ILLINOIS POLLUTION CONTROL BOARD
January 23, 1986

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Complainant,	)	
v.	)	PCB 85-127
RIP'S FERTILIZER SERVICE,	)	
Respondent.	)	

MR. MARK A. LaROSE, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF THE COMPLAINANT.

MR. GARY W. (RIP) GREEN, OWNER OF RIP'S FERTILIZER SERVICE, APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by W.J. Nega):

This matter comes before the Board on a four-count Complaint filed on August 22, 1985 by the Illinois Environmental Protection Agency (Agency).

Count I of the Complaint alleged that: (1) intermittently from May 26, 1982 until August 22, 1985 (including, but not limited to, June 29, 1983, September 15, 1983, and July 19, 1984), the Respondent threatened the discharge of contaminants from its facility into Illinois waters so as to cause or tend to cause water pollution in violation of Section 12(a) of the Illinois Environmental Protection Act (Act); (2) intermittently from May 26, 1982 until August 22, 1985, the Respondent deposited contaminants upon the land at its facility in such a place and in such a manner so as to create a water pollution hazard in violation of Section 12(d) of the Act; (3) intermittently from April 28, 1983 until August 22, 1985, the Respondent threatened the discharge of contaminants into Illinois waters from the county road so as to cause or tend to cause water pollution in violation of Section 12(a) of the Act, and (4) intermittently from April 28, 1983 until August 22, 1985, the Respondent deposited contaminants upon the land, specifically the county road, in such place and manner so as to create a water pollution hazard in violation of Section 12(d) of the Act.

Count II alleged that, at intermittent times from May 26, 1982 until August 22, 1985, the Respondent caused or allowed the

discharge of Treflan* and Lasso* at its facility into Illinois waters so as to cause therein the presence of those materials in concentrations greater than one-tenth of the 96-hour median tolerance limit (96-hr. TL_m) for certain native fish species in violation of 35 Ill. Adm. Code 302.210 (Substances Toxic to Aquatic Life) and Section 12(a) of the Act.

Count III alleged that, intermittently from June 29, 1983 until July 9, 1984, the Respondent constructed and operated a chemical rinsate pit at its facility without first obtaining the necessary Agency construction and operating permits in violation of 35 Ill. Adm. Code 309.202(a) and 35 Ill. Adm. Code 309.203 and Section 12(a) of the Act.

Count IV alleged that: (1) intermittently from May 26, 1982 until August 22, 1985 (including, but not limited to, June 29, 1983 and July 9, 1984), the Respondent failed to take appropriate measures to prevent the spillage of liquid 32% ammonia solution from causing water pollution had such spillage occurred in violation of 35 Ill. Adm. Code 306.102 and Section 12(a) of the Act, and (2) intermittently from July 9, 1984 until August 22, 1985, the Respondent failed to take appropriate measures to prevent spillage of potash fertilizer from causing water pollution in violation of 35 Ill. Adm. Code 306.102 and Section 12(a) of the Act.

The parties filed a Stipulation and Proposal for Settlement on August 22, 1985 and a hearing was held on October 11, 1985 at which no members of the public were present. (R. 14). At the hearing,, the Hearing Officer granted the Agency's motion for leave to file Attachments A through D as a supplement to the record, since these attachments were not originally filed with the Stipulation and Proposal for Settlement due to an inadvertent oversight. (R. 3-4; see: letter filed on October 22, 1985 from Assistant Attorney General LaRose to Clerk of the Board).

