

ILLINOIS POLLUTION CONTROL BOARD
April 21, 1988

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

FINAL 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 claimed 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. 111^{1/2}, 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.

By its August 6, 1987 Opinion and Order, this Board found that odor and dust emissions from Dunn impacted the Carters, that those emissions constituted a frequent and severe substantial interference with the enjoyment of life and property, and that this interference was unreasonable as to fugitive dust emissions. The Board found that the interference was not unreasonable as to process dust emissions, and deferred its judgment as to the unreasonableness of the odor emissions pending further information from the parties. The Board based its decision on the reasonableness or unreasonableness of the emissions on the applicable statutory criteria:

1. The character and degree of the interference;
2. The social and economic value of the Dunn operations;

3. The suitability or unsuitability of the Dunn plant to its location, including whether it or the adjacent residential area had priority of location; and
4. The technical practicability and economic reasonableness of reducing or eliminating the Dunn emissions.

This Board did not evaluate the economic benefits derived by Dunn through any non-compliance. Ill.Rev.Stat. ch. 111¹/₂, Section 1033(c) (1988).

This Board ordered Dunn to submit a report by November 5, 1987 on its present operations and outlining methods for reducing its dust and odor emissions. Dunn was to submit a detailed description of its facility and operations, including the locations and types of all existing pollution control equipment. The report was to describe all possible sources of fugitive dust emissions and outline past and prospective methods for control. It was also to describe all possible sources of odor emissions and describe methods for their reduction. This Board allowed the Carters thirty days to submit their responses to the Dunn report and retained jurisdiction pending this Final Order. For additional description of the facts of this case, see the August 6, 1987 Opinion and Order.

Dunn Report and Follow-Up Responses

In its report submitted October 22, 1987, pursuant to the August 6, 1987 Opinion and Order, Dunn included a plan of its facilities and a summary description of its operations. The Carters' home is indicated as about 12 feet north of the north boundary of the Dunn plant, near where Dunn stores sand and gravel. This storage area is unpaved. A 12-foot high windbreak fence separates the two properties. The Dunn plant baghouse is about 70 feet south of the north property line abutting the Carter property. The Dunn open-topped material hoppers are about 50 feet south of this line. Another 15 feet immediately south of the material hoppers and about 90 feet from the Carter property is a hooded conveyor transfer point. About 100 feet south of the Carter property are two elevated finished product silos at which truck loading occurs, and between 20 and 50 feet south and east of these silos are heated tanks for storage of asphaltic cements. The map indicates that the truck route through the plant enters from the west gate, proceeds in a southwest direction to the product silos, proceeds east about 90 feet, then turns north to exit the plant on the city street about 20 feet east of the Carters' residence. The intervenors Stanleys' home is indicated as 258 feet north of (three houses and one street away from) the north boundary of the Dunn plant.

Dunn indicates that normal plant operations occur between 7:00 a.m. and 4:30 p.m. During an average day, the plant receives about 30 to 40 truckloads of sand and rock and one or two truckloads of asphaltic cement. On such a day, about 30 to 40 truckloads of bituminous concrete are shipped out. On days of peak operation, the plant may receive and ship up to 80 truckloads each of aggregate material and finished product and receive three loads of cement. Minimum days might only involve the shipment of 10 truckloads of product, with no materials receipts. Normal operations occur between March 15 and November 30 from Monday through Friday, with work on Saturdays occurring only two or three times a year.

Dunn stated that truck traffic through unpaved areas of the yard, dumping rock from trucks, pushing rock into stockpiles, endloader traffic from stockpiles to open-topped hoppers, dumping rock into those hoppers, and a conveyor transfer point produce its fugitive dust emissions. To control these emissions, Dunn installed a 12-foot high windbreak fence along its northern boundary line, immediately between its material storage area and adjoining properties, including the Carters'. Dunn has also installed open-topped windshields around its material hoppers, installed a dust hood around the conveyor transfer point, and established a routine for oiling and wetting the traffic areas of its stockpile area. The record indicates that Dunn paved the traffic areas of its plant and commenced monthly sweeping of the paved areas and aggregate stockpiles some time after December, 1982. After that time, it also began monthly applications of road oil to the unpaved areas as part of its fugitive particulates control program submitted to the Illinois Environmental Protection Agency ("Agency") (Resp. Ex. 12).

