ILLINOIS POLLUTION CONTROL BOARD
August 6, 1987

WILLIAM AND DELORES CARTER, Complainants, and LEROY AND MARGUERITE STANLEY, Intervenors.	)	
v.	)	PCB 83-132
DUNN COMPANY, Respondent,	)	

OPINION AND ORDER OF THE BOARD (by B. Forcade):

This matter comes to the Board on an August 5, 1983, complaint filed by William and Delores Carter (hereinafter "the Carters"), against Dunn Company, a Division of Tyrolt, Incorporated (hereinafter "Dunn"). The complaint claims that emissions of dust and odors from Dunn are causing a violation of Section 9 (a) of the Environmental Protection Act, Ill. Rev. Stat. 1985, ch. 111½, par. 1009(a) (hereinafter "the Act"). Hearings were held October 8, 1986, and February 23, 1987. No testimony was heard at the October 8, hearing. Post hearing comments were filed by the Carters on March 3, 1987, and April 9, 1987. On March 9, 1987, Dunn objected to the introduction of new evidence by way of post hearing submissions. To the extent the post hearing filings contain new information, the objection is sustained, and any such information will not be considered by the Board.

Dunn operates a small batch mixing asphalt plant, with associated sand and gravel piles, at 724 N. Mercer Street, Decatur, Illinois. The Carters live at 755 N. Mercer Street, and share a common lot line with Dunn (Resp. Ex. No. 4). At hearing, testimony was received from intervenor LeRoy Stanley of 830 N. Mercer. In addition, the original complaint in this proceeding was accompanied by complaint forms from twelve individuals in the general area of 600-800 north on Mercer and Pine Streets. The original complaint and testimony at hearing object to dust and odor from Dunn.

Dunn's operation is a batch mixing asphalt plant, manufactured by "Waite." The process employs stockpiles of aggregate which are placed in cold feed bins by end loaders.

This is then fed by enclosed belt conveyor to a cold feed elevator that raises the aggregate to the gas-fired rotary dryer. The aggregate from the dryer is fed into the hot elevator and raised to the hot bins. The aggregate is then screened, weighed, and fed into the pug mill where the hot asphalt is added, all ingredients are mixed and dumped into waiting covered trucks and hauled away.

The plant is capable of mixing 90 tons per hour. The control for this asphalt plant is a cyclone and "custom built" baghouse model 224DS with 3,584 square feet of surface area; filter material is 1402 Nomex. With an efficiency of 99.96%, the gas flow is 20,000 ACFM with inlet temperature of 250 F. and exit temperature of 225 F. through a rectangular stack 22 inches x 25 inches and height of 42 feet above grade.

The baghouse is connected to the asphalt plant at the feed end of the aggregate dryer, the hot storage bin, and the pug mill. The material collected is returned to the system via the hot elevator (Respondent Ex. No. 11).

Dunn's efforts to control dust and odor focus on two areas: the cyclone and baghouse control process emissions; fugitive emissions are controlled by periodic oiling of unpaved areas and a fence around the facility. Process emissions are estimated at 0.89 tons per year of particulates. Odor emissions are not quantified. Fugitive dust emissions are approximately 10 tons per year (Resp. Ex. Nos. 11,12,13).

At hearing, the Carters asserted that Dunn is operating in violation of certain municipal zoning requirements (R. 27); the Board will not rule on this claim. The Pollution Control Board is not a proper forum for resolution of alleged zoning violations. Second, the record indicates that Dunn's operation has met all necessary zoning and Environmental Protection Agency (hereinafter "the Agency") permitting requirements (Resp. Ex. Nos. 4, 7-24). The sole question before the Board is whether Dunn's operations are in violation of Section 9 (a) of the Act.

The Act and judicial interpretations adopt a "public nuisance" approach to dust and odor problems. The Act defines and prohibits unreasonable interference with the enjoyment of life or property from air pollution:

> Section 9
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> No person shall:
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> a. Cause or threaten or allow the discharge or emission of any contaminant into the environment in any state so as to cause or tend to cause air pollution in

> Illinois, either alone or in combination with contaminants from other sources, or so as to violate regulations or standards adopted by the Board under this Act;
>
> Section 3
>
> b. "AIR POLLUTION" is the presence in the atmosphere of one or more contaminants in sufficient quantities and of such characteristics and duration as to be injurious to human, plant, or animal life, to health, or to property, or to unreasonably interfere with the enjoyment of life or property.

