed for its variance.

In addition, the recent United States Supreme Court decision in Train v. Natural Resources Defense Council, Inc. 43 LW 4467 (April 15, 1975) limits our ability to grant ADM the relief requested. In Train the court held that states can grant variances after July 31, 1975, from their Implementation Programs provided the national ambient air quality standards are not violated. The Agency's Recommendation stated that at the two monitoring stations in Decatur the ambient air quality has been "consistently worse than the primary ambient air quality standard for particulates of 75 micrograms per cubic meter of air." Therefore, no variance can be granted after July 31, 1975.

In conclusion, ADM's recent good faith efforts convince us that a variance is warranted. However, the unexcused delay and the Train decision limit the period for which the variance can be granted.

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


ORDER

Archer-Daniels-Midland Company is hereby granted a variance from Rules 103, 202(b), and 203(f)(1) and (2) of Chapter Two from September 24, 1974, until July 31, 1975, in order to carry out the compliance plan as indicated in our Opinion and as set out in full in the Stipulation and Additional Stipulation of Fact entered into evidence during the April 2, 1975, hearing.

IT IS SO ORDERED.

Mr. Dumelle dissents.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 6th day of June, 1975, by a vote of 4-1.



Christan L. Moffett, Clerk
Illinois Pollution Control Board