

ILLINOIS POLLUTION CONTROL BOARD
April 28, 1977

ENVIRONMENTAL PROTECTION AGENCY,)
)
 Complainant,)
)
 v.) PCB 76-77
)
HAROLD CRAIG and ROBERT CRAIG,)
)
 Respondents.)

Mr. John Van Vranken, Assistant Attorney General, appeared on behalf of Complainant.
Mr. Randall Robertson and Mr. Eric Robertson appeared on behalf of Respondents.

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

On March 18, 1976 the Environmental Protection Agency (Agency) filed with the Pollution Control Board a complaint against Harold Craig and Robert Craig alleging violations of Section 12(a) of the Environmental Protection Act (Act); Rules 203(a), 203(d), 403 and 405 of the Chapter 3: Water Pollution Regulations (Chapter 3); and causing a fish kill in Swank Creek on or about July 18, 1975. Hearings were held August 19, 1976, September 28, 1976 and November 16, 1976.

Respondents operate the Craig Brothers Dairy Farm which includes about 830 acres (R. 46). From 640 to 650 acres are planted to crops and about 250 acres are used to produce feed for the dairy cattle (R. 52). Corn, beans, hay, oats and wheat are raised (R. 47). Respondents have 130 dairy cattle and approximately another 100 head of cattle scattered on other parts of the farm (R. 48). Manure from the dairy cows is stored in a pit behind the barn for application on the fields (R. 48). The pit is not quite 100 yards from Swank Creek at the nearest point (R. 49). Swank Creek flows through the farm and around the town of Indianola (R. 48).

On July 18, 1975 an employee of the Agency, Tom Smith, inspected Swank Creek in response to a call reporting a fish kill (R. 55, 97). On this date Mr. Smith took four water samples from Swank Creek, one from above the Craig farm and Indianola; one at a twelve-inch corrugated tile approximately 100 yards east of the Craig dairy barn, discharging into Swank Creek; one downstream at the northeast corner of Indianola; and one at the last road bridge before Swank Creek enters the Little Vermilion River (Comp. Exs. 5-8). These samples showed that upstream from the Craig farm and Indianola that the stream was clear with no odor, no fish were observed (R. 71, 72, Comp. Ex. 7). Slightly north of Indianola by the Craig brothers' farm Mr. Smith observed a quantity of manure in the stream (R. 67). A water sample was taken at this point from a tile discharge into the stream (R. 67, Comp. Ex. 8). The tile discharges from the Craig farm (R. 69). The stream was dark brown, with moderate manure odor and with dead minnows in the vicinity (Comp. Ex. 8). Slightly upstream the stream was approximately ten yards wide and had approximately a ten yard stretch of manure in it (R. 71). The next sampling point downstream showed the stream with a brown cast, slight manure odor, and with dead minnows, carp, suckers and pickerel in the vicinity (R. 72, Comp. Ex. 5). The last point sampled downstream showed the water with a brown cast, slight manure odor and no fish -- dead, alive or distressed were observed (R. 72, Comp. Ex. 6). Mr. Smith returned the next day accompanied by an engineer and observed similar conditions in the stream (R. 73, Comp. Ex. 9). During Mr. Smith's inspection on July 18 and 19, 1975 he observed no other tiles discharging into the stream (R. 95).

Mr. Richard Ryczek, an Agency engineer, also testified. He visited the stream site on July 19, 1975 and observed conditions similar to those described by Mr. Smith. He also expanded the description of the manure in the stream. Approximately twenty-five yards upstream of the tile (12-inch corrugated pipe) discharge the entire stream bottom was covered with manure (R. 110). The investigators traced this upstream to a point where a large stockpile of manure was observed and which had apparently overflowed (R. 110). A makeshift earthen dam had recently been erected to stem the flow of the manure into the creek (R. 110). Mr. Ryczek investigated the stream again on September 30, 1975. Jim Frank of the Agency was also with him. On this date the stream behind the Craig barn was choked with manure for a distance of 30 yards downstream of the point of entry (R. 116). On October 1, 1975, Mr. Ryczek did a complete stream survey (R. 118). Above the Craig farm the stream was

clear (R. 118). At the tile discharge at the Craig barn the manure was still flowing to the creek (R. 119). Below this point there were sludge banks, no evidence of any life, excessive algae, turbid water and a manure odor (R. 119). Proceeding downstream the water gradually improved; the samples included two additional discharges downstream (R. 120, 121).

Mr. Ryczek inspected the area on July 29, 1976 (R. 129). At this time the manure pile had been removed and efforts had been made to construct a manure holder behind the barn (R. 125). No stream survey was made.

