ILLINOIS POLLUTION CONTROL BOARD
May 8, 1975

ENVIRONMENTAL PROTECTION AGENCY, Complainant,	)	
v.	)	PCB 74-213
SPINNEY RUN FARMS, Respondent,	)	
SPINNEY RUN FARMS, Petitioner,	)	
v.	)	PCB 74-347
ENVIRONMENTAL PROTECTION AGENCY, Respondent,	)	

Mr. Jeffrey S. Herden, Assistant Attorney General, and John T. Bernbom, appeared on behalf of the Environmental Protection Agency;
Mr. Harold W. Klingner, appeared on behalf of Spinney Run Farms.

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

An enforcement action of the Environmental Protection Agency (Agency) and a petition for variance filed by Spinney Run Farms (Spinney) were consolidated. The cases were consolidated for the purpose of incorporating by reference testimony had in the earlier hearing, PCB 74-213, and will be considered together in this Opinion. This Opinion explains the Order in PCB 74-347 issued April 10, 1975.

Spinney Run Farms operates a milk processing and bottling plant on Route 63 north of Libertyville in Lake County, Illinois. Equipment at the plant includes bulk milk storage facilities, pasteurizing and bottling apparatus, cooling equipment and a wastewater treatment plant.

Respondent's wastewater treatment plant consists of holding tanks, grit chamber, aeration tank, settling tank, chlorine contact tank, and a sludge holding tank. The treatment plant has a design capacity of 8,600 gallons per day for the treatment and disposal of wastewater generated during the milk processing operation, general cleansing of the milk processing plant environs, and waste produced by plant employes. Effluent from the waste treatment plant

is discharged to a community tile which empties into the Des Plaines River.

The Agency alleges, in a complaint originally filed June 7, 1974 and amended October, 1974, that Respondent in the operation of its waste treatment plant, has: 1. caused or allowed the Des Plaines River to be of an unnatural color or turbidity so as to be harmful to plant or aquatic life, in violation of Section 12(a) of the Environmental Protection Act and Rule 203(a) of the Water Pollution Regulations; 2. caused or allowed its effluent to be in a turbid, odorous or "milky color condition" in violation of Section 12(a) of the Act and Rule 403 of the Regulations; 3. caused or allowed from April 1, 1973 to January 1, 1974 its effluent to exceed 30 mg/l of BOD_5 and 37 mg/l of suspended solids in violation of Section 12(a) of the Act and Rule 404(a) of the Regulations; 4. caused or allowed since January 1, 1974 its effluent to exceed 4 mg/l of BOD5 and 5 mg/l of suspended solids in violation of Section 12(a) of the Act and Rule 404(f) of the Regulations; 5. caused or allowed its effluent to exceed 400 fecal coliforms per 100 ml in violation of Section 12(a) of the Act and Rule 405 of the Regulations; and 6. failed to have a properly certified operator employed at its sewage treatment plant, in violation of Section 12(a) of the Act and Rule 1201 of the Regulations.

Hearings were held on this matter on August 1, September 10, and September 24, 1974. On September 23, 1974, 3-1/2 months after the complaint was originally filed, Respondent filed a petition for variance with the Board. Specifically, Spinney Run Farms requested relief from Rules 203(a), 403, 404(a), 404(f) and 405 of the Water Pollution Regulations and consequently Section 12(a) of the Act until such time as its treatment plant could be expanded and until its effluent could be diverted to the North Shore Sanitary District (NSSD) treatment plant presently under construction at Gurnee. A hearing on this petition was held on November 12, 1974.

Spinney Run Farms was previously before the Board in another consolidated enforcement and variance proceeding, PCB 72-185 and PCB 72-327, respectively. On July 12, 1973 we entered an Order imposing a penalty of $2,000 for water pollution violations of the Act, Water Pollution Regulations, and its predecessor the Sanitary Water Board Regulations. The violations found in that proceeding are substantially

the same as those alleged here - involving general water quality, turbidity, BOD_5, suspended solids, fecal coliform, and failure to have a certified plant operator. The Order also granted a variance from Rules 403, 404(a) and 405 of the Water Pollution Regulations from October 30, 1972 to March 30, 1973. Although that variance ended before the date of the Order, Spinney Run Farms had indicated a compliance time schedule which allowed for completion of its intended treatment plant expansion within the time frame of the variance. Spinney Run Farms proposed a $100,000 expansion of its treatment plant - from a hydraulic loading of 15,000 gallons per day to 60,000 gallons per day - by installing new pumps, a new aeration basin with mechanical aerator, a new clarifier with mechanical sludge removal equipment, a horizontal multiplex filter for tertiary treatment, and aerobic digester and drying beds, and alteration of the aeration tank to a chlorine contact basin. Consideration was also given to the planned expansion of the NSSD's Gurnee plant, and we approved the ultimate goal of discharging the Spinney Run Farms' effluent to the Gurnee interceptor sewer.

