

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE REGIONAL ADMINISTRATOR

In the Matter of
Reabe Spraying Service, Inc.,
Respondent

)))
)))
)))

Docket No. I.F.& R. V-651-C

Appearances:

Marian Neudel and Michael Walker,
Environmental Protection Agency,
Region V, Chicago, Illinois, for
Complainant United States Environ-
mental Protection Agency.

Anderson, Fisher, Shannon, O'Brien
and Rice, by Daniel Golden,
Plover, Wisconsin, for Respondent
Reabe Spraying Service.

92 APR 22 P 2: 16

INITIAL DECISION

This is a proceeding under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), Section 14(a)(1), 7 U.S.C. 136 1(a)(1), for the assessment of civil penalties for alleged violations of the Act. ^{1/}

The proceeding was instituted by a complaint issued by the United States Environmental Protection Agency ("EPA") and filed on February 6, 1981,

1/ FIFRA, Section 14(a)(1) provides as follows:

Any registrant, commercial applicator, wholesaler, dealer, retailer, or other distributor who violates any provision of this Act may be assessed a civil penalty by the Administrator of not more than \$5,000 for each offense.

charging that Reabe Spraying Service, Inc. ("Reabe"), had applied the pesticides Aqua 8 Parathion, Kocide 101, and Sevin Sprayable Carbaryl Insecticide in a manner inconsistent with their labels in violation of FIFRA, Section 12(a)(2)(G), 7 U.S.C. 136 j(c)(2)(G). A civil penalty in the amount of \$6,000, was requested.^{2/} Reabe answered and denied the violations.

A hearing was held in Juneau, Wisconsin on November 17, 18 and 19, 1981. Following the hearing, each party submitted proposed findings of fact and conclusions and supporting and reply briefs. On consideration of the entire record and the parties' submissions, a penalty of \$600.00 is assessed. All proposed findings of fact inconsistent with this decision are rejected.^{3/}

Findings of Fact

1. On Tuesday, June 24, 1980, Reabe, pursuant to a contract with the Del Monte Corporation, sprayed by airplane a mixture of the pesticides Aqua 8 Parathion ("Parathion"), Sevin Sprayable Carbaryl Insecticide ("Sevin") and Kocide 101 on a bean field located in Marion Township in the County of Waushara, State of Wisconsin.

^{2/} \$5,000 was requested for the misapplications of the Parathion pesticide and \$500 for each of the Kocide and Sevin pesticide misapplications.

^{3/} The deposition of Dr. Donald P. Morgan taken on January 7, 1982, pursuant to agreement of the parties is also made a part of the record. See my letter of December 22, 1981, to counsel for the parties. It will be referred to as the "Morgan Deposition." The affidavit of Roy Reabe, Jr., sworn to on March 11, 1982, submitted by Reabe after the close of the hearing, as supplemented by Mr. Golden's letter of March 12, 1982, with enclosures, is marked as "Respondent's Exhibit 43," and received into evidence. See Tr. 381-82.

Findings on disputed issues are also contained in the section below headed "Discussion and Conclusions."

Transcript ("Tr.") 5; Respondent's Answer. The spraying was done between 9:00 a.m. and 10:00 a.m. Tr. 179; Respondent's Ex. 38.

2. Parathion and Sevin are insecticides of a type known as "cholinesterase-inhibiting" pesticides. The active ingredient in Parathion is ethyl parathion which is highly toxic, and it is classified as a "restrictive use" pesticide that can be used only by certified applicators or persons under their supervision. The active ingredient in Sevin is carbaryl, which is moderately toxic. Kocide 101 is a fungicide containing the active ingredient cupric hydroxide, and is also moderately toxic. Complainant's Exs. 51-53, 68.^{4/}
3. The temperature at the time of spraying was about 76 degrees Fahrenheit and relative humidity was in the upper 80 per cent range. The winds were very light, five miles per hour or less. The pilot who did the spraying testified that the wind direction was from the southeast at five miles per hour. Tr. 166; 53; Complainant's Ex. 50; Respondent's Ex. 34. It is, however, probably not accurate to speak of a "prevailing" wind direction over an entire hourly period when the winds are so light. Mr. Koerber, an EPA environmental scientist specializing in air pollution, testified that under conditions of a very light wind, the wind direction is likely to be highly variable and subject to local influences such as the land warming

^{4/} See 40 CFR 162.10(h) for EPA toxicity categories.

at different rates because of differing surface characteristics. Tr. 55, 56, 59.