Dunn believes that paving the entire drive and stockpile area and maintaining traffic areas free from dust by sweeping or the use of a vacuum truck should reduce dust emissions from those sources. Dunn also proposes extending and enclosing the tops of the open-topped hopper hoods to minimize those emissions. It will also extend its 12-foot windbreak fence around the east boundary of its stockpile area. The prevailing wind is from the southwest as noted by Dunn.

Dunn stated that its odors emanate from its asphaltic cements, and not from its aggregate materials. These could come from the vents of Dunn's heated tanks and from truck loading from the finished product silos. Dunn proposed constructing an aspirated hood under the silos to catch fumes released during truck loading operations, and venting its heated cement tanks through activated carbon filters.

Dunn asserted that it would implement these proposed improvements to continue its operations, but that they would take the company to the limit of economic viability. It requested definitive Board action so it could determine a course of action.

The Carters responded to the Dunn report on November 4, 1987. They assert that trucks delivering sand, rock, and asphaltic cement and those hauling finished product enter the Dunn plant from the north, near the Carter home, as well as from the west, as asserted by Dunn. They also assert that Dunn operations frequently begin at 4:30 a.m. and extend to as late as 12:00 p.m., contrary to the Dunn assertions. The Carters complain of the plant noise awakening them at early hours, the fact that the windbreak fence abutting their property blocks their light, and that the fence does not contain dust. The Carters feel nothing could contain the dust generated by the handling of dry materials. They state that the southwest wind picks up dust from the aggregate stockpiles and blows it into the neighborhood to a distance of three blocks, despite the windbreak fence. Odors are also evident in closed homes up to a block away from Dunn's plant. The Carters assert that Dunn's contract sweeper generated dust inside the plant as this vehicle attempted to capture it because the sweeper used no water on its brushes. The Carters finally feel that the odor is beyond control because Dunn stockpiles asphalt 12 feet high along a four-foot retaining wall. This is assumedly in the open.

Dunn filed a supplemental response on November 20, 1987. In it, Dunn reiterates that deliveries of aggregate materials enter only from the west gate, away from the Carter home. Dunn maintains that it is permitted to operate 24 hours, but also maintains the accuracy of the hours originally asserted in its October 27, 1987 report. Dunn asserts that its windbreak fence along the Carter property line was suggested by the Agency and is effective in controlling fugitive dust. Dunn maintains that paving the stockpile area and keeping the paved surfaces clean is adequate to control dust from that area, and observes that no person from three blocks away has ever complained of dust. Dunn admits that it stockpiles cold patch asphalt, but points out that this is along its far southern fence line and that it emanates no odor.

In its supplemental response, Dunn estimates the capital costs of the proposed control measures outlined in its earlier response. The total is about \$56,500. About \$11,800 of this is for the aspirated fume hood, which Dunn states would not produce benefits proportionate to its cost. Dunn believes that installation of this device will render routine maintenance difficult and create a safety hazard by obscuring the view of the silos. It states that loading a single truck takes only 15 seconds, so only a small portion of any day permits odor emissions from the loading of 40 to 80 trucks. It also states that the hood would only aspirate asphalt fumes during operation of the plant dryer, which is only about half the time. Dunn requests that this Board not require installation of the hood under the product silos.

In a supplemental reply, dated November 23, 1987, the Carters reiterate their assertions that trucks hauling aggregate and liquid asphalt cement do in fact enter through the north gate. They make numerous other reiterations and several assertions not relevant and material to the issues before this Board: What reasonable and cost-effective means exist to control dust and odor emissions from the Dunn property so that Dunn, the Carters, and other surrounding neighbors can continue in the reasonable enjoyment of life and property?

Discussion

It is worth initial observation to note that this Board lacks the full equity powers and legal authority of a court of law. It cannot hear matters of general law or grant relief beyond what the Environmental Protection Act would authorize. See Ill.Rev.Stat. ch. 111^{1/2}, Sections 1033 & 1042. Like a court of law, however, it is constrained to decide each individual case on its merits and based on a record established according to certain procedural and evidentiary rules. 35 Ill. Adm. Code 103.200 - 103.210.

