ILLINOIS POLLUTION CONTROL BOARD October 30, 1980

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JUNE CANTRELL AND LLOYD CANTRELL,

Complainants,

PCB 79-254

v.

THOMAS GAINES AND WILLIAM GAINES,

Respondents.

MR. ANDREW LEAHY, ATTORNEY AT LAW, APPEARED ON BEHALF OF THE COMPLAINANTS.

MR. LEO F. CARROLL, ATTORNEY AT LAW, APPEARED ON BEHALF OF THE RESPONDENTS.

OPINION AND ORDER OF THE BOARD (by D. Satchell):

This matter comes before the Board upon a complaint filed November 30, 1979 by June and Lloyd Cantrell naming as Respondents Thomas Gaines and William Gaines. The complaint alleges violation of Section 9(a) and 9(b) of the Environmental Protection Act (Act) and Rule 104(b)(3) of Chapter 5: Agriculture Related Pollution in connection with the construction and operation of a confined hog feedlot structure. A hearing was held June 27, 1980 at Jacksonville. Members of the public were present. Mrs. William T. Gaines, Sr. presented a statement.

The confinement facility in question is situated on a two acre tract across a road to the east of the Cantrell residence. Both the facility and residence are in Sec. 32, T. 14 N., R. 10 W., 3 PM, Morgan County. The property is owned by Respondent Thomas Gaines, more formally known as William T. Gaines, Jr. (Gaines). Respondent William Gaines is the father of the owner of the facility. He owns property adjacent to the facility but is not involved in this hog operation. At the hearing the parties stipulated to the dismissal of William Gaines (R. 52, 80, 116, 150; Resp. Ex. 10).

The facility is described as a modified open front building of pole barn construction. It has concrete dividers, waterers, a mechanism for operating the doors according to temperature, a feeder at one end, a large bulk tank on the other end with an auger system and an aeration system in the manure pit (R. 53, 138). The structure was built around September 21, 1978 (R. 53, 66). The building was completed in May of 1979 (R. 54). Apparently Gaines has had other hog operations on this property, but did not have this type of confinement facility prior to the spring of 1979 (R. 52). The building is thirty-two feet wide and 104 feet long (R. 54). The long sides of the building face north and south (R. 59, 65; Comp. Ex. 4). The building has a slatted floor system with a pit which is eight feet deep by ten feet wide by ninety-eight feet long (R. 57).

The facility has twelve pens within which the animals are moved. The building originally contained 345 young pigs weighing about forty-five pounds each (R. 54). It now contains a distribution of animals running up to 200 to 210 pounds in weight (R. 55). When the building was full it would have about three pens worth of full sized animals (R. 56). During 1979 the average population was about 150 animals and during 1980 the average population has been less than 100 (R. 56). The present population is about fifty young pigs, with no large ones (R. 57). Gaines purchases about \$35,000 worth of feed per year, but doesn't know the number of pounds this represents (R. 129, 152).

When the stock is grazed on a sufficiently large area per animal, the manure is subject to aerobic decomposition. Although there is an odor present around the fresh droppings, it quickly subsides. Decomposition takes place with an adequate supply of oxygen reaching the decomposing material and relatively little odor is produced (R. 21, 35; Comp. Ex. 1). When stock densities are too great manure undergoes anaerobic decomposition. A confinement facility is an extreme example of insufficient grazing area. In the subject facility, the manure falls through the slatted floor to be accumulated in the pit. Under anaerobic conditions manure ferments through the action of microorganisms in the absence of oxygen. A variety of volatile, malodorous chemicals result.

In a confinement facility it is possible and advisable to maintain aerobic conditions within the manure pit (R. 36, 45; Comp. Ex. 1). Gaines has installed a system to maintain aerobic conditions through injection of "oxygen" (R. 139). Although the original injection system broke down, it has been replaced with a new and better unit (R. 140).

Gaines has attended seminars at the Purina research farms in St. Louis during the winter of 1979 and 1980 to learn about the operation of hog facilities (R. 148). He spends eight to ten hours a day at the facility (R. 146). Gaines employs one Morgan Defrades, a full time employee who spends about the same time at the facility (R. 128, 146).

