## ILLINOIS POLLUTION CONTROL BOARD December 13, 1973

ENVIRONMENTAL PROTECTION AGENCY COMPLAINANT	) ) )			
v.	)	1	PCB	73-182
O'KEEFE BROS. COAL COMPANY RESPONDENT	) ) )			

FREDRIC J. ENTIN, ASSISTANT ATTORNEY GENERAL, in behalf of the ENVIRONMENTAL PROTECTION AGENCY CHARLES J. O'CONNOR, ATTORNEY, ARVEY, HODES & MANTYNBAND, in behalf of O'KEEFE BROS. COAL COMPANY

OPINION AND ORDER OF THE BOARD (by Mr. Marder)

This action involves an enforcement case brought against O'Keefe Bros. Coal Company by the Environmental Protection Agency. Respondent is alleged to have operated a coal yard in violation of Section 9 (A) of the Environmental Protection Act and in violation of Rule 203 (f) (l) of the Illinois Pollution Control Board Rules and Regulations, Chapter 2, Part II. Complaint was filed May 1, 1973.

O'Keefe Bros. Coal Company is a Delaware corporation, which owns and operates a coal storage yard located at 32nd Place and Benson Street in Chicago. The main operations at the yard consist of unloading coal from barges and loading coal into delivery trucks for distribution to area users. The major pieces of equipment used at the yard are a P & H crane with an Owens coal bucket; two front end loaders, coal delivery trucks, and portable oil and water spraying devices.

Because of the nature of the complaints, it is very necessary to describe the area in which O'Keefe is located. The area surrounding O'Keefe is zoned M-2-3, General Manufacturing District (Resp. Exhibit 3). Respondent's exhibit #1 gives an excellent portrayal of the alignment of industries and residences in the area. O'Keefe is bordered on the north by a ready-mix cement plant, south by an unpaved truck lot and unpaved truck depot, on the west by the Chicago River. Across the Chicago River is another truck depot. The east side of O'Keefe is a semi-residential area. Many of the roads and alleys are unpaved. There are a few lots with debris piled in them. There are various other industrial plants in the area, notably the

city incinerator (10 blocks south) and the Fisk Edison plant (10 blocks north). Both the Dan Ryan and the Stevenson Expressway are in the area. The above description is given to point out that there are many potential emission sources in the area which add an additional element to the burden of proof on the Agency.

As mentioned above two separate counts constitute this complaint (9A and 203 [f] [1] ). Because of the nature of the complaints, and more importantly the different methods of proof required, the complaints will be separated.

The complaint filed May 1, 1973, was followed by a motion to dismiss by Respondent. The motion to dismiss was denied by the Board, and Respondent then filed an answer to complaint. The matter went to hearings which were held on July 16, 25, 26, 30 and August 1st. The matter was hotly disputed and much valuable testimony was elicited on both sides. The volume of testimony generated has greatly helped the Board in rendering its decision.

## Complaint Alleging Violation of 203 (f) (1)

Rule 203 (f) (1) deals with dust emanating from material handling or storage facilities. Rule 203 (f) (3), however, qualifies 203 (f) (l) by negating it if a wind speed of 25 mph is present. The rationale for these two rules was obvious: to maintain proper practice in material handling and stockpiling regulations, while recognizing the fact that the problem of suppressing dust from stockpiles is unique. When the Board adopted this regulation, it specifically drew reference to the testimony elicited on this point. The Board felt that Mr. Roberts' testimony (EPA) that at 25 mph wind limit fugitive particles would be regulated 99% of the time of the year was valid. (Emission Standards #R-71-23 P. 25.)

The Complainant then finds himself in the position of having to prove not only that fugitive particles were emitted beyond Respondent's property line, but also that at such a time the wind speed was not in excess of 25 mph. The record is filled with references (R. 21, 83) asking for specific dates of violations by Respondent from Complainant. This information was not forthcoming. References were made by citizen witnesses (R. 33, 79, 196, 233) to dust being in the air every day. Because of the nature of the highly industrialized area and the high potential for dust emanating from many sources (as will be covered later), the Board cannot pretend to presume that Respondent would be required to defend "Every day."

Agency investigator Dennis Belsky conducted high volume sampler tests around Respondent's property. Although this data was tied to specific dates, Mr. Belsky could not tie these dates to actual visual emissions as required by 203 (f) (l). The entire question of high-volume samples as a defense becomes moot because of a stipulation that these samples would not be used as a tool for prosecution of 203 (R. 359).