Board regulations at 35 Ill. Adm. Code Sections 201.102, "Air Pollution" and 201.141 "Prohibition of Air Pollution" contain identical language to the Act. There have been several judicial interpretations of the "unreasonable interference" air pollution language. See: Incinerator, Inc. v. Pollution Control Board, 59 Ill.2d 290, 319 N.E.2d 794 (1974); Mystic Tape, Div. of Borden, Inc. v. Pollution Control Board, 60 Ill.2d 330; 328 N.E.2d 5 (1975); Processing & Books v. Pollution Control Board, 64 Ill.2d 68, 351 N.E.2d 865 (1976).

The judicial interpretation of an "unreasonable interference" proceeding which is most closely related to this case is Ferndale Heights Utilities Company v. Illinois Pollution Control Board and Illinois Environmental Protection Agency, 44 Ill.App.3d 962, 358 N.E.2d 1224 (First District, 1976), (hereinafter "Ferndale"). While that proceeding involved noise pollution, rather than air pollution, it does provide definitive judicial guidance on the validity of the "public nuisance" concept and what type of evidence is necessary to support a finding of violation. In Ferndale, the Board found that Ferndale Heights Utilities Company had violated the regulatory public nuisance standard in their operation of a pumping station. On Appeal, the Utility Company argued that the regulatory language of Section 900.102 was unconstitutional in that it did not contain sufficient standards for determining what constitutes "noise pollution" and argued that the narrative testimony at hearing lacked sufficient specificity to sustain a finding of violation of noise pollution. The Ferndale court found the regulatory language, when viewed in the entire statutory framework, including the factors listed in Section 33(c) of the Act, was sufficiently specific to pass constitutional muster. In evaluating the adequacy and specificity of the citizen testimony, the court stated:

> Ferndale next asserts that the Board's order should be reversed because its finding of a violation of Rule 102 is contrary to the manifest weight of the evidence. Specifically, Ferndale argues that the Pierson testimony failed to provide dates and times of noises, failed to show any disturbance in his house, failed to show physical damage to himself or any person or property, failed to show that he never lounged or entertained guests in his yard and failed to show when and how often he did not lounge or entertain guests in his yard. Other alleged testimonial deficiencies involve failure to cite dates and times when activities such as patio parties were prevented or when the various witness' sleep was interrupted. However, agency witnesses used such terms as "almost constant this summer", "five times this past summer" and "awakened once or twice this year" to describe generally how often they were disturbed by the noise emanating from the pumping station. Terms such as "a great source of irritation", disturbing", "like ten air conditioners running at the same time" and "[like] a lawnmower running all day under my window" were used to describe the effect of this sound upon the individuals.
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> Based upon such testimony, the Board properly found that the character and degree of interference with the enjoyment of life and lawful activity occasioned by sounds emanating from Ferndale's pumping operations to be "unreasonable." Our review of the record does not mandate a contrary conclusion. (id.)

These statutory and judicial standards provide the guidance by which the Board must evaluate the record in this proceeding. The Board may find severe and frequent interference with the enjoyment of life solely based on testimony describing the impacts of the dust and odor emissions. However, to evaluate whether those impacts are "unreasonable," the Board must evaluate a series of factors listed in Section 33 (c) of the Act:

* * *

> C. In making its orders and determinations, the Board shall take into consideration all the facts and circumstances bearing upon the reasonableness of the emissions,

discharges, or deposits involved including, but not limited to:

1. the character and degree of injury to, or interference with the protection of the health, general welfare and physical property of the people;

2. the social and economic value of the pollution source;

3. the suitability or unsuitability of the pollution source to the area in which it is located, including the question of priority of location in the area involved; and

4. the technical practicability and economic reasonableness of reducing or eliminating the emissions, discharges or deposits resulting from such pollution source.

