

ILLINOIS POLLUTION CONTROL BOARD
May 22, 1975

ENVIRONMENTAL PROTECTION AGENCY,)
Complainant,)
)
v.) PCB 74-250
)
CONSOLIDATION COAL COMPANY,)
a Delaware Corporation, and)
)
CONOCO, INC.,)
a Delaware Corporation,)
Respondent.)

Mr. Frederic Benson, Assistant Attorney General, appeared for Complainant;
Mr. Bill F. Green and Mr. Richard A. Green appeared on behalf of Respondent.

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

On July 2, 1974, the Environmental Protection Agency (EPA) filed a complaint against Consolidation Coal Company and Conoco, Inc. alleging violation of Rule 102 of Chapter 8 of the Illinois Pollution Control Board Noise Regulations which states that:

No person shall cause or allow the emission of sound beyond the boundaries of his property so as to cause noise pollution in Illinois, or so as to violate any provision of this chapter of the Illinois Environmental Protection Act.

The violation of Rule 102 occurred when the Respondent Consolidation Coal Company (Consolidation) erected an air shaft exhaust fan, i.e. Hillsboro Mine, Number 2 air shaft exhaust fan. The equipment includes an 8-foot diameter model M 96-50 DS Joy Manufacturing, axivane high capacity mine fan, 1188 rpm, 100 hp. motor, connected to an air shaft 500 feet deep and contained in a steel housing.

The fan and housing are located on Consolidation's property which is surrounded by a community of private residences. On April 25, 1973, at 3:00 a.m., Consolidation commenced operation of the fan, running it twenty-four hours a day, seven days a week. The noise from this fan caused several residents to move downstairs in order to sleep. Testimony at the hearings shows that communication at a normal voice level outside of several homes became impossible after the fan was in operation. In January of 1974 a

diverter was installed, but had little dampening effect upon the noise levels being emitted from the fan. The EPA has made a thorough investigation of the sounds being emitted from Consolidation's fan and the record adequately supports a finding of a continuous violation of Rule 102 from April 25, 1973 to October 4, 1974.

After several hearings and extensive investigation by the EPA, Consolidation and the EPA entered into a stipulation by which a settlement of this action is proposed and presented to the Board pursuant to Procedural Rule 333.

Part of said settlement proposal would require Consolidation to reduce the noise emitted by its No. 2 airshaft exhaust fan and housing so that the noise levels near the effected residences do not exceed the following limits:

<u>Octave Band Center Frequency</u>	<u>Octave Band Sound Pressure Levels (dB) of Sound Emitted</u>
31.5	69
63	67
125	62
250	54
500	47
1000	41
2000	36
4000	32
8000	32

The Board finds that the proposed levels of emission are reasonable and orders Consolidation to cease and desist from exceeding said levels of emissions. The Board assesses the stipulated penalty against Consolidation for violation of Rule 102 in the amount of \$3,500.00.

The Board finds that the defendant Conoco, although a stockholder in Consolidation, does not control, manage, own, or operate Hillsboro Mine, Number 2 air shaft exhaust fan. We accept the stipulation and enter our order accordingly.

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

ORDER

1. Consolidation Coal Company shall reduce the noise emitted by its No. 2 air shaft exhaust fan and housing so that the noise levels caused by said equipment measured at the points set forth in Group Exhibit 4 near the residences described therein does not exceed the limits set forth in today's Board Opinion. Compliance with these levels shall be determined by employing the sound measurement techniques and procedures prescribed by Rule 103 of Chapter Eight of the Noise Regulations; and

2. To reduce said sound levels, Consolidation Coal Company shall purchase and install a "Fan Silencer", the specifications of which are more fully set forth in Exhibit A attached to this Opinion and hereby incorporated by reference as though fully set forth herein; and

3. Compliance by Consolidation Coal Company shall be according to that set forth in Exhibit B, attached hereto and hereby incorporated by reference as though fully set forth herein; and

4. Consolidation Coal Company shall post a performance bond without surety with the Environmental Protection Agency in the amount of \$10,000.00 within 35 days of this Order; and

5. A penalty in the amount of \$3,500.00 is assessed against Consolidation Coal Company for violation of Rule 102 of Chapter 8 of the Pollution Control Board's Noise Regulations. Said amount shall be paid within 35 days of this order by certified check or money order payable to the order of the State of Illinois. Payment shall be made to: Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706; and

6. The Complaint against Continental Oil Company, A/K/A Conoco, Inc., is hereby dismissed.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 22nd day of May, 1975 by a vote of 5-0.



Christan L. Moffett, Clerk
Illinois Pollution Control Board

FAN SILENCER SPECIFICATIONS
 CONSOLIDATION COAL COMPANY
 HILLSBORO MINE, COFFEEN, ILLINOIS

1. Fan

Joy Model M96-50D.S. (8'-0" Diameter) - High Capacity
 Joy Axivane Mine Fan

2. Fan Capacity

450,000 CFM

3. Static Pressure Drop - 1/4 (inches of water)

Transition from fan cone to silencer should be designed
 to minimize pressure loss

4. Temperature Range

55° F to 65° F

5. Acoustical Requirements

Octave Band Mid Frequency CPS	<u>31.5</u>	<u>63</u>	<u>125</u>	<u>250</u>	<u>500</u>	<u>1000</u>	<u>2000</u>	<u>4000</u>	<u>8000</u>
Sound Pressure Level at Site "A", 1300' From Fan	62	61	57	65	69	77	68	59	41
Required Level	69	67	62	54	47	41	36	32	32
DIL (Dynamic Insertion Loss) Required at 1300'	-	-	-	11	22	36	32	22	9
Sound Pressure Level at Fan	74	81	88	98	103	102	95	85	77
Background Level Without Fan at Site "A"	47	44	38	28	26	24	22	42*	47*

* Cricket and Bird Noise

COMPLIANCE PLAN

October 1, 1974 Engineering specifications for fan silencer complete.
October 2, 1974 Specifications mailed to manufacturer.
October 25, 1974 Proposals received from manufacturer.
November 1, 1974 Silencer placed on order.
February 1, 1975* Silencer received from manufacturer.
February 15, 1975 Silencer in operation.
March 1, 1975 If sound levels, caused by fan and motor operation,
 at the surrounding residences do not meet limits
 specified in paragraph A, decision will be made
 concerning acoustical coating of fan cone, sound
 insulation of motor building, and air conditioning
 of motor building.
April 15, 1975 If required, acoustical coating of fan cone,
 sound insulation of motor building, and air
 conditioning of motor building completed.

*Pending scheduled delivery by manufacturer.

	PLAN EXPENSE
Silencer Unit	\$40,000
Foundations	2,000
Installation	<u>5,000</u>
	\$47,000

Exhibit B