ILLINOIS POLLUTION CONTROL BOARD November 14, 1974

ENVIRONMENTAL PROTECTION AGENCY,)
Complainant,	{
vs.) PCB 72-412
CHARLES J. TRIONE & BETHEL TERRACE, INC.,)
Respondents.	

John W. Leserka, Assistant Attorney General, on behalf of the Environmental Protection Agency; John B. Raffaelle, Attorney, on behalf of Respondents.

OPINION AND ORDER OF THE BOARD (by Mr. Seaman):

The Environmental Protection Agency (hereinafter referred to as "Agency") filed its original Complaint against Charles J. Trione and Bethel Terrace, Inc. (hereinafter referred to as "Respondents") on October 18, 1972. On January 2, 1973, the Agency filed an Amended Complaint and it is on this Complaint that six public hearings were held. The Amended Complaint consists of three Counts. We shall treat each Count separately.

The Respondents own and operate (1) a dumping area, (2) a sewage treatment plant in conjunction with a polishing lagoon and (3) a mobil home trailer park, all of which are located on a single site in Caseyville, St. Clair County, Illinois. Respondent Charles J. Trione is the sole owner of Respondent Bethel Terrace, Inc.. (5/3/73 R. 173).

Count I charges Respondents with numerous specific dates of violation of Sections 21(a), 21(b), 21(e), and 21(f) of the Environmental Protection Act; and Rules 3.04, 5.06, 5.07(a) and 5.07(b) of the Rules For Refuse Sites and Facilities, remaining in effect pursuant to Section 49(c) of the Act.

Mr. Kenneth Mensing, Sanitary Inspector for the Division of Land Pollution Control of the Agency, testified (5/3/73 R. 93-134) to the conditions he found at Respondent's landfill or dump during each of the dates of violation alleged in the Amended Complaint as well as to the fact that the Respondents never obtained a permit for the operation of a landfill.

Mr. Mensing conducted his initial inspection of Respondents' property on November 22, 1971 and observed thereon large ravines into which numerous automobile bodies, brush, tree limbs and a large number of tires had been dumped. (5/3/73 R. 95, 96). On that same date, Mr. Mensing informed Trione of the violative condition of said ravines and of a separate area upon the premises where refuse collected from Respondents' trailer park was sometimes dumped. (5/3/73 R. 97). Mr. Mensing testified that he told Trione that these areas should be covered daily and that if Trione wished to continue dumping he should apply for a permit. (5/3/73 R. 97). Mr. Mensing testified that open dumping of refuse, open dumping of garbage, failure to apply daily cover and failure to properly spread continued substantially unabated for more than a year. (5/3/73 R. 133).

Complainant's Exhibits 2 through 17, being photographs of Respondents' dumping areas taken on separate dates, show hundreds of automobile tires, numerous wrecked automobiles, other debris and garbage. Respondent Trione admitted by his testimony that he did not obtain a permit to operate (5/3/73 R. 181); that he dumped upon his property refuse collected from the residents of the trailer park until February of 1972 (5/3/73 R. 177); and that he allowed the dumping of tires upon his property during the period between early 1969 to approximately the end of 1972. (5/3/73 R. 181). Complainant's witness James E. Kammueller observed the dumping of tires on Respondent's property on October 26, 1972. (5/17/73 R. 5). Complainant's Exhibit 26 is a photograph showing the dumping of tires on that date.

This Board finds that the evidence adduced by the Agency in the form of testimony and exhibits is sufficient to sustain the allegations of Count I. In mitigation, Respondent Trione testified that he never believed a permit was required, this in the face of numerous notices by the Agency (See Complainant's Exhibits 18 through 25). Trione further testified that he had been operating in the same manner long before the Environmental Protection Agency was formed. We find little merit in these assertions.