The Respondent, Rip's Fertilizer Service, is a sole proprietorship owned and operated by Mr. Gary W. (Rip) Green which is located near Roseville, Warren County, Illinois. The Respondent is primarily in the business of selling and applying agricultural herbicides and fertilizers. There are three buildings on the Respondent's site: a dry fertilizer storage building, a shop, and an office. (See: Attachments A, B, and C to the Stipulation). There are also three storage tanks at the site: two tanks for the storage of 32% ammonia solution (which have a capacity of approximately 12,000 to 15,000 gallons) and

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*Treflan is the trade name for the herbicide trifluralin which is produced by Elanco Products Company. Lasso is the trade name for the herbicide alachlor which is produced by Monsanto Company. Attachment D to the Stipulation provides further details on these chemicals and their toxicity to bluegill, channel catfish, fathead minnows and daphnia.

one tank for the storage of liquid anhydrous ammonia (which has a capacity of about 18,000 gallons). There are three "floater" trucks used to spray fertilizers, anhydrous ammonia nurse tanks, and some other tank vehicles which are parked in the open area at various locations at the site when not in service. (Stip. 2; see: Attachment B to the Stipulation).

On May 26, 1982, an Agency inspection of the Respondent's site revealed two areas of pesticide runoff from the facility: (1) contaminated runoff from tank vehicles parked near the head of the drainage ditch was draining from the north side of the property and entering a roadside ditch and (2) ponded liquid on the east side of the facility was traveling to the northeast across a farm field and through the yard of the neighboring resident, Mr. Paul Hill. (Stip. 2-3).

The Agency inspector observed that the roadsite ditch, which was void of vegetation for a substantial distance, is tributary to an unnamed tributary of Swan Creek. Two grab samples were taken from the drainage ditch on May 26, 1982. The first grab sample, at Station R-1, was taken at the head of the drainage ditch, while the second sample, at Station R-2, was taken about 50 yards north and west of Station R-1 in the drainage ditch. (Stip. 2; see: Attachment A to the Stipulation). The sampling results at Stations R-1 and R-2 indicated the following results:

	Concentration (mg/l)	
Contaminant	Station R-1	Station R-2
Treflan	550	0.86
Lasso	790	8.6
BOD	36	
COD	2010	
pH	7.0	

(Stip. 3).

Similarly, grab sampling of the runoff from the ponded area on the east side of the site which travelled across a farm field indicated the following data:

Contaminant	Concentration (mg/l)
Treflan	8.1
Lasso	230.0

(Stip. 3).

In addition to the sampling done on May 26, 1982, the Agency inspector also observed that the Respondent had no berm or other spill control device designed to contain or control spills or leaks from the two 32% ammonia storage tanks on the property. (Stip. 3).

On June 29, 1983, the same Agency inspector again visited the Respondent's facility. In the interim time period between the first and second Agency inspections, the Respondent had constructed an unlined pit for the storage of chemical rinsate in an attempt to alleviate some of the runoff problems at the site. However, the Respondent constructed the chemical rinsing pit without first obtaining the requisite Agency permit. Moreover, because the chemical rinsing pit was unlined, it was possible for its contents to percolate into the groundwater. (Stip. 3; R. 6-8). Accordingly, a grab sample of the contents of the Respondent's chemical rinsing pit indicated the presence of the following contaminants:

Contaminant	Concentration (mg/l)
Treflan	2.0
Lasso	87.0
Atrazine*	120.0
Dual*	210.0
Sencor*	13.0

(Stip. 3).

Similarly, a grab sample taken on June 29, 1983 of the small ponded area of liquid located to the west of the chemical rising pit showed the presence of the following contaminants:

Contaminant	Concentration (mg/l)
Treflan	0.009
Lasso	7.2
Dual	7.2
Atrazine	2.3
Sencor	0.13

It was also observed by the Agency inspector on June 29, 1983 that the Respondent had not yet utilized a dike or other device designed to control or contain spills from the two 32% ammonia storage tanks. (Stip. 4).

During the inspection conducted by the Agency on July 9, 1984, it was found that the chemical rinsing pit had been removed

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*Atrazine is a herbicide commonly marketed under the trade name AAtrex and produced by Ciba-Geigy Corporation. Dual is the trade name for the herbicide metolachlor which is produced by the Ciba-Geigy Corporation. Sencor is the trade name of the herbicide metribuzin which is produced by the Mobay Chemical Company. The herbicide metribuzin is also known by the trade name Lexone and is marketed by the DuPont Company. Attachment D to the Stipulation provides further details on these chemicals and their toxicity to bluegill, channel catfish, fathead minnows and daphnia.