Manure is periodically pumped from the pit for land application (R. 69, 139). Gaines owns a tank and injection system with John and Paul Freeman. The system injects the manure eighteen to twenty inches underground. Gaines has several people waiting to take his manure which he describes as being of high quality (R. 139).

Complainants Lloyd and June Cantrell reside across a road to the west of the facility (R. 80). Mrs. Cantrell works seven to five Monday, Tuesday and Wednesday as a hairdresser (R. 86, 113). Mr. Cantrell is a retired automobile salesman who actively engages in farming (R. 86). The Cantrell residence is situated on a forty acre tract. The Cantrells farm 200 acres at a remote location (R. 87). The residence is situated on a 3/4 acre tract within the forty acres (R. 64, 78, 98; Comp. Ex. 3).

The Cantrells have a number of outbuildings close to the residence (R. 78, 82, 84; Resp. Exs. 3, 4, 5, 6). Cantrells raise livestock on the forty acres (R. 70). They currently have two pigs, five baby pigs, four horses, sheep, dogs and cats (R. 77, 88).

Mr. Gaines testified that the distance from the confinement building to the fence on his side of the road would be 1000 to 1500 feet (R. 58). Mr. Cantrell testified that the distance between his house and the confinement building is 288 feet (R. 91, 92). Mr. Cantrell actually measured the distance with a tape, while Mr. Gaines offered no basis of his estimate. Because of the large uncertainty it is unlikely that he made an actual measurement.

The Cantrell residence is situated on a 3/4 acre tract and the confinement facility a two acre tract (R. 78, 150, 152). Assuming these are square, the residence would be on a 180 foot lot and the confinement facility a 295 foot lot. The testimony is that the buildings are east and west of each other across a northsouth road (R. 66, 80). Assuming that the buildings are in the center of the lots and the roadway is 100 feet wide, they would be separated by about 340 feet. On the map they are slightly offset (Resp. Ex. 10). The buildings appear to be about 500 feet apart on the map. However, little reliance can be placed on the map because of its scale and type.

Mr. Gaines testified the area is rural and not residential. Tax bills classify it as rural (R. 133). Within a mile and a half radius of Gaines' facility, there are the following hog operations: Jackson, Johnson, Freeman and Evans (R. 137). There are about 3000 animals in confinement within a mile and a half circle of Cantrells (R. 138). This figure fluctuates from time to time and could exceed 3000. All of these operations are about an equal distance from the Cantrell residence (R. 151).

Russell Jackson owns an eighty acre tract immediately west of the Cantrell property (R. 131, 133; Resp. Ex. 10). Mrs. Cantrell testified that Jackson lived a shade over a mile through the fields and that he had a hog confinement facility. She did not know how many hogs. Jackson is south and west of Cantrells (R. 79). Gaines testified that Jackson's is a larger operation with a concentrated farrowing unit, facilities for feeding silage and a finishing house (R. 85, 131, 136; Resp. Ex. 9). Mrs. Cantrell testified that Jackson's facility was built in the late 60's or early 70's (R. 87). She testified that his facility was a mile or a mile and a quarter through the field (R. 87). Mr. Gaines testified that Jackson's farrowing and nursing unit was between three quarters and a mile from Gaines' facility and a mile from Cantrell's residence (R. 130, 131, 136; Resp. Ex. 10).

The Johnson brothers have a tract in excess of 160 acres to the north and west of the Cantrells. Their property includes the tract shown as belonging to James Lonergan in the map (R. 153; Resp. Ex. 10). The Johnsons sell about 3000 hogs per year (R. 135). Their facility is situated about 3/4 mile from the Cantrell residence (R. 84, 134; Resp. Ex. 7).

On page 137 there is reference to hog facilities owned by "John Freeman and Paul, Tom, Ehrland" and on page 135 there is reference to an operation owned by "Paul and John Freund." On page 151 there is reference to a "Mr. Freeman." The names Ehrland and Freund do not appear on the plat map (Resp. Ex. 10). There is, however, a 180 acre tract beginning about 1/4 mile east of Cantrells which belongs to Paul and Betty Freeman. Apparently the references to Freund and Ehrland are errors in transcription. The Board assumes that all three of these are a single operation and that the correct name is Freeman.