The allegations of Count II of the Amended Complaint relate to the sewage treatment plant owned and operated by Respondents. Said facility is located proximate to an unnamed tributary of Canteen Creek, which is in turn tributary to the Cahokia Canal. Count II charges continuing violation of the Act; certain Rules and Regulations of the Illinois Sanitary Water Board (effective pursuant to Section 49(c) of the Act); and certain Rules in Chapter 3 of Illinois Pollution Control Board Rules and Regulations. We shall consider the allegations of Count II separately.

a) Caused, threatened, and allowed the discharge of contaminants, as defined by the Act, including but not limited to inadequately treated sewage on various dates, including but not limited to 5/16/72, 5/22/72, 5/24/72, 7/20/72, 7/21/72, 7/28/72, 8/1/72, 8/22/72 and 10/26/72 so as to cause or tend to cause water pollution in Illinois of an unnamed tributary of Canteen Creek either alone or in combination with matter from other sources, or so as to violate regulations adopted by the Pollution Control Board under the Act, all in violation of \$12(a) of the Act; III. Rev. Stat. 1971 Ch. 111 1/2, \$1012(a).

We find that Complainant has proven this general allegation. The particulars of Respondents' violations are set out below, as the allegations of Count II become more specific.

b) Caused or allowed unnatural sludge or bottom deposits, floating debris, visible oil, odor, unnatural plant or algal growth, unnatural color or turbidity, or matter in concentrations or combinations toxic or harmful to human, animal, plant or aquatic life of other than natural origin to be present in the unnamed tributary of Canteen Creek in violation of Rules 203(a) and 402 of Chapter 3.

The evidence that Respondents' sewage treatment operation has caused or contributed to the pollution of the unnamed tributary of Canteen Creek (hereinafter, the "receiving stream") is simply overwhelming. The Record is replete with testimony to the effect that Respondents' treatment plant functioned poorly, and often not at all. Respondents' polishing lagoon was also often in very poor condition. Respondents were repeatedly informed over a period of many months of the unsatisfactory condition of the treatment plant and the polishing lagoon; however, efforts toward compliance were slow and generally ineffective during this period. The picture which emerges from the Record is one of neglect, regarding both the function of the treatment system and the quality of its effluent.

More specifically, on May 10, 1972, Mr. James E. Kammueller, an Agency sanitarian, made the first of many investigative visits to Respondents' premises. (5/17/73 R. 8). Mr. Kammueller described Respondents' treatment facility as including a sewage collection system terminal station, a package extended aeration treatment plant and a polishing lagoon. (5/17/73 R. 9). No effluent coordination or disinfection is provided at the polishing lagoon prior to discharge into the receiving stream. (5/17/73 R. 9).

The lagoon was built in 1965 to serve 58 mobile homes. As the park grew, the sewer terminal lift station and the treatment plant were constructed to accommodate approximately 130 mobile homes. (5/17/73 R. 10).

Mr. Kammueller ran a dissolved oxygen test on the aeration tank at the package plant and found that it contained no dissolved oxygen. (5/17/73 R. 17). Mr. Kammueller stated that insufficient air was being supplied to the aeration tank because one of the two blower units was not in service (5/17/73 R. 18). Mr. Kammueller also ran a sludge test on the aeration tank and found insufficient solids present.

Mr. Kammueller showed Mr. Trione how to perform the tests required by the Agency. Respondents had not been submitting monthly operational reports as required and had no certified treatment plant operator. (5/17/73 R. 19). The witness noted that the polishing lagoon was dark green in color, had a septic H₂S odor and was causing discoloration of the receiving stream. (5/17/73 R. 19). Mr. Kammueller testified that the lagoon was not baffled to prevent the discharge of floating scum and debris and that there was duck weed on the lagoon surface. (5/17/73 R. 20). Mr. Trione was informed of all of these conditions.

On May 22, 1972, Mr. Kammueller again visited Respondents' premises and observed that the aeration equipment at the package plant was still not in service; that the polishing lagoon had turned gray-green in color and had a septic odor; that the surface of the lagoon was 50% covered by duck weed; that solid sewage was bypassing to the lagoon; and that lagoon effluent was not being disinfected. (5/17/73 R. 28). Trione was again advised of these unsatisfactory conditions.

On July 20, 1972, Mr. Kammueller observed that the terminal lift station was not in service and that all sewage was bypassing directly to the polishing lagoon. (5/17/73 R. 35). The lagoon itself was black, covered with duck weed, and had a strong septic odor. (5/17/73 R. 36). The witness testified that the receiving stream was black in color downstream of the lagoon effluent discharge. (5/17/73 R. 36). Again, on July 28, 1972, Mr. Kammueller noted that sewage was passing directly to the lagoon, that the lagoon was black, septic and foul smelling, and that the receiving stream was black, and septic downstream of the effluent discharge. (5/17/73 R. 46).