4. The methods and techniques used by Reabe to spray the bean field were consistent with industrial standards for aerial application then in effect. Tr. 87-92.
5. The Bird's Nest Day Care Center ("Center") operated by United Migrant Opportunity Services was located on a plot of land adjoining the eastern edge of the bean field and lay near the southeast corner of the bean field. It had been in operation at that location since 1978. Complainant's Exs. 63, 64; Tr. 231. At the time of the spraying, there were within the Center building five young children between the ages of two and six, and about fifteen adult women. Four of the adults were involved in teaching the children, one was the cook and the remainder were participating in a "Young Child Development" class. Tr. 10; Complainant's Ex. 18.
6. Adults who were present at the Center when the spraying took place testified as follows:

(a) Patricia Goggin was a teacher at the Center. At about 9:15 a.m., she was inside the Center with the five children. She and other adults at the Center heard the sound of an airplane and one of the adults went outside and reported back that the bean field was being sprayed. Ms. Goggin and her co-teacher, Mary Jane Erickson, then proceeded to evacuate the five children, loading them in the Center's van and driving away from the Center. They returned to the Center about an hour-and-a-half later, after

the spraying had been completed. On returning, Ms. Goggin stated that, "I could feel and taste a very foreign substance that -- you know, I could feel it on my arms and my face. I could taste it and I continually tried to wash my hands and, you know, wash my face, but it persisted." Tr. 9-11.

(b) Mary Jane Erickson was present at the Center as lead teacher. On learning that the bean field was being sprayed, she went out to the playground area to observe. The plane at that time was circling above the Center and appeared to her as though it was returning to the bean field for another spraying. She returned to the building and helped Ms. Goggin evacuate the children. As she was walking toward the van in which the children were loaded, she stated that "there was a slight breeze coming up the path [from the northwest] and it smelled like some kind of insecticide, something like that." The next day she developed a sore throat and a runny nose which lasted about a week. Tr. 109-116; Complainant's Ex. 7.

(c) Kathleen Goldsmith worked as a day care aide at the Center. She was attending the Young Child Development Class when at about 9:00 a.m. she heard an airplane. She went out to investigate and saw the airplane spraying the bean field. She then went back into the class in the Center. The windows were closed and the class continued with its course in Young Child Development. Ms. Goldsmith remained at the Center for the rest of the day. She stated that she

smelled and tasted a substance in the air which she described as have "[a] mediciney smell" and a "chalky" taste, and felt a tight constriction of her throat and chest. A few days later she developed a sore throat and noticed that her eyes burned and watered. Tr. 129-132, 134; Complainant's Ex. 1.

(d) Luz Mata worked as a day care aide at the Center. She was also attending the Young Child Development Class. She heard an airplane and went outside and saw the airplane flying over the bean field. She then returned to the Center and watched the airplane as it sprayed the bean field. She, herself, did not taste or smell anything unusual, but she heard other ladies saying that "it smells awful." The next day she had a sore throat. Tr. 143-149; Complainant's Ex. 5.

(e) Magdalena Flores worked as an infant home care supervisor at the Center. She heard the sound of the airplane spraying the bean field and said that inside the building "there was like dust and it tasted like bitter and sour." Later on in the day she experienced stomach aches and cramps which lasted all night and the next day. Tr. 150-52, 157.

(f) Dorothy Kramlich is a child care instructor for the Fox Valley Technical Institute. She was teaching the Young Child Development Class at the Center. On hearing the airplane, she got up and closed the windows. She also smelled an unusual pungent odor in the building just about the time the van with the children left, which persisted for several hours, but experienced no health problems. Tr. 200-203, 206.