The "unreasonableness" of the noise or odor pollution must be determined in reference to these statutory criteria. Wells Manufacturing Company v. Pollution Control Board, 73 Ill.2d 226, 383 N.E.2d 148 (1978); Mystic Tape, supra; Incinerator, supra, City of Monmouth v. Pollution Control Board, 57 Ill.2d 482, 313 N.E.2d 161 (1974). However, complainants are not required to introduce evidence on these points. Processing & Books, supra.

The Board's first duty in a proceeding of this type is to review the record to determine whether there are emissions of dust and odor and whether those emissions cause a frequent and severe interference with the enjoyment of life. There is no dispute that Dunn facility is a source of dust emissions. Dunn introduced Agency inspection reports which estimate process particulate emissions at 0.89 tons per year and fugitive particulate emissions at 10 tons per year (Resp Ex. Nos. 11,13). Agency inspectors have observed visible fugitive dust emissions on some occasions (Resp Ex. Nos. 21,23), and not observed emissions on other occasions (Resp. Ex. Nos. 7,15). Testimony at hearing by complaining witnesses confirm dust emissions from Dunn (R. 19,27,33,37,46).

There is also no question that the Dunn facility produces odor emissions. Dunn introduced an Agency inspection report (Resp. Ex. No. 14) which states, "[The Agency inspector] visited Dunn Co. and asphalt odor was detectible approx. 1 1/2 blocks from plant. Odor was in the direction of the wind which was blowing from SW towards NE. Odor near the plant appeared no

different than normal for asphalt plant processing." Another Agency inspection report introduced by Dunn (Resp. Ex. No. 23) stated, "Plant odors noted by [the Agency inspector] appear normal for an asphalt plant; however, [the Agency inspector] notes the plant is located next to residential (75') and even a small amount of odor can be noticed by people living this close to an asphalt plant." At other times, Agency inspectors found no odors present (Resp. Ex. Nos. 18,21). Testimony at hearing confirm odor emissions from Dunn (R. 19,31,34,37,38,39).

Based on the record, the Board finds that there are odor and dust emissions from Dunn which impact the complainants. Next, the Board must determine whether those impacts cause a frequent and severe interference with the enjoyment of life. Perhaps the most succinct description of the impact of the dust and odors was provided by the Stanleys (R. 18-20; Resp. Ex. Nos 1,2):

> We've also experienced problems with maintaining a sanitary home. Dust and grime has accumulated because of the soot expelled by the Dunn Company's operations. Our furniture and carpet is virtually destroyed because of this. Dusting is virtually impossible because of the continuous falling of these dust particles.
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> During the spring, summer, and later fall of the year it is extremely difficult for us to sit on our front porch once Dunn Company has begun operations. Breathing becomes difficult, eyes burn and water, and sneezing follows. My family has developed allergies which we have never experienced before. Mr. Stanley suffers with a blockage in his lungs from causes unknown. Some of our children and grandchildren have extreme respiratory allergies that require shots from their physicians and skin rashes that will not heal.
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> We have worked hard the past nineteen years to pay for our home and we would like to spend the remainder of our days trying to breathe fresh clean air. However, with the adverse affect of the gas fumes and grime that Dunn Company expels we find this virtually impossible. There must be a solution to this problem and we hope that you the Pollution Control Board can help us.

Mrs. Carter also described the severity of the impact:

We can't go home and lay down in our nice clean bed like anyone else. We have to beat our bed. We cannot go home and cook a meal without washing your dishes or your pots and pans before you put your food in. We can go to our home, get ice cubes out, and they are full of dust. The dust is just as harmful as the fumes. (R. 34).

* * *

Q Everyone. All right. Now, with respect to the emissions from the plant, what are the strengths of the emissions?

A It's just like a gas main has broke.

Q Well, what is the strength?

A Full strength.

Q Well, define full strength for me.

A If you inhale gas, you normally will get sick from it. We inhale this, and we are getting sick from it. (R. 52).