On his August 1, 1974 inspection, Mr. Kammueller noted that the receiving stream, downstream of the lagoon discharge, contained thick, black sludge deposits which were two to three inches deep. (5/17/73 R. 54). On October 26, 1972, Mr. Kammueller observed not only black sludge deposits in the receiving stream, but also floating duck weed and white foam. (5/17/73 R. 75).

We will not exercise ourselves further in detailing the violations testified to by Mr. Kammueller. The witness inspected Respondents' premises on numerous occasions between May 10, 1972 and April 18, 1973; on each date his observations of violative conditions were substantially the same. Complainants' Exhibits 18 through 47 (in particular, Complainant's Exhibits 32 and 47), being photographs of and reports pertaining to the violations described by Mr. Kammueller, are more than sufficient to substantiate his testimony. We find that Respondents' have violated Rules 203(a) and 402 of Chapter 3, as alleged in Count II, paragraph b.

c) Caused or allowed the concentrations of iron, ammonia nitrogen and sulfate in the unnamed tributary of Canteen Creek to exceed the levels set forth in Rule 203(f) of Chapter 3, all in violation of Rules 203(f) and 402 of Chapter 3.

In addition to a chronically malfunctioning sewage treatment facility, the Record indicates that Respondents have a pollution problem resulting from mineral-laden surface run-off which also enters the receiving stream. Respondents' property is covered by gob piles and refuse piles which developed during the period when previous owners had conducted extensive coal mining operations. As a result, the surface water which courses through Respondents' property acquires high concentrations of various elements and carries them to the receiving stream. (5/17/73 R. 38). As depicted in Complainant's Exhibit 37, most of the run-off enters the receiving stream at a point below the discharge from Respondents' polishing lagoon; however, small amounts also flow into the lagoon itself (5/17/73 R. 106) and to the treatment plant through feeder sewers.

Downstream of the gob pile drainage (which is orange in color) the receiving stream becomes orange, with deposits of coal fines up to six inches deep in the stream bed. (5/17/73 R. 54). The stream bed also contains orange deposits two to three inches deep in places. (5/17/73 R. 55). See also 5/17/73 R. 64, 75 and 6/20/73 R. 5.

Complainant conducted extensive sampling and testing of Respondents' polishing lagoon and its effluent; of the receiving stream at various points; and of the drainage from Respondents' gob piles. The results of this testing, indicated in Complainant's Exhibits 39-45, 48 and 50, convince this Board that Respondents have violated Rules 203(f) and 402 of Chapter 3.

The standard for iron concentration set by Rule 203(f) of Chapter 3 is 1 mg/l. On August 1, 1972, the concentration of iron in the receiving stream at a point immediately upstream from Respondents' discharge was 0.6 mg/l; the concentration of iron in the drainage from Respondents' gob pile, before entering the receiving stream, was 40 mg/l; the concentration of iron in the receiving stream at a point 75 feet downstream from the gob pile drainage discharge was 48 mg/l; and the concentration of iron in the receiving stream at a point 350 feet downstream from the gob pile drainage discharge was 2.4 mg/l.

The standard for ammonia nitrogen set by Rule 203(f) of Chapter 3 is 1.5 mg/l. On August 1, 1972, the concentration of ammonia nitrogen in the receiving stream at a point immediately upstream from the discharge of Respondents' lagoon effluent was 23 mg/l; the concentration of ammonia nitrogen in Respondents' lagoon effluent was 26 mg/l; and the concentration of ammonia nitrogen in the receiving stream at a point 100 feet downstream from the point of Respondents' lagoon effluent discharge was 23 mg/l.

The standard for sulphate concentration set by Rule 203(f) of Chapter 3 is 500 mg/l. On August 1, 1972, the concentration of sulphate in the receiving stream at a point immediately upstream from the discharge

of Respondents' lagoon effluent was 200 mg/l; the concentration of sulphate in the drainage from Respondents' gob pile, before entering the receiving stream, was 1800 mg/l; and the concentration of sulphate in the receiving stream at a point 350 feet downstream from the point at which the gob pile drainage entered the receiving stream was 100 mg/l. (See Complainant's Exhibit 38). Therefore, although the concentration of sulphate in Respondents' lagoon effluent is not violative of Rule 203(f), a violation of Rule 402 is substantiated.