7. Julie Vargas in the summer of 1980, was the supervisor of the Center. She knew the bean field was going to be sprayed, but did not know the day on which the spraying would be done. Accordingly, about 7:00 a.m. on the morning of June 24, 1980, she called Mr. Schultz, one of the owners of both the land on which the Center was located and the adjacent bean field, to find out when the spraying would take place and was told that she would be given 24-hour notice. She then telephoned the Center and told them not to worry because they would be notified. At about 9:00 or 9:15 a.m., however, she received a telephone call at home from the Center informing her that the bean field was being sprayed and the children were being taken away. She then went out to the Center after lunch and noticed a strange odor in the air, but no unusual taste.

Tr. 236-238, 246.
8. Edward Meister, an employee of the Wisconsin Department of Agriculture, made an investigation to determine whether there had been overspraying. He arrived at the Center on Thursday, June 26th, two days after the spraying, interviewed several of the persons at the Center and took several samples. One sample was taken from the bean field, one from vegetation in the Center's playground area, and one from vegetation twenty yards from the Center's building. A wipe sample with a special napkin was also taken from an automobile belonging to one of the adults at the Center, which had been parked on the edge of the bean field. These samples and a blank sample from an

uncontaminated napkin were sent to a laboratory in Madison, Wisconsin for testing. Tests were made on the sample for the presence of Parathion and Sevin.^{5/} No detectable levels of Sevin or Parathion were found on the blank sample or on the samples taken from the vegetation on the premises of the Center. Sevin, but not Parathion, was found on the vegetation sample taken from the bean field and also on the wipe sample taken from the automobile parked on the edge of the bean field.^{6/} Tr. 317-20, 398; Complainant's Ex. 31.

9. Seven of the adults at the Center during the spraying on June 24, 1980, Patricia Goggin, Julie Vargas, Magdalena Flores, Diane Ostronski, Pam Clark, Lila Dorn and Kathleen Goldsmith gave blood and urine samples at the Wild Rose Clinic following the incident.^{7/} These samples were sent to the Epidemiologic Studies Program at the University of Iowa for analysis to determine whether the persons showed any symptoms of having been poisoned by exposure to ethyl parathion (the active ingredient in Parathion) or Sevin. Complainant's Exs. 10, 54. Blood cholinesterase levels were examined to determine whether the persons had been exposed to Parathion. All individuals except Ms. Goggin and Ms. Vargas had normal levels of blood cholinesterase activities. Ms. Goggin

^{5/} Kocide was not tested because the laboratory did not have adequate facilities for testing for copper. Tr. 407, 411.

^{6/} 4.2 parts per million of Sevin were found on the sample of the vegetation taken from the bean field and 1.3 micrograms of Sevin were found on the parked automobile. The test's lower limit of detection for Parathion was 1/10 part per million. Tr. 398-99, 406.

^{7/} Patricia Goggin, Julie Vargas, Magdalena Flores, Diane Ostronski and Pam Clark gave blood and urine samples at the clinic on Wednesday, June 25, 1980. Kathleen Goldsmith and Lila Dorn gave samples on Friday, June 27th. Tr. 13; Complainant's Exs. 1, 3, 4, 9, 15, 26.

and Ms. Vargas had depressed levels of plasma pseudo-cholinesterase levels, but normal levels of red blood cell cholinesterase activity. Complainant's Ex. 10. Urine specimens were also tested for the presence of Parathion and Sevin, and none were found. The urine tests, however, were inconclusive as to exposure to these pesticides because both Sevin and ethyl parathion are rapidly metabolized and excreted. Complainant's Ex. 54.

10. Dr. Donald P. Morgan, an Associate Professor of preventative medicine and environmental health at the University of Iowa, and Director of Projects at the University aimed at detecting adverse effects of pesticides on human health, testified about the test conducted on the blood and urine samples taken from the adults at the Center and sent to the clinic to him for testing. Dr. Morgan explained that Parathion and Sevin are inhibitors of the enzyme cholinesterase, which is critical to the normal transmission of nerve impulses.^{8/} He further said that there are cholinesterase enzymes carried in the plasma and red blood cells of human beings which are also inhibited by these compounds and that the

^{8/} Parathion is an organophosphate cholinesterase inhibiting compound. Sevin is a carbamate cholinesterase inhibiting compound. Complainant's Ex. 68.