The operation attributed to "Freund" is a hog finishing house exactly like Gaines' (R. 135; Resp. Ex. 8). It has about the same number of hogs as Gaines (R. 135). This operation is described as 3/4 mile to a mile from Gaines' operation and a mile from the Cantrell residence (R. 136). "Freeman's" operation is a half mile to 3/4 mile from the Cantrell residence (R. 151).

There is also reference to an operation run by Evans to the west of the Cantrells (R. 137). The plat map shows a 107 acre tract owned by Roy W. Evans and a ten acre tract owned by a "R. W. E., Jr." about 3/4 to one mile southwest of the Cantrell residence (Resp. Ex. 10). No detailed description of this facility is given and the number of hogs involved is not listed.

Mrs. Cantrell testified that prior to construction of the Gaines facility she noticed normal things that one would smell in the country. Afterwards there was always a manure smell whether the wind blew or not, particularly in the warm months, June through August (R. 67). Livestock was moved in during July of 1979 and odors were prevalent a week or ten days after that (R. 69). Mrs. Cantrell admitted that normal country odors include excrement from some of her own livestock (R. 81). However, there is a different smell between that which is lying out on the ground and the continuous nauseating smell from the confinement facility (R. 72).

Mrs. Cantrell testified to odor on the following dates:

July 24 and 27 or 28, 1979	(R.	107)
August 18 through 21, 1979	(R.	109)
September 17 or 19, 1979	(R.	110)
October 10 or 12, 1979	(R.	110)
October 20 to 24 or 25, 1979	(R.	110)
November 8 and 17, 1979	(R.	110)
June 2, 3, 17, 18, 19, 1980	(R.	70)

Mrs. Cantrell testified that there never was a month without odor (R. 108). However, she also testified that there was not very much odor during December 1979 (R. 111).

Complainants have made no effort to correlate the odor with wind direction. Mrs. Cantrell's testimony that there was a manure smell whether the wind blew or not infers that the source of the odor is several operations scattered around the residence (R. 67). Respondents have established that such operations exist. The Board therefore finds that Complainants have failed to establish that the Gaines operation is the source of the odor they complain of.

The complaint alleges violation of Section 9(a) of the Act which provides that no person shall:

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.

The Board has adopted no standards for hog odor. Complainants have failed to establish that the Gaines have emitted odors so as to cause air pollution within the meaning of Section 9(a).

The complaint also alleges violations through violation of Rule 104(b)(3) of Chapter 5 which provides as follows:

New livestock management facilities and new livestock waste handling facilities shall not be located in close proximity to populated areas so as to cause air pollution. The Complainants have failed to establish that the facility causes air pollution. However, they have argued that Rule 104(b)(3) prohibits the facility from being located close to the residence apart from any question of whether it causes air pollution (R. 6, 159).

Complainants have introduced into evidence ASAE Engineering Practice: ASAE EP379, "Control of Manure Odors" (Comp. Ex. 1). Section 4.111 provides that one should:

. . . locate a livestock operation at a reasonable distance from residential areas, places of employment, institutions, and other areas frequented by persons other than the operators of the animal enterprise. Although the distances have not been established beyond which complaints are invalid, it is desirable to stay 1600 m (one mile) from housing developments and 400-800 m (one quarter to one half mile) from neighboring residences.

The Rule 104(b)(3) does not expressly incorporate the ASAE document. Rule 104(b)(3) speaks of "close proximity to populated areas." The Board holds that a "populated area" is not intended to extend to a single residence in a rural area.

The complaint also alleges violation of Section 9(b) of the Act which provides that no person shall construct a facility capable of causing or contributing to air pollution of any type designated by Board regulations without a permit (R. 122). However, Board regulations do not provide for permits for the type of facility Gaines is operating (R. 39, 44). There is therefore no violation of Section 9(b) of the Act.

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

ORDER

The complaint is dismissed with prejudice.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 30^{-1-} day of <u>orthop</u>, 1980 by a vote of 50.

0 Clerk Christan L. Moffett, Clerk Illinois Pollution Control Board