We are satisfied from the figures above, and from the results of similar analyses contained in the cited exhibits, that Respondents have violated Rule 203(f) and 402 of Chapter 3. Respondents' liability for the violative gob pile drainage is clear in the wake of Meadowlark Farms, Inc. v. Illinois Pollution Control Board, 17 Ill. App. 3d 851, 308 N.E. 2d 829 (1974) and Freeman Coal Mining Corporation v. Illinois Pollution Control Board, 313 N.E. 2d 616 (1974).

d) Caused or allowed the level of fecal coliform in the unnamed tributary of Canteen Creek to exceed 400 per 100 ml in violation of Rules 203(g) and 402 of Chapter 3.

Complainant conducted extensive sampling and testing of the receiving stream. The results pertaining to levels of fecal coliforms are summarized below:

<u>Exhibit</u>	Sampling Date	Fecal coliforms/100 ml.
43C	8/1/72	100,000
43D	8/1/72	31,000
43F	8/1/72	5,900
43G	8/1/72	1,000
44B	10/26/72	890,000
44C	10/26/72	750,000
44E	10/26/72	140,000

Rule 203(g) is as follows:

(g) Based on a minimum of five samples taken over not more than a 30-day period, fecal coliforms (STORET number - 31515) shall not exceed a geometric mean of 200 per 100 ml, nor shall more than 10% of the samples during any 30-day period, exceed 400 per 100 ml.

Notwithstanding that the levels of fecal coliforms in the receiving stream are grossly in excess of 200/100ml, we cannot find Respondents in violation of Rule 203(g) because Complainant failed to introduce the results of five samples taken over not more than a 30-day period.

(e) Caused or allowed the effluent from its sewage treatment facilities to contain settleable solids, floating debris, scum and sludge solids, and color, odor and turbidity above obvious levels, all in violation of Rule 403 of Chapter 3.

We find the violations alleged. We reach this decision on the basis of the evidence treated under Count II (b) and, in pertinent part, Count II (c) (none of which will be reiterated here) as supplemented by Complainant's numerous photographs and Complainant's Exhibit 38.

f) Caused or allowed the effluent from its sewage treatment facilities to exceed 400 fecal coliforms per 100 ml in violation of Rule 405 of Chapter 3.

Complainant's Exhibit 38 indicates that on the dates specified below the effluent from Respondents' polishing lagoon contained the following levels of fecal coliforms:

Sampling Date	Fecal Coliforms per 100 ml
	- -
5/16/72	5,000
5/16/72	100,000
5/22/72	1,100
7/21/72	100,000
7/28/72	180,000
8/01/72	30,000
8/01/72	50,000
8/09/72	38,000

We find that Respondents have violated Rule 405 of Chapter 3; the figures speak for themselves.

g) Caused, threatened, or allowed the discharge or emission of contaminants, including but not limited to hydrogen sulfide odors, so as to cause or tend to cause air pollution in Illinois either alone or in combination with contaminants from other sources in violation of $\S9(a)$ of the Act.

More than 250 pages of the Record involved the testimony of citizens residing in Respondents' mobile home park or in close proximity to Respondents' property. A total of 28 citizen witnesses testified regarding the presence of a severe odor nuisance and regarding the origin thereof. The witnesses agreed that an odor problem existed; however, there was a sharp difference of opinion as to whether the offensive odor came from Respondents' polishing lagoon or from a nearby egg ranch.

Complainant presented six witnesses who stated, with little variation, that the odors were offensive to the point of nausea; that the odors restricted their use of yards; and that they could definitely differentiate between the odors emanating from the egg ranch and the offensive odors emanating from Respondents' lagoon. (See, for example, the testimony of Mrs. Frances Bauer, 5/3/73 R. 5-35).

Respondents introduced the testimony of 22 witnesses who stated, again with little variation, that the odors definitely emanated from the egg ranch, certainly not from Respondents' lagoon, and that the odors ceased when the egg ranch terminated operation in October of 1972. (See, for example, the testimony of Mr. Richard Jerashen, 7/25/72 R. 71-74).