In the instant case, Agency engineers visited the dairy on three occasions. Mr. Michael Hermesmeyer was denied entrance to the treatment facility on August 28, 1973 because he lacked a hard hat. However, he was able to observe a septic odor (R. 11). Two samples were gathered for him by Mr. John Bleck, engineer for Spinney Rum Farms. The first sample was taken from the effluent man-hole immediately following the final clarifier tank. The second sample was taken from the outfall to the Des Plaines River. Bleck indicated several other discharges are connected to the tile. Although the discharge at this point was milky white and discolored the river 2 to 3 feet from the bank and 20 feet downstream, no dead fish or toluene odors were noticed. Mr. Hermesmeyer made a second visit on October 11, 1973, at which time he took another sample from the same man-hole. Mr. James Mikolaitis, another Agency engineer, made a third visit on January 8, 1974. He observed that a gas-chlorinator had been installed in the treatment plant, and he collected an effluent sample from either the same man-hole or the next one following. The sample was described as "milky white, very turbid, and (it) had a slight odor" (R. 38). He also stated that Bleck told him the plant was overloaded and was being washed out, which would result in the wastewater being substantially untreated (R. 39). Laboratory analyses (admitted as EPA Exhibit) revealed the following results:

EFFLUENT AT MANHOLE	AUG. 28	OCT. 11	JAN. 8
BOD_5	70	<150	>260
Total Suspended Solids	120	750	490
Fecal Coliform	6,000	⊥81,000	300

DISCHARGE FROM TILE	AUG. 28
BOD_5	> 110
Total Suspended Solids	170
Fecal Coliform	180,000

In addition to these results, Mr. Bleck also prepared his own reports as required by the Agency. These reports (admitted as EPA Exhibits 4-23) cover a period from August to December, 1973, and describe the final effluent to be turbid, occasionally milky, and indicate BOD and suspended solids concentrations in excess of the Regulations.

These exhibits and the unrefuted testimony of Agency engineers clearly prove the alleged violations.

Rule 203(a)

This Rule reads in full as follows:

"(All waters of the State shall meet the following standards):

(a) Freedom from 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."

Respondent argues that it is the Agency's burden to prove the effluent is toxic or harmful to some form of life. This argument relies on a reading of Rule 203(a) which qualifies each enumerated freedom by the toxicity requirement. We disagree with this interpretation. A review of our Opinion explaining this regulation (In The Matter of Effluent Criteria, R 70-8, March 7, 1972) indicates that these enumerated freedoms are to be read in the disjunctive; only the last clause - matter other than those enumerated - relates to toxicity. The Opinion described the purpose of Rule 203(a) as preserving "the existing requirements for freedom from nuisance" (page 4). Those existing requirements were contained in Rule 1.03 of the Illinois Sanitary Water Board Rules and

Regulations, SWB-12, which separately listed four sentences, only the last of which related to toxicity to some form of life. The relevant words in the first three sentences were "objectionable", "unsightly", "deleterious", and "detrimental" to legitimate uses". Although the Agency engineer on August 28, 1973 indicated that no dead fish or toluene odors were noticed, the evidence as to the milky color of the river is sufficient to make out a violation of Rule 203(a). In addition, Respondent's own engineer, in describing a photograph of the river at the tile discharge, (Respondent's Exhibit 20, Number 7) explained that the picture indicated the "discoloration caused from the discharge of our effluent into the River" (R. 325)(Emphasis added).

Rules 403, 404(a), 404(f), and 405

In Respondent's Brief it is admitted that the effluent does not currently meet the standards of these Rules. In response, Spinney Run claims: 1. As long as discharge is to the River, it will infrequently violate Rule 403 whenever a plant "upset" occurs. Upsets are described as "shock loadings to the treatment plant". (V. 54) 2. That given the present technology, achievement of the BOD_5 and suspended solids standards of Rule 404(a) (30 mg/l and 37 mg/l respectively) applicable before December 31, 1973 was unlikely. 3. That achievement of the stricter standards of Rule 404(f) (4 mg/l and 5 mg/l respectively) applicable after December 31, 1973 was impossible. 4. And that Rule 405 is violated only once a week when a portion of the plant influent is by-passed because of hydraulic overloading. These defenses will be discussed shortly in connection with the variance petition. That Spinney Run Farms actually violated these standards, however, is undisputed. The Agency laboratory reports and Spinney Run Farms' own reports are sufficient proof in this regard.