The complaint alleges that violation of 203 (f) (1) started on or about October 14, 1972, and continued up to the day of filing of complaint (May 1, 1973). The only meteorological data supplied to validate wind conditions was entered by Respondent (Resp. Exhibit 14) entitled Local Climatological Data June 1972. From a study of this one-month period there were two days on which the maximum wind speed exceeded 25 mph. These times of these two days, at least, are exceptions to the rule. As mentioned above, the Board in adopting 203 (f) (1) recognized that it would be unreasonable to expect 100% compliance and built in 203 (f) (3) as an override. The Board would be derelict in not allowing Respondent the protection afforded to it in 203 (f) (3). There has been no evidence that O'Keefe has violated 203 (f) (1) and this charge will be dismissed.

## Complaint Alleging Violation of Sec. 9 (A).

The remaining charge against Respondent regards alleged violation of Sect. 9 (A) of the Environmental Protection Act. Violation is alleged from December 1, 1971, to the date of this complaint. The complaint specifically states that Respondent has allowed coal particles into the atmosphere in such quantities as to be injurious to human, plant, or animal life, to health, to property, and to unreasonably interfere with the enjoyment of life or property. By proposing these charges the Agency has accepted the burden of proof in two regards:

- 1. That Respondent did emit particles of coal dust
- 2. That said particles were injurious to humans, vegetation, animal life, or unreasonably interfered with life.or property.

Complainant elicited testimony from five citizen witnesses. One of said witnesses (Mrs. Minnich) was of questionable cradibility. This is stated for two reasons.

- 1. The hearing officer in his closing statement to the Board points out that her testimony is contradicted by other witnesses and that her tone of voice led the hearing officer to believe that she was prejudiced toward the Respondent.
- 2. Witness's hostility was clearly shown in the following testimony when under cross-examination:
  - Q. Now let's assume that there was no coal dust coming into your house from O'Keefe, you would still run O'Keefe out of the neighborhood, isn't that right?
  - A. Sir, we would like to see all them industries out of there. We would like to have what we had before.

In light of the above, Mrs. Minnich's testimony will not be considered by the Board.

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The remaining witnesses (Mrs. Karpinski R. 15-68, Mrs. Cannova R. 69-112, Mrs. Jablonski R. 112-166, Mrs. Fawcett R. 166-227) all live within one block of O'Keefe Coal Company. They testified as to the problems suffered as a result of dust in the area. Each witness related times when they saw coal dust but could not pin down a specific date or dates.

Mrs. Cannova stated that if it is very windy you get coal dust (R. 77), but that every day it is in the air (R. 79). Mrs. Cannova testified (R. 75) that coal dust is oily and filmy and cannot be washed off. She also testified that the paint on her house was deteriorating as a result of the dust (R. 91-93).

Mrs. Jablonski testified that the clothes on her wash line get dirty (R. 141), and described the coal dust as black and greasy (R. 114). She further claimed that the black dust was present when the wind was over the coal yard (R. 133).

Mrs. Fawcett, a 46-year resident of the area, testified that coal dust was in and out of her house (R. 167), and that there is more dust on windy days (R. 169).

Mrs. Karpinski testified that dust was noticed every day, but more so on windy days (R. 22). She also testified as to the problems of hanging out clothes (R. 39).

Three of the four witnesses, when asked if they suffered any physical discomfort due to the dust, answered they do not (Karpinski R. 36, Cannova R. 86, Fawcett R. 201).

In rebuttal Respondent took issue with a number of points raised by citizen witnesses. The nature of dust as characterized by witnesses varied from hard and brittle to oily. Respondent claims that it is impossible to determine coal dust from other dust by mere visual observation (see test of Gerald Duckett below). The fact that witness Karpinski never saw dust actually leave the yard (R. 65) was pointed out. Mrs. Cannova's testimony as to peeling paint was successfully rebutted (R. 101) due to the fact that the house was not peeling when it was repainted. This would indicate that the peeling could very well be due to factors other than coal dust.