Complainant's investigator, Mr. Kammueller, noted a foul, septic, H₂S, rotten egg odor emanating from Respondents' lagoon on each of his many visits. (See, for example, 5/17/73 R. 28 and, also, Complainant's Exhibits 41, 42, 43A, 43B, 43C, 43D, 44A, 44B, 44C).

We are convinced, from the testimony of Mr. Kammueller and Complainant's citizen witnesses and from the above-described poor condition of the lagoon (direct sewage bypass, black color, duck weed, etc.) that Respondents' polishing lagoon was a source of such foul odors as to constitute a violation of Section 9(a) of the Act. We feel that the diametrically opposed testimony of Record may be the result of the similarity between the odor which might be expected to emanate from an egg ranch and the "rotten egg" odor characteristic of a lagoon in septic condition. We have no doubt that offensive odors arose from both sources; however, we find that either alone or in combination with the egg ranch, Respondents have violated Section 9(a) of the Act.

h) Failed to submit operating reports in violation of Rule 501(a) of Chapter 3.

This allegation was not contested by Respondents. Complainant showed that Respondents failed to submit operating reports in violation of Rule 501(a) of Chapter 3. (5/17/73 R. 19).

i) Operated the said sewage treatment facilities without a properly certified operator in violation of Rules 1.02 and 5.01 of SWB-2.

This allegation was admitted by Respondent Trione. (8/1/73 R. 388).

j) Failed to submit a project completion schedule for the modification or addition of controls to meet applicable effluent standards in violation of Rule 1002 of Chapter 3.

Complainant showed that Respondents failed to submit the requisite project completion schedule. (5/17/73 R. 90).

The allegations of Count III of the Amended Complaint relate specifically to the drainage from Respondents' gob piles (discussed above) into the unnamed tributary to Canteen Creek. This unnamed tributary is the same body into which Respondents' lagoon effluent discharges, and we have termed it the receiving stream.

Paragraphs (a) and (c) of Count II charge that the drainage from Respondents' gob piles violated Section 12(a) of the Act and Rule 203(f) of Chapter 3 in that the drainage contained excessively high concentrations of iron, manganese, sulfate and dissolved solids.

Complainant's evidence pertaining to these allegations consisted of testimony (see, for example, 6/20/73 R. 5, 6) and numerous sample analyses (see, for example, Complainant's Exhibits 38, 43D-G, 44D, 44E, 48B-D). This evidence shows gross violations of the iron, manganese, sulfate and dissolved solids standards and sustains Complainant's allegations.

Finally, in Paragraph (b) of Count III, Complainant alleges that the drainage from Respondents' gob piles caused or allowed unnatural sludge or bottom deposits, floating debris, visible oil, odor, unnatural plant or algae growth or turbidity, or matter in concentrations or combinations toxic or harmful to human, animal, plant or aquatic life of other than natural origin to be present in the receiving stream, in violation of Rule 203(a) of Chapter 3.

Complainant's evidence pertaining to this allegation consisted of testimony to the effect that the drainage from Respondents' gob piles was degrading the receiving stream (see, for example, 5/17/73 R. 38, 64, 65, 106) and numerous photographs depicting that degradation. (Complainant's Exhibits 28, 29, 31, 32, 47). This evidence shows gross violation of Rule 203(a) of Chapter 3.

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

IT IS THE ORDER of the Pollution Control Board that:

- l. Respondents shall cease and desist from the violations found herein, with the exception of those violations caused by the drainage from Respondents' gob piles. Respondents shall, within 180 days from the date of this Order, submit to this Board and to the Environmental Protection Agency a compliance program detailing the measures they intend to follow in order to abate the violations caused by the gob pile drainage.
- 2. Respondents shall pay to the State of Illinois, the sum of \$2,000.00 within 35 days from the date of this Order. Penalty payment by certified check or money order payable to the State of Illinois shall be made to: Fiscal Services Division, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706.
- 3. Respondents shall, within 180 days from the date of this Order, submit to this Board and to the Environmental Protection Agency, a statement detailing what measures they intend to follow in order to bring the entire operation into compliance.

Christon & moffest

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, do hereby certify that the above Order was adopted on this day of love 1974 by a vote of ...

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