Rule 1201

On the first day of hearings, Spinney Run stipulated that it had not had a properly certified operator employed at its sewage treatment plant since July 13, 1973 (R. 71). In defense of this, Spinney Run introduced evidence indicating this its consulting engineer, Mr. Bleck (who had also designed the treatment plant) was technically qualified (R. 358-60), but as a result of Agency inaction was never notified when to take his qualification examination. Mr. Bleck submitted his application for Certificate of Competency to the Agency on February 24, 1971 (Respondent Exhibit 21), but except for one telephone call (concerning several questions regarding the application and a request for a copy of his contract with Spinney Run) on June 7, 1971, he never heard from the

Agency again in this matter (R. 357). Although the Agency could have been more helpful, the fact remains that the burden was upon Spinney Run to make sure its operator was properly certified. Considering the same violation was alleged in the previous action before the Board (although it was dismissed since no evidence was offered) Spinney Run should have been well aware of its obligation. Respondent's Brief further argues that under the Sanitary Water Board's Rules and Regulations (SWB-2) the requirement of a written examination pertained only to sewage treatment plant operators as opposed to industrial waste treatment plant operators. Regardless of the relative merits of this argument, we need only note that the Board's own regulations, Chapter 3, superseded SWB-2. Under Rule 1204 the Agency has the discretion to adopt and promulgate all procedures reasonably necessary to perform its duties and responsibilities regarding certification.

On March 10, 1975, subsequent to the hearings and filing of briefs in this case, Spinney Run filed a Supplemental Brief. The Agency filed a Motion to Strike, on March 11, 1975, on the grounds that the brief was based on information and evidence outside the record. The only additional information included in the brief was the amount of money spent in the two proceedings and an assertion that Mr. Bleck, Spinney Run's engineer, had finally received his operator's certificate from the Agency without any additional documentation having been filed. Since we do not find these assertions controlling in our decision we find the Motion to Strike is moot.

Petition for Variance

Spinney Run states as the reason for seeking a variance its inability to comply with the stringent standards of Rule 404(f) and the lack of adequate technology to attain those standards. It was asserted that a higher degree of BOD loading in dairy wastes made it harder to treat than municipal waste (R. 270). In support of this Spinney Run offered into evidence as Respondent's Exhibit 10 the Federal Environmental Protection Agency Regulations for the "Dairy Products Processing Industry Point Source Category". These federal guidelines contain the following standards for fluid milk processing plants:

		Daily Maximum	30-Day Average
1977	BOD_5	337.5	135
	Total Suspended Solids	550	202
1983	BOD_5	74	37
	Total Suspended Solids	92.5	46.3

These standards compare to Spinney Run's present average of 140 to 150 BOD_5 and 70 to 80 total suspended solids. Mr. W. James Harper who helped perform research for the Federal guidelines, appeared as an expert witness and testified as to Spinney Run's above average performance in waste treatment. The industry average of BOD_5 influent load is 2,000 mg/l while Spinney Run achieves 1,500 mg/l (V. 24). It is noted that the 98% reduction anticipated by the 1983 Federal standards, by means of tertiary treatment, would still only bring Spinney Run down to a level of 26 mg/l BOD_5 well above the standard of Rule 404(f) (V. 28). Mr. Harper suggests that further reduction can be obtained by in-plant control involving an entire refurbishing of the plant at an estimated cost of $250,000 (V. 31). Although Mr. Harper describes Spinney Run's performance as above average, he also indicated that the system whereby raw waste was bypassed from the treatment plant to avoid an "upset" was an inefficient means of treatment which should be eliminated. An equalization tank at the head of the treatment plant could accomplish this, but he did not think there was sufficient land to install one adjacent to the facility (V. 52 to 55).

Spinney Run now proposes an expansion of its present treatment plant at a cost of $200,000 (Respondent's Exhibit 16; R. 305 to 311; V. 105). This expansion would involve virtually the same program as that proposed in the earlier proceeding and upon which we relied in granting the requested variance. In fact the description of the proposed expansion, appearing in paragraph nine of the present variance petition, is an exact repetition of the language appearing in paragraph five of the first variance petition. The only difference between the two proposals is that the first one indicated a completion date of December 31, 1972, while the present one indicates a completion date of December, 1975. The record does not explain Spinney Run's failure to go forward with the original expansion.