(reportedly during the summer of 1983). (Stip. 4). On July 9, 1984, the Agency inspector also observed that a portion of the farm field to the east of the Respondent's site and the drainageway through Mr. Paul Hill's property both had an absence of vegetation. The inspector indicated that the barren area in the farm field was about 30 feet wide and 100 to 200 feet long. (Stip. 4). It was also noticed that no dike or spill control device had yet been built to control potential spills from the two 32% ammonia storage tanks. (Stip. 4-5).

Additionally, the Agency inspector observed a potash storage pile during his July 9, 1984 inspection. This potash storage pile was located on the west side of the dry fertilizer storage building and consisted of about 60 tons of potash which was contained by a wooden fence and stored outside the building. Because the fence was broken in several places, some potash was spilling outside the containment area. The Agency inspector noted that there was no spill containment at the potash load-out conveyor located on the east side of the dry fertilizer storage building and there was no device or equipment to control air pollution from the conveyor. (Stip. 5).

In reference to the effects of the Respondent's operations on neighboring property, an Agency inspection on April 28, 1983 of the county road and an adjacent farm field owned by Ellen M. Allaman showed a wet path on the road which had recently been scraped that started at the entrance to the farm field and extended for about one-fourth mile to the north. It was learned that the Allaman field had previously been sprayed by the Respondent's floater truck and a small spill occurred when a valve was accidentally left open on a nurse tank which provided chemicals to the floater truck. (Stip. 5). (See: Attachment C to the Stipulation).

Soil from the county road was subsequently sampled at four locations by a private citizen and then analyzed by the Agency. Sampling Station 1 was located on the west side of the county road about 150 feet south of the abandoned railroad tracks, while Station 2 was located along the west side of the road about one-fourth mile south of Station 1 (i.e., north of the field entrance). Station 3 was also a short distance north of the field entrance and located along the west side of the county road south of Station 2, while Station 4 was located directly at the field entrance. (Stip. 5). According to the Agency, the ditch along the west side of the county road intersected and drained into a small stream which flowed into Mr. Russell Ault's farm pond. (Stip. 6). The analysis of the soil samples taken from the four sampling locations showed the following concentrations of contaminants:

Contaminant	Concentration (ug/g) (ppm) Station 1	Station 2	Station 3	Station 4
Dual	100	180	270	300
Atrazine	61	52	74	66
Ammonia Nitrogen (mg/l)	—	—	—	45,000

The Agency has conducted a literature review pertaining to the potential toxicity of the substances to both aquatic and human life. (See: Attachment D of the Stipulation). The pertinent literature expresses toxicity to native fish in terms of the median lethal concentration (LC_{50}) which is defined as a statistical estimate of the concentration of a test material in air or water necessary to cause death to 50% of a fish test population within a given time (often 96 hours). This 96-hour LC_{50} (median lethal concentration) is equivalent to the 96-hour TL_m (median tolerance limit for certain native fish species which produces death to 50% of a tested fish population in a 96-hour period) provided in 35 Ill. Adm. Code 302.210. The Agency has indicated the following water quality standards which are based upon the least stringent 96-hour LC_{50} for each species as determined from the Agency's literature review:

TABLE I

TOXICITIES* AND STANDARDS**

	Lasso	AAtrex	Dual	Sencor	Treflan
	— parts per million —				
Bluegill	6.4	26	15.0	½100	.19
Standard	.64	2.6	1.5	-	.019
Channel Catfish	***	***	4.9	***	2.2
Standard	-	-	.49	-	.22
Fathead Minnow	***	***	***	***	.105
Standard	-	-	-	-	.011
Daphnia	***	3.6	***	***	.56
Standard	-	.36	-	-	.056

* Highest level reported
** Based on 1/10 96-hr LC_{50}
*** No data available

(Stip., Attachment D)

Because the roadside ditch and the drainageway to the north and to the west of the Respondent's facility are accessible to the general public, the Agency believes there is a slight potential danger to humans from each of the herbicides used. (Stip. 6). However, at the hearing it was emphasized that the Agency had no indication that there had been any actual harmful effects or actual injury to any humans or any farm animals or any wildlife or any fish. (R. 10-11).