With this in mind, the Board takes no notice of any allegations of violations now made by the parties that remain unproven in testimony or evidence not properly presented in the public hearings of October 8, 1986 and March 3, 1987 and properly made part of the record. This Board also takes no notice of any testimony or evidence which is not relevant to issues within this statutorily-defined jurisdiction. Further, this Board cannot now hear allegations pertaining to matters within its jurisdiction which are not part of this proceeding. Finally, the sole object of the comments solicited in the August 6, 1987 Opinion and Order was to fashion relief from the fugitive dust violations found therein, and to alleviate any odor problem. For these reasons, allegations of noise, submissions of certain unattested photographs, assertions of certain adverse health effects, and other related matters made as part of the ordered comments were not properly made at this time.

The original record contained little to guide this Board in imposing requirements with which Dunn could comply. The record after the parties' more recent submissions contains enough information to impose certain requirements for compliance on Dunn, although a fuller record might have allowed greater precision and certainty. The requirements below represent the fullest extent to which this Board can grant relief based on the facts properly before it.

Initially, however, this Board agrees with Dunn, based on the information submitted, that the cost of the aspired fume hood for finished product loading operations would probably outweigh any potential benefits it would confer. The potential

safety hazard it could create is a significant part of its cost consideration. The fact that it would likely be operational half the time diminishes its prospective benefits. It is further possible that alternative measures could control odor emissions from this source, but the record does not identify them.

The Board has decided to impose the full requirements of its regulations pertaining to fugitive particulate matter on Dunn's operations. The Dunn plant is located upwind of (based on a prevailing summer southwest wind) and immediately bounded by a residential area. The requirements of Subpart K: Fugitive Particulate Matter of Part 212: Visual and Particulate Matter Emissions of the Air Pollution regulations, 35 Ill. Adm. Code 212.301 - 212.315, will adequately control the emissions from the Dunn plant with only minor additional requirements. The more significant of these regulations, any additional requirements this Board will impose with regard to each, and any recommendations or observations this Board makes with regard to any are listed below:

Section 212.301 Fugitive Particulate Matter

This provision requires the control of fugitive particulate emissions by not permitting visible emissions from any material handling, material storage, or process facility. The Board adds no further requirement to this Section.

Section 212.304 Storage Piles

This provision requires the control of fugitive particulate emissions from storage piles, such as Dunn's aggregate storage areas. This provision shall apply to Dunn's aggregate storage areas, the 50 T/year and 100 T/year limitation provisions notwithstanding. The Board will require Dunn to complete the proposed paving of this area before September 1, 1988. Until such a time as Dunn shall assemble and the Agency shall have an opportunity to comment on an operating program for the Dunn facility, Dunn shall commence sweeping, vacuuming, or using some alternative temporary method for effective dust removal from all dust-generating stockpile and traffic areas in its plant before June 1, 1988. Dunn shall continue this method or its equivalent on a regular basis until it either suspends its operations or implements its operating program. The Agency can work with Dunn to devise an adequate program for dust control and removal as part of Dunn's revised operating program pursuant to Sections 212.309 through 212.315. The Board observes that Dunn's past monthly oiling and sweeping efforts have proven inadequate, and recommends that the Agency and Dunn devise such means at such a frequency that will provide effective dust control. The Board also observes that the installation of a windbreak fence on the downwind side of the storage piles relative to the Carters' and other residential properties has proven ineffective, and

recommends that the Agency and Dunn study the more appropriate positioning of such a fence with respect to prevailing winds, the shape and situation of the wind-protected storage area, and the location of the neighboring residences. An upwind location from the storage piles may be more appropriate. The Board also suggests that the Agency and Dunn include in Dunn's revised operating program such provisions as are appropriate to control the enhanced dust emissions generated during routine materials handling operations, such as truck offloading, pushing materials into piles, picking up materials for transport to the process, etc.

Section 212.305 Conveyor Loading Operations

The record does not indicate whether Dunn employs conveyor loading to its aggregate stockpiles. If at any time Dunn uses such equipment, the provision of Section 212.305 shall apply to its operations, the 50 T/year and 100 T/year limitations to Section 212.304 notwithstanding.