The present proposal does not include any in-plant controls as mentioned by Mr. Harper. Spinney Run expects to achieve thereby a BOD_5 between 50 and 100 mg/l (V. 84). It still intends to achieve compliance with Rule 404(f) by diversion of its effluent to the NSSD's new Gurnee plant once that plant's tertiary treatment is in operation. Mr. Bleck, Spinney Run's engineer believes compliance is impossible without such diversion (V. 79). In describing the expansion proposals (R. 304 to 311), however, Bleck voiced an inconsistent position, indicating an expected overall efficiency of 99.7% and a final effluent of 4 mg/l BOD_5 and 1 mg/l suspended solids (R. 308).

Respondent's President and General Manager, Raymond

Alderman, testified that denial of a variance would work a hardship on his company. Gross sales for Spinney Run for the year ending July 1, 1974 amounted to over $9.9 million dollars. Pretax operating profit was approximately $150,000 (V. 69). A project including treatment plant expansion, in-plant controls, the reverse osmosis operation, and operating expenses was estimated at a total cost over $500,000 which amount Respondent's Vice President, Cameron Farwell, testified would be difficult to finance (V. 68). He did indicate, however, that financing for the $200,000 plant expansion was available (V. 73).

We recognize that a full compliance with the Regulations would impose a financial burden on Spinney Run. We also recognize that the standards of Rule 404(f) are stringent, but they are intended to insure enhanced water quality in the State. The Federal guidelines are not controlling. Although Spinney Run repeatedly maintained that the standards for BOD and suspended solids were unattainable, its engineer also described an expansion program which purported to meet these prescribed standards. Its expert witness assessed the program as reasonable but could not fully evaluate it for lack of information (V. 40). He did indicate, though, that compliance with Rule 404(f) "might be achievable relatively soon if we were willing to pay the cost of getting it done" (V. 47).

Although we reject the notion that full compliance is technologically impractical, we find that to impose such a burden at this late date -- when diversion of Spinney Run's effluent to the Gurnee treatment plant is so close -- would be economically unreasonable. The record indicates that diversion can be accomplished by October, 1976. The pre-treatment plant proposed by Spinney Run should be adequate to reduce its effluent to levels acceptable for such diversion (V. 80). It is doubtful that any more rigorous plan to further improve the quality of the effluent could be accomplished before that date. For this reason we grant the requested variances from Rules 203(a), 403 and 404(f) until September 22, 1975, subject to the conditions set out in full in our previously issued Order of April 10, 1975. As petitioner failed to proceed with its pretreatment plant as originally proposed in the earlier case, we are hesitant to grant the variance for the full length of time requested. Should Spinney Run be able to show sufficient progress in constructing the facility an extension of the variance upon proper application would be appropriate.

Finally, the certificate of acceptance as required in our Order of April 10, 1975 should be addressed to the Water Division of the Environmental Protection Agency, rather than to the Air Division as contained therein.

Penalties

Spinney Run Farms is adjudged to have violated all sections of the Act and Regulations as alleged in the Agency complaint. In arriving at this determination we have duly considered all factors set out in Section 33 of the Act. We find substantial interference with the general welfare of the people in the nature and quantity of the pollutants involved. The social and economic value of the dairy is not such as to warrant the extent of this pollution. Similarly we find that the quantities involved are patently unsuitable to the waters of the State. Moreover, we have consistently held that any priority of location does not constitute a permit to pollute. Finally, we have rejected the notion that it is technically impracticable or economically unreasonable to reduce the discharges. Rather, we have granted the variance in consideration of the pending diversion to the Gurnee treatment plant in order to avoid the duplicated cost and effort which would be rendered unnecessary after such diversion.

We note that the considerable reduction in pollution made possible by Spinney Run's proposed pretreatment plant could have, and should have been accomplished by 1973, as anticipated by our previous Order. We recognize that it is often cheaper to pollute than to comply with regulations. When a polluter has failed to take advantage of a previous variance, we need necessarily rely on strict enforcement and a substantial monetary penalty to assure deterrence from such a policy. For this reason we feel that a penalty of $8,000 for the violations found herein are justified.

ORDER

It is the Order of the Pollution Control Board that:

1. Spinney Run Farms pay to the State of Illinois, within 45 days of the date of this Order, the sum of $8,000 as a penalty for the violations of Section 12(a) and Rules 203(a), 403, 404(a), 404(f), 405 and 1201 of the Regulations found in this proceeding. Penalty payment by certified check or money order shall be made payable to: Fiscal Services, Illinois Environmental Protection Agency, 2200 Churchill Road, Springfield, Illinois 62706.

2. The Order of April 10, 1975 is modified to substitute the Water Pollution Control Division as the recipient for the certificate of acceptance.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion and Order were adopted on th 8th day of May, 1975 by a vote of 5-0.

Christan L. Moffett, Clerk
Illinois Pollution Control Board