The parties have stipulated that the Respondent: (1) caused or allowed the discharge of contaminants from its facility into Illinois waters so as to cause or tend to cause water pollution in violation of Section 12(a) of the Act; (2) threatened the discharge of contaminants from its facility into Illinois waters so as to cause or tend to cause water pollution in violation of Section 12(a) of the Act; (3) caused or allowed the discharge of Treflan and Lasso from its facility into Illinois waters in concentrations greater than one-tenth of the 96-hour TL_m for certain native fish species in violation of 35 Ill. Adm. Code 302.210 and Section 12(a) of the Act; (4) deposited contaminants upon the land at its facility in such place and manner so as to create a water pollution hazard in violation of Section 12(d) of the Act; (5) constructed and operated a chemical rinsate pit at its facility without first obtaining the requisite Construction and Operating Permits from the Agency in violation of 35 Ill. Adm. Code 309.202(a), 35 Ill. Adm. Code 309.203, and Section 12(a) of the Act; (6) failed to take appropriate measures to prevent spillage of potash fertilizer from causing water pollution in violation of 35 Ill. Adm. Code 306.102 and Section 12(a) of the Act; (7) failed to take appropriate measures to prevent spillage of liquid 32% ammonia solution from causing water pollution had such spillage occurred in violation of 35 Ill. Adm. Code 306.102 and Section 12(a) of the Act; (8) threatened the discharge of contaminants into an Illinois water from the county road so as to cause or tend to cause water pollution in violation of Section 12(a) of the Act, and (9) deposited contaminants upon the land, and specifically the county road, in such a place and manner so as to create a water pollution hazard in violation of Section 12(d) of the Act. (Stip. 7-9).

The proposed settlement agreement provides that the Respondent admits the aforementioned violations and agrees to: (1) cease and desist from further violations; (2) follow a specified Agency-approved compliance program, and (3) pay a stipulated penalty of $1,800.00 in three installments of $600.00 each into the Illinois Environmental Protection Trust Fund. (Stip. 8-10).

To achieve expeditious compliance, the Respondent has agreed to (and has substantially completed) the following measures as part of its compliance program and schedule:

Compliance Program

The Respondent shall take the following measures to achieve compliance:

Item	Completion Date
1. Construct a dike around ammonia solution tanks	Completed
2. Construct a load in/load out pad for ammonia solutions	Completed
3. Repair the potash pile containment wall	Completed
4. Potash fertilizer will be stored inside the dry fertilizer building to the extent possible. Potash may be stored outside in the containment area when necessary between March 15 - June 1 and August 15 - November 30, provided that it is covered with plastic at all times.	Beginning 4/1/85 and thereafter
5. During the application season, two floater trucks shall be parked inside the shop building when not in use, and the third floater truck shall be parked in the ammonia load in/load out pad when not in use. Spillage or leakage from the floater trucks shall be collected and either re-used or land applied. After the application season is completed and the floater trucks cleaned, they may be parked at any location.	Beginning 4/1/85 and thereafter
6. Provide proper containment of spillage and leakage from any additional floater trucks which are purchased or used in the future	Immediately when necessary
7. Cover the conveyor extension on the east side of dry fertilizer building and attach the boot at end of the conveyor.	Completed

(Stip. 9-10)

In evaluating this enforcement action and proposed settlement agreement, the Board has taken into consideration all the facts and circumstances in light of the specific criteria delineated in Section 33(c) of the Act and finds the settlement agreement acceptable under 35 Ill. Adm. Code 103.180.