There is also testimony that the emission impacts have been occurring since Dunn began its asphalt operations and have continued since that time many, if not most, business days (R. 23,24,28,53). Based on the record the Board finds that emissions of dust and odors from Dunn are causing a frequent and severe interference with the complainants enjoyment of life and property. This interference goes far beyond trifling interference, petty annoyance, or minor discomfort. The dust and odors constitute a substantial interference with the enjoyment of life and property.

Having found a frequent and substantial interference, the Board must determine whether that interference is "unreasonable" in light of the four factors described in Section 33 (c) of the Act. As the Board has already found a frequent and severe interference with the enjoyment of life and property, no addition discussion of the first factor is necessary.

Concerning the second of the Section 33 (c) factors, the Board finds that Dunn is of social and economic benefit in that it produces products and retains employees in the State of Illinois. However, that social and economic benefit is significantly reduced by the nature of the dust and odor emissions from the facility.

The third Section 33 (c) factor concerns suitability of the pollution source to the area in which it is located and priority of location. The record contains very little descriptive information on the area beyond complainants and respondents property. It is clear that some complainants live less than 100 feet from the source of the emissions (Resp. Ex. No. 23), sharing a common property line (Resp. Ex. No. 4). It is also clear the Dunn's present operation is consistent with the local zoning laws that have been in effect since 1960 (Resp. Ex. No. 4). The record shows that at least some of the complainants have priority of location in that they occupied their property before the asphalt operations began. The facility in question was operated as a coal company at least 12 years ago (R. 64). Clearly, intervenor Stanley (Resp. Ex. No. 2) and complaining witness Whitney (R. 64) have priority of location. The Carters have lived in the vicinity of the Dunn facility for 25 years (R. 27), but moved into their present residence in the last six years (R. 50), at which time it appears the asphalt plant was in operation.

Overall, the Board finds that the complainants have the priority of location, and that the Dunn facility is suitable for the area in which it is located if dust and odor emissions can be reduced to acceptable levels.

Concerning the last of the Section 33(c) factors, the Board must determine whether it is technically feasible and economically reasonable to reduce dust and odor emissions to acceptable levels. Because of the nature of this particular proceeding, the Board must evaluate dust control and odor control separately.

The dust emissions have two sources: process dust emissions and fugitive dust emissions. The process dust emissions amount to approximately 0.89 tons per year (Resp. Ex. No. 11). The process emissions are governed by the New Source Performance Standards of 40 C.F.R. Part 60. All evidence in the record indicates that the process emissions are rigidly controlled by stringent standards, and that the facility is in compliance with these standards at all times. There is no evidence that Dunn could reduce the process emissions in a reasonable manner. These emissions compose a very small proportion of overall dust emissions, are controlled by stringent emission limitations, and the facility consistently complies with those emissions. For these reasons the Board does not believe additional reductions in process emissions can be accomplished in a technically feasible and economically reasonable manner. Consequently, the Board holds that the process emissions do not constitute "unreasonable interference".

The fugitive emissions from Dunn amount to approximately 10 tons per year (Resp. Ex. No. 13). The sources of fugitive emissions identified by Agency inspectors or citizen complaints

are : stock piles or storage bins (Resp. Ex. Nos. 13,17), paved and unpaved areas of the facility (Resp. Ex. No. 12), unloading, storage and removal of aggregate (Resp. Ex. No. 18), and shutting down the dust collection line from the mixer (Resp. Ex. Nos. 11,21). Dunn has submitted to the Agency a fugitive particulate matter control program. That program, in its entirety, states, "All paved surfaces of the traffic areas leading to our aggregate stockpiles will be swept with a pick up sweeper monthly, as needed, during the paving season. All unpaved areas shall be sprayed with road oil monthly, as needed, during the paving season. The road oil shall be applied with an asphalt distributor." (Resp. Ex. No. 12). In addition to the fugitive dust control program, Dunn has constructed a fence around the facility, and there are indications that a water spray is used occasionally to control dust while loading aggregate.