measurement of these blood enzymes serves as a method of detecting absorption of organophosphate compounds. Morgan Deposition at 4. Dr. Morgan stated that in his opinion it was unlikely that the depressed plasma cholinesterase levels in Ms. Goggin and Ms. Vargas, who of the adults tested had the least exposure to any possible drift, could be explained as caused by any exposure to Parathion. He explained that any exposure to Parathion would be expected to depress both plasma and red blood cell cholinesterase levels. Morgan Deposition at 4, 24.^{9/} His conclusion, then, in his words was that "I strongly feel that they [Ms. Vargas and Ms. Goggin] had some exposure to a cholinesterase inhibitor other than exposure to the spray." Morgan Deposition at 8.

11. With respect to the symptoms of cramps, nausea and other physical discomfort many of the persons complained of, Dr. Morgan stated that any person experiencing such symptoms as a result of exposure to ethyl parathion should also show a definite depression of cholinesterase levels. Morgan Deposition at 7, 23. He also said that symptoms that made their appearance more than 12 hours after the alleged contact with the pesticide are probably not caused by that contact. Morgan Deposition at 13. He further stated that symptoms such as

^{9/} Dr. Morgan also indicated that the result cannot be explained by the lapse of time between the asserted exposure and the testing since depression of the red blood cell cholinesterase levels persists for a longer time than depression of the plasma cholinesterase levels. Morgan Deposition at 9, 27.

swelling of the eyes, and sore throat, which some of the adults said they experienced, are not typical of exposure to ethyl parathion or Sevin. He indicated, however, that it was possible that they could have been related to some other chemical in the spray such as a copper compound or Xylene (which may have been used as a carrier of the pesticides.) Morgan Deposition at 10, 20.

Discussion and Conclusions

The violations charged in this proceeding are the application of the pesticides Parathion, Sevin and Kocide in a manner inconsistent with their label in violation of FIFRA, Section 12(a)(2)(G).^{10/} The label prohibitions on the Parathion which it is claimed were violated were the following:

Do not apply when weather conditions favor drift from the areas treated.

Keep all unprotected persons and children away from treated areas or where there is danger of drift.

Do not allow this material to drift onto neighboring crops or non-crop areas. . . .

Do not breathe
POISONOUS IF BREATHED
Breathing vapors, spray, mist or dust may be fatal.^{11/}

The label prohibition on the Kocide which the complaint alleges was violated was the following:

Do not apply when weather conditions favor drift from areas treated. ^{12/}

^{10/} FIFRA, Section 12(a)(2)(G) provides that "[i]t shall be unlawful for any person-- . . .to use any registered pesticide in a manner inconsistent with its labeling. . . ."

^{11/} Complainant's Ex. 52.

^{12/} Complainant's Ex. 53.

The label prohibition on Sevin which the complaint alleges was violated was the following:

HARMFUL IF INHALED. . . .Avoid Breathing of Dust
Spray. 13/

At the outset, the charges of violating the label warnings against breathing or inhaling Parathion or Sevin are dismissed. These statements appear to be on the label to protect from exposure those who handle or use these pesticides and not to prevent misapplications that may expose others, which is the nature of the charges in this case. Protection of the public from exposure, where deemed necessary, would seem to be covered by such label statements as the prohibitions on the Parathion and Kocide labels against applying when weather conditions favor drift, and the requirement on the Parathion label that persons and children be kept away from where there is danger of drift.^{14/}

The pleadings and the proof in this case, then, really raise three issues: First, did the Parathion and Kocide actually drift onto the Center's property? Second, were the Parathion and Kocide applied when weather conditions favored drift from the treated areas? Third, did Reabe keep all unprotected persons and children away from where there was danger of drift as required by the Parathion label?

13/ Complainant's Ex. 51.

14/ Literally read, any person who inhaled or breathed the pesticide would seem to violate the label prohibition against breathing or inhaling the pesticide. Yet, it seems obvious that the prohibition was not intended to make violators out of persons who, like the adults at the Center, may have breathed or inhaled pesticides which had drifted from the treated area.