Dennis Belsky gave testimony relating to the high volume sampling procedures used at or around O'Keefe's coal yard. Two samplers were set up both on the same side of O'Keefe's yard. Samples were taken for twelve days in June of 1972. From the placement of the high volume samplers the wind would have to be blowing from the south, southwest, or west to pass over Respondent's coal pile before reaching the high-volume units. The following is a summary of results (Complainant's Exhibit #3):

Date	$\frac{\text{Site I}}{\text{ug/m}^3}$	Site II ug/m³	% Wind S, SW, W	% Wind Other
6/13	139	180	100	ocner
14	79	79	56	44
15	103	73	4	96
16	142	75		100
19	147	165	76	24
20	-	66	24	76
21	107	112	***	100
22	113	104	accept	100
23	76	79	0700	100
26	155	187	20	80
27	156	192	16	84
28	131	131	24	76

As one can see from a glance at the aforementioned data, the particulate matter entrapped bears very little conclusive evidence that when the wind blows directly over Respondent's yard the amount increases. Belsky stated (R. 362) that he saw coal dust blowing on 6/22/72, but that it was blowing away from him because of the wind direction. He also testified that the particulate level showed an increase when the wind direction was from the south, southwest, or west during all or part of the sample period (R. 348).

In rebuttal Respondent challenged the validity of the above testing. It was pointed out that the highest particulate counts were recorded when the wind was 84% from "other" directions, and that the second highest reading was when the wind was 80% from other directions (R. 408-9). The location of the high volume samplers was also strongly attacked (R. 382). The point was raised that by putting two samplers downstream of the source it is impossible to subtract background. Due to the high potential for dust from other sources, it was argued that background could be a significant part of the recorded amounts. Respondent cast doubt on the June 13, 1972, data by pointing out that the day was hazy and smoky (R. 411) and that this in itself would yield higher than normal counts. Respondent points out that the Kelly School sampling station was the closest air monitoring station to the O'Keefe yard, and that the geometric mean of this area was 118  $ug/m^3$  (R. 419). The geometric mean from the O'Keefe tests were 112 and 119  $ug/m^3$  (R. 420). Under redirect examination, Complainant states that dispersion would rule out the Kelly School as a viable background (R. 423). It must be noted, however, that no other source of background was offered.

Although the above is true, the language in Section 9 (A) clearly says: "either alone or in combination with contaminants from other sources" (emphasis added). This argument would tend to discount background if it is proven that O'Keefe did indeed contribute to the emissions. There is, however, no proof that particles contained on the high volume filters were coal dust. Testimony (Belsky R. 353) was elicited that although

testing was done on three filters, the laboratory tests were inconclusive, and that there is no indication as to whether the free carbon was from coal particles or from other sources.

Two Agency investigators testified (Seymour Levine R. 441-499, Caesar Krzymowski R. 502-604) as to their investigation of the O'Keefe property, and their interviews with citizens in the area.

Mr. Levine stated that he first visited Respondent's property on December 1, 1971 (R. 444), as a result of citizen complaints. He claimed that he saw the operation of an end loader in the yard and that the operation was emitting a gray transient cloud (R. 448), which he believed to be partially coal dust. Complainant's Exhibit 66 was introduced which is a photograph showing dark dust under a local resident's door mat. Under cross-examination Respondent took issue with Mr. Levine's ability to distinguish coal dust from other dust, and brought out the point that there are other types of dust in the area (R. 471). Respondent also questioned why no sampling was done on the dust under the doormat (R. 478).

Mr. Krzymowski also testified (R. 512) to seeing dust (cloud) during loading of trucks and that the plume dissipated in 10 to 12 feet. Complainant's Exhibit 6E was introduced which purports to show emissions from a truck loading operation. Mr. Krzymowski supported the testimony of Mr. Levine as to dust on window sills and under door mats. Witness testified as to techniques used to suppress dusting. Reference was made to chemical binders which would in effect seal the surface (R. 529). Complainant entered exhibits 7-A,C,D which are chemical literature which explains technology available to suppress dust.

At this point in the hearing, Respondent elicited testimony from a number of witnesses to attest to operating procedures at O'Keefe and also to rebut some of the testimony above.