Section 212.306 Traffic Areas

This provision requires the control of dust emissions from normal traffic pattern areas that are generated by mobile equipment and vehicles moving within a plant. Section 212.306 shall apply to Dunn's facilities, the 50 T/year and 100 T/year limitations of Section 212.304 notwithstanding. Dunn has already paved these areas, according to the record, and this Board will require that all such existing and future areas remain paved. This Board will require that the area in the vicinity of the material hoppers where aggregate materials loading occurs be considered normal traffic pattern areas and remain paved. The Board's observations and recommendations with regard to the aggregate material storage areas shall apply to the normal traffic pattern areas. The Board further observes that limiting the speed of mobile equipment is a potential supplemental method for reducing dust generation.

Section 212.307 Materials Collected by Pollution Control Equipment

This Section requires the control of fugitive particulates emissions generated by the handling of materials collected by pollution control equipment. The provisions of Section 212.304 shall apply to any dust collected during Dunn's efforts to control its fugitive emissions, by whatever means collected.

Section 212.308 Spraying or Choke-Feeding Required

This provision requires the control of fugitive particulate emissions generated by various materials handling and processing operations. Section 212.308, in addition to its current

applicability to Dunn's operations, shall apply to all aggregate materials offloading from trucks, the deposition of aggregate materials into the materials hoppers, and the aggregate conveyor transfer point.

Sections 212.309 Through 212.312 Operating Program and Amendments

Dunn shall prepare an operating program in compliance with Sections 212.309, 212.310, and 212.312 and submit a copy of its program to the Agency as part of an application for an amended permit to include Sections 212.301 through 212.315 not later than August 1, 1988. Dunn shall implement all provisions of its operating program not requiring the installation of capital equipment prior to October 1, 1988. Dunn shall implement all provisions of its operating program as expeditiously as possible, but not later than March 1, 1989, unless an earlier date is given in this Order. The Agency may require an earlier date as a permit condition if it has determined that it is as expeditious as practicable.

In addition to its actions to minimize or eliminate its fugitive particulate emissions, Dunn has agreed to take certain actions to control its odor emissions. As mentioned, such requirements shall not include the installation of an aspirated hood around its finished product loading equipment. Dunn must, prior to August 1, 1988, install activated carbon filters at the vents from its heated asphalt cement tanks. Dunn must select the activated carbon adsorbant, the size of these filters, and perform necessary replacement and/or maintenance of these filters according to the recommendations of the manufacturer or licensed professional engineer, for the specific purpose of controlling Dunn's odors from its asphaltic cements.

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

ORDER

Based on the Board's findings and conclusions expressed in this Opinion, the Board hereby orders Dunn Company to undertake the following actions:

1. To file with the Illinois Environmental Protection Agency ("Agency"), by August 1, 1988, an application for an amended operating permit which shall include provisions for compliance with 35 Ill. Adm. Code 212.301 through 212.315, inclusive; any provision purporting to except its operations because of the magnitude of their emissions notwithstanding;

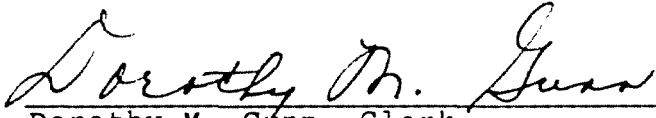
2. To implement, by October 1, 1988, all provisions of its operating program filed with the Agency which do not require the installation of capital equipment;
3. To comply by March 1, 1989, or by any earlier date set by the Agency as part of its permitting authority, or by any earlier date required by this Order for any particular action, with the provisions of 35 Ill. Adm. Code 212.301 through 212.315, inclusive, any provision purporting to except its operations because of the magnitude of their emissions notwithstanding;
4. To pave by September 1, 1988 the entire surface of its aggregate materials storage area, including that area in the vicinity of its aggregate materials hoppers;
5. To initiate by June 1, 1988 an interim program for the on-going collection and removal of dust from all dust-generating stockpile and traffic areas in its plant, and continue in these collections and removals until such a time that it initiates permanent practices pursuant to compliance with an operating program and permit including provisions for compliance with 35 Ill. Adm. Code 212.301 through 212.315, inclusive;
6. To install by August 1, 1988 an activated carbon filter on the vents of its heated asphalt cement tanks, which filter is designed and selected according to a manufacturer or licensed professional engineer's recommendations for the purpose of controlling its odors from its asphaltic cements, and to replace and/or maintain this equipment on an on-going basis according to those recommendations.

The Clerk of the Board shall forward a copy of this Opinion and Order to the Agency.

IT IS SO ORDERED

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 21st day of April, 1988, by a vote of 6-1.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board