When viewed with scrutiny, the fugitive dust control program actually requires very little. First, it only applies during the paving season. Second it only applies "as needed", whatever that term might mean. And last, it only requires action, at most, once a month. While Dunn may do a great deal more to control dust, it is not required by the fugitive dust control program. The Board believes that additional fugitive dust control measures are technically feasible and economically reasonable. If nothing else, the Board could require that all areas be oiled on a weekly basis and that water spray be employed constantly while aggregate loading or unloading is in progress and that water spray be employed constantly while the dust return line is shut down. Because the fugitive emissions constitute such a large proportion of overall emissions, those emissions cause frequent and severe interference, and additional controls are feasible and reasonable, the Board finds that the fugitive dust emissions are causing "unreasonable interference". Rather than simply ordering Dunn to increase the frequency of all dust control activities, the Board will retain jurisdiction in this matter and order Dunn to prepare a report which specifically identifies all possible sources of fugitive emissions, and all reasonable methods of reducing those emissions. In this manner, the Board can attempt to accomplish the greatest dust reduction with the least interruption to Dunn's activities.

The last area for evaluation regarding control is the odor problem. The Board finds the present record is inadequate to reach any decision on the source of the odor problems, or possible methods of control. Since the Board is requiring Dunn to prepare a report on fugitive dust control, the Board will defer a determination on the odor issue until that report is prepared and require as a part of that report that Dunn attempt to identify sources of the odor problem, and possible methods of control. In so doing the Board notes that it has already determined that the odor emissions are causing a frequent and severe interference with the enjoyment of life to area residents.

The only matter yet to be determined is whether those emissions are "unreasonable".

In summary, the Board finds that process dust emissions do not cause unreasonable interference, that fugitive dust emissions do constitute an unreasonable interference, and defers a determination on the odor emissions pending receipt of the report Dunn is required to prepare on methods of controlling emissions. Also, the Board will retain jurisdiction in this matter until the required report is received. At that time the Board will specify what additional control measures will be required.

Dunn will be required to prepare a report on present operations and methods of reducing emissions, and to submit that report to the Board and the complainants not later than November 5, 1987. That report should describe in detail the existing facility, day to day operations, and the location and type of all existing pollution control equipment. A second part of the report should describe all possible sources of fugitive dust emissions, Dunn's past efforts to control each of those possible sources, and potential methods which could be used to further reduce emissions. The report should particularly evaluate the use of water sprays, or water with a chemical binder, as a method of additional control. In the third part of the report Dunn must attempt to identify the sources of odor emissions and possible methods of reducing those emissions. The Board will allow the complainants thirty days after the report is submitted to provide written comments to the Board (with a copy served on Dunn). After the final comments are received, the Board will proceed to issue a final order in this matter.

This Opinion constitutes the Board's findings of facts and conclusions of law in this matter.

ORDER

1. The Board finds that the Dunn Company, a Division of Tyrolt Incorporated ("Dunn Company"), 724 North Mercer Street, Decatur, Illinois, has violated Section 9(a) of the Environmental Protection Act, Ill. Rev. Stat. 1985, ch. 111½ par. 1009(a), through dust emissions from fugitive sources at its facility. The Board defers a determination on odor emissions.

2. Dunn Company is ordered to submit to the Board and the Complainants, not later than November 5, 1987, a report on present operations and methods of reducing emissions. The report shall describe in detail the existing facility, day-to-day operations and the location and type of all existing pollution control equipment. The report shall also describe

in detail all possible sources of fugitive dust emissions, Dunn Company's past effort to control each of those possible sources, and potential methods which could be used to further reduce emissions. The report should particularly evaluate the use of water sprays, or water with a chemical binder, as a method of additional control. Additionally, the report shall identify the sources of odor emission and possible methods of reducing those emissions, such as afterburners or scrubbers.

3. The Complainants shall have thirty days from the receipt of the report described in paragraph two, above, to provide written comments to the Board, with a copy served on Dunn Company, regarding the report and the form of remedy requested.

4. The Board will retain jurisdiction in this matter pending receipt of the report and responsive comments. The Board will then proceed to issue a final order in this matter.

IT IS SO ORDERED

Chairman J.D. Dumelle concurred and Board Member J. Theodore Meyer dissented.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 6th day of August, 1987, by a vote of 5-1.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board