Kenneth Brummett, a fishery biologist for the Illinois Department of Conservation, determined the number and value of fish killed on July 18, 1975 (R. 190, 196). Mr. Brummett stated that manure introduced into a stream would remove oxygen from the stream having an adverse effect upon fish (R. 198). However, no actual determination of cause of death of the fish was made.

Respondents have attempted to show with extensive testimony that the Complainant's case is inadequate by suggesting the existence of other potential discharges into portions of Swank Creek downstream from the Craig farm. Respondents have not shown that any other cause did actually occur or exist on July 18, 1975. The evidence is circumstantial; however, the overpowering thrust of the evidence is that Respondents' manure was the major cause of the fish kill that occurred on July 18, 1975. The Board finds that the exhibits and testimony also clearly show the existence of violations of Rules 203(a), 203(d), 403 and 405 of Chapter 3 and Section 12(a) of the Act.

Prior to determining the resolution of this problem the Board must consider the factors of Section 33(c) of the Act. The Department of Conservation has determined that approximately 31,665 fish were killed at an estimated value of \$1,345.40 (Comp. Ex. 24). This figure does not include injury to the general public such as the nuisance of the odor, the unappealing appearance of the stream on the contribution of pollution to other users downstream of the Little Vermilion.

There is no doubt that the Craig Brothers' Dairy Farm is of social and economic value. The farm is located just outside the city limits of Indianola (R. 47). Indianola has approximately 400 people with little industry (R. 47). The Craig Brothers' Dairy Farm is suitably located.

There was a great deal of discussion concerning technical practicability and economic reasonableness. There is no question that elimination of the discharge is possible. The discussion concerned whether Complainant's or Respondents' method was a better method. Complainant's method was based on some knowledge and some assumptions on the part of the Agency (R. 256). The Agency was also concerned with potential odor problems from hauling part of the manure through or by Indianola as Respondents' plan requires; however, Respondents have done this in the past with no known complaints (R. 455). The Agency's estimated cost is \$12,270 (Comp. Ex. 28). Respondents claim the Agency's plan will cost \$37,050 (R. 444). Respondents' plan is estimated to cost \$14,000 (R. 439). The Agency's plan is \$158 less to operate per year than Respondents' according to Respondents' engineer (R. 441). The Craigs have hired an engineering firm to design a system of containment of livestock waste (R. 431). The system is to be economically compatible with the Craig operation and meet all the requirements of the Agency (R. 432). The Craigs are prepared to install the recommended system and have in fact begun installation (R. 340). The bulk of the work is to be completed in the fall of 1976 with seeding to be done in the spring of 1977 (R. 342). The drain tile from the Craigs' milk parlor has been altered so that it drains into their lagoon rather than Swank Creek (R. 343).

The Craigs did not provide financial data for their entire operation, but did show gross income and losses for the farm for the years 1970 through 1975. The year 1970 showed gross profit of \$5,240 (R. 344). The following years show losses: 1971 - \$3,322; 1972 - \$15,748; 1973 - \$1,904; 1974 - \$27,689; and 1975 - \$29,394 (R. 344). This information fails to consider the benefit to the grain growing operation that the use of manure rather than fertilizer provides.

The Board finds that the fact the Craigs have hired an engineering firm and committed themselves to follow its plan shows that compliance is economically and technologically feasible. The Craig plan was designed to meet the requirements of the regulations and the Act and the needs of the Craigs. At completion of the project any failure to meet these requirements will, of course, remain the responsibility of the Craigs.

In accordance with Section 42(b) of the Act the Board will require the Respondents to pay the reasonable value of \$1,345.40 to the Game and Fish Fund in the State Treasury. The Board finds that the continuing violations of Chapter 3 and Section 12(a) of the Act for at least several months merits a heavy penalty; however, in light of the cost of compliance, payment for the fish and the profit and loss statements, a penalty of \$500 will be sufficient to aid in enforcement of the Board's Regulations and the Act.

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

ORDER

It is the Order of the Pollution Control Board that:

1. Harold Craig and Robert Craig are found to be in violation of Rules 203(a), 203(d), 403 and 405 of the Chapter 3: Water Pollution Regulations and Section 12(a) of the Environmental Protection Act, which resulted in a fish kill on July 18, 1975.
2. Respondents shall cease and desist all further violations.
3. Respondents shall pay to the Game and Fish Fund of the State Treasury the value of the fish killed, \$1,345.40, within 35 days of this Order.
4. A penalty of \$500 is assessed. Payment shall be by certified check or money order payable to:

State of Illinois
Fiscal Services Division
Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Payment is due within 35 days of this Order.

Mr. James Young abstained.
Mr. Jacob D. Dumelle concurred.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on the 28th day of April, 1977 by a vote of 4-0.


Christan L. Moffett, Clerk
Illinois Pollution Control Board