Joseph R. Comella was an investigator for the City of Chicago Environmental Control Department from 4/15/59 to 9/1/72. Mr. Comella testified that the coal piles at O'Keefe are the same height as at other yards (R. 622), that there were complaints on many other facilities in the area (R. 624), and that during his visits to O'Keefe he observed no dust coming out of the yard (R. 630). Respondent's Exhibit 12 was entered, which is a summary of many inspections made of O'Keefe yards by the City of Chicago. In reading through these the Board finds again and again statements by the investigators that no dust or violations were found. At one point a complaint was lodged in the Circuit Court against O'Keefe (R. 312) and O'Keefe was put on observation. This complaint was lodged on a day when the wind speed was approximately 30 mph. Respondent's Exhibit 12 A is a letter of agreement between the City of Chicago and O'Keefe dated November 8, 1972. Witness reported that in his opinion the fence at O'Keefe was higher than at most yards (8 feet) (R. 667) (Respondent's Exhibit 33 shows the 8 feet to be the legal limit for fences in Chicago). He also testified that the roads and piles seemed to be oily (R. 668).

Mr. Gerald Duckett next testified in Respondent's behalf. Mr. Duckett is an expert in the field of coal and coal handling. He explained that O'Keefe purchases high volatility bituminous coal which is sized and oiled at the mine site. He testified that the sole purpose for oiling of coal is to reduce dusting (R. 763) and that oiling cost \$.30/ton extra (R. 764). He also stated that oiling of coal is the best dust suppressant and that the use of chemical sprays would be ineffective in that it is only surface active (R. 773). Mr. Duckett testified that he could not tell small particles of coal dust from other particles by observation (R. 803), and that in his opinion the only way to be sure what was coal dust would be by chemical analysis. The witness also testified that O'Keefe is a well-run coal yard (R. 826) and that in his opinion they are using all known steps to control dust (R. 827). In cross-examination Complainant elicited testimony that even though the coal was oil-treated, some dust is generated through handling (R. 840). Mr. Duckett further testified that if coal dust was present, in his opinion it is highly possible it was coming from a large coal yard about ten blocks away. This statement was made because that coal dust was not oil treated, and therefore more susceptible to wind blowage (R. 819).

Two additional witnesses testified, Mr. F. McNichols (R. 877-896) and Mr. R. Blaising (R. 897-920). Both of these witnesses had vast experience in the field of coal. Both witnesses claim the best way to barge unloaded coal is by a clam shell bucket (R. 886, 903), because it is cleaner and avoids breakage. Mr. McNichols testified that O'Keefe sprays their roads with oil to keep down dust and that he had never seen any other coal yard take this precaution (R. 888). He further testified that the crane operator at Respondent's is an "expert" and is very careful (R. 890). This the witness claims to be a fact in that he had occasion to hire the unloader for his yard. Mr. Blaising also testified that O'Keefe used the best methods available (R. 907).

Mr. Barry O'Keefe next testified. He entered evidence (Complainant's Exhibit 31) which was a record of hours worked by employees. During the period of April 27 to September 6, 1972, no crane operator worked past 6:00 p.m. This was a very effective rebut to earlier testimony by citizen witnesses that they had (during the summer of 1972) talked to a crane operator at O'Keefe after 8:00 p.m. Mr. O'Keefe also testified as to the steps taken at Respondent's yard to abate dust. He stated that the piles and roads are sprayed (R. 947) and that the manager of the yard was instructed to be very careful in unloading (R. 943). It was pointed out that it is also an economic advantage to avoid breakage in that the customer is paying for a certain size coal, and resents dust.

Many exhibits were entered showing the other potential emission sources in the area. Pictures displaying dust being kicked up by automobiles on local unpaved roads were also displayed.

In summary, the Board finds that the Environmental Protection Agency has not met its burden of proof in the 9 (A) violation. At no time did it conclusively prove that dust did indeed emanate from the property of O'Keefe. Failing this the Agency in no way proved that any dust in the area was coal dust. In an area such as this, it is imperative that the emission source be traced to Respondent. The area is such that the probability of emissions is present from many sources, and that the types of emissions are very difficult to tell apart with the naked eye. Although the Board feels that the people of the area are in great need of relief from pollution in the area, it also feels that the polluter must be accurately identified before action can be taken. This did not happen in the instant case. The record of this case can only leave the Board with the opinion that O'Keefe is doing everything possible to control its emissions.

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

## ORDER

IT IS THE ORDER of the Pollution Control Board that charges of violation of Section 9 (A) of the Environmental Protection Act and Rule 203 (f) (1) of the Illinois Pollution Control Board Rules and Regulations, Chapter 2, Part II, be dismissed.

IT IS SO ORDERED.

Mr. Dumelle dissented.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, certify that the above Opinion and Order was adopted by the Board on the  $13^{77}$  day of december, 1973, by a vote of 4

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