In reference to the character and degree of injury to, or interference with, the protection of the health and general welfare, the Agency has emphasized that the Respondent's operations caused no actual injury or actual harmful effects to any humans or any farm animals or any wildlife or any fish or any neighboring property. (R. 10). Some of the Respondent's storage tanks were not bermed properly to prevent the sudden or unplanned release of the substances that were held in the tanks from escaping into the environment, but there is no tangible evidence of substantial leakage. Because the wooden fence surrounding the potash storage pile was broken in several places, some potash was spilling outside the containment areas on the Respondent's own property, but no actual damage was done. There was some contaminated runoff which was of a potentially injurious nature, but no evidence of any actual injury caused by this violation. Moreover, the Agency has characterized the Respondent's facility as having minor problems and operating pretty much up to the standard operating procedures of a small facility at the time. (R. 11).

Additionally, no violations were of a willful or wanton nature, and the Respondent exhibited good faith by constructing a chemical rinsing pit for the purpose of alleviating runoff problems at the facility once those problems were brought to its attention. Good faith was also shown by the Respondent's cooperation with Agency personnel, the allowing of numerous inspections to be made at various times, and compliance with Agency suggestions for improving the Respondent's operating procedures. (R. 5-12). The Agency has also noted that the actions taken by the Respondent since the first inspection by the Agency have eliminated the problems at the facility. (R. 8; R. 13).

Furthermore, it is stipulated that the Respondent is "a small, privately owned independent facility and has experienced financial difficulties over the past several years" (Stip. 8; R. 8). The Respondent's facility clearly has a social and economic value when herbicides and fertilizers are properly handled and the Respondent produces a good product and provides needed services which are socially and economically beneficial to the rural and farming community in which the site is located. (R. 8). The suitability of the Respondent's site to the area in which it is located is also appropriate, providing all operations are conducted in an environmentally suitable manner in accordance with sound ecological principles for the handling and storage of herbicides and fertilizers. It was technically practicable and economically reasonable to have eliminated the violations alleged

in the Complaint, thereby eliminating potential environmental problems from the Respondent's site.

The Board finds that the Respondent, Rip's Fertilizer Service, has violated 35 Ill. Adm. Code 302.210, 306.102, 309.202(a), and 309.203 and Sections 12(a) and 12(d) of the Act. The Respondent will be ordered to follow the agreed-upon compliance plan; to cease and desist from further violations, and to pay a stipulated penalty of $1,800.00 in three installments of $600.00 each into the Illinois Environmental Protection Trust Fund.

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

ORDER

It is the Order of the Illinois Pollution Control Board that:

1. The Respondent, Rip's Fertilizer Service, has violated 35 Ill. Adm. Code 302.210, 306.102, 309.202(a), and 309.203 and Sections 12(a) and 12(d) of the Illinois Environmental Protection Act.

2. The Respondent shall cease and desist from all further violations.

3. Within 30 days of the date of this Order, the Respondent shall, by certified check or money order payable to the State of Illinois and designated for deposit into the Environmental Protection Trust Fund, pay the first installment of $600.00 on the total stipulated penalty of $1,800.00 which is to be sent to:

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

   The second installment of $600.00 shall be paid on, or before, May 15, 1986 and the third installment of $600.00 shall be paid on, or before, November 15, 1986 in the same manner and with the same designation as indicated above. It is stipulated by the parties that the Respondent has waived any right to have any unused portion of the penalty returned from the Environmental Protection Trust Fund.

4. The Respondent shall comply with all the terms and conditions of the Stipulation and Proposal for

Settlement filed on August 22, 1985, which is incorporated by reference as if fully set forth herein.

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 23rd day of January, 1986 by a vote of 6-1.

Dorothy M. Gunn

Dorothy M. Gunn, Clerk
Illinois Pollution Control Board