1. Did the Parathion and Kocide Actually Drift?

The issue first in importance would appear to be whether Complainant has established by the preponderance of evidence (See 40 CFR 22.24) that an actual drift occurred. While for the reasons stated below it is not, as Complainant argues, conclusive proof, the occurrence of pesticide drift would certainly be strong proof that the pesticides had been used under weather conditions which favor drift. It is found here that the evidence does not establish that a drift actually occurred.

Complainant places great reliance on the testimony of the occupants of the Center as to their smelling the pesticides and the physical symptoms they experienced after the spraying. Dr. Morgan's testimony, however, casts considerable doubt on whether their physical symptoms can, in fact, be attributed to exposure to Parathion or Sevin.^{15/} Nor is the fact that a foreign substance was smelled or tasted by some of the adults necessarily proof of an overspray. As Mr. Jacobsen noted, the smell or taste may have been attributable not to the spray drifting, but to vapors emanating after the spray had been deposited on the crop.^{16/}

Complainant argues that Dr. Morgan's test results should be disregarded because they were based on statistically calculated normal cholinesterase levels, and not on the actual normal cholinesterase levels of the persons from the Center who were tested, which could have been higher than the statistical norm. But Dr. Morgan's testimony indicates that

^{15/} The health effects of Kocide have not been identified in the record except for the possibility that it may cause some irritation. See Complainant's Ex. 69; Morgan Deposition at 10, 20, 21.

^{16/} See Tr. 77-78, 98-100. The vapors could have come from the inert ingredients rather than from the pesticides. Id.

the risk of drawing an erroneous conclusion from the test because of possible individual variances in cholinesterase levels is small.^{17/} It is also clear from the record that Dr. Morgan, in the course of his work, considers the tests to be sufficiently trustworthy to make judgments on whether a person has been poisoned by exposure to an organophosphate.^{18/} Consequently, it is found that the tests are reliable evidence of whether persons at the Center were exposed to Parathion.

That there was no overspray is also corroborated by the fact that the samples taken by Mr. Meister in his investigation also disclosed no evidence of Parathion or Sevin on the Center's property. Complainant argues that the tests done on these samples are not reliable because the samples were collected two days after the spraying and were transmitted to the laboratory under conditions which did not adequately protect the Parathion and Sevin from breaking down in transit.^{19/} The argument has some weight with respect to the probative value of the tests for Parathion since no Parathion was found even on the sample taken from the bean field.^{20/}

^{17/} Morgan Deposition at 23-24, 29, 34.

^{18/} See Complainant's Ex. 10.

^{19/} Complainant faults the conditions under which the samples were forwarded to the laboratory because after being collected and put into plastic bags, they were transported in Mr. Meister's automobile for about an hour under conditions of high temperature and humidity before being frozen and then shipped frozen, but not packed in ice, for a four-hour trip to the laboratory. Tr. 330-31.

^{20/} The chemist with the State of Wisconsin who did the testing appears to have attributed the absence of Parathion to its having broken down during the two-day period that elapsed before the sample was taken rather than to its degradation while in transit to the laboratory. See Tr. 399; 401-02.

The tests did disclose, however, the presence of Sevin on the sample taken from the bean field, and in a lower concentration on the sample taken from the automobile parked on the edge of the bean field. Under these circumstances, Complainant's attempt to explain away the absence of Sevin on the samples taken from the Center as a result of its breaking down during its transmission to the laboratory is unpersuasive. To assume, which is what I would apparently have to do, that a smaller amount of Sevin than was deposited on the automobile drifted into the Center area, and that Mr. Meister's procedures were sufficiently defective to cause the Sevin in the samples taken from the Center to break down to a point below the detection limits of the test would be too speculative on the basis of this record.^{21/}

It is, of course, true that Dr. Morgan did not test for exposure to Kocide and that no tests were run for the presence of Kocide on the samples collected by Mr. Meister. The testimony of the Center staff and students as to what they smelled or tasted and the symptoms they experienced, however, on which Complainant relies for its proof of drifting spray would not be sufficient to establish that a drift of Kocide occurred in view of the paucity of evidence in the record on the health effects of Kocide.^{22/}

^{21/} See Tr. 409. There is no basis for assuming that Sevin on the automobile would have lasted longer than Sevin on the foliage. In both cases the Sevin would have been exposed to high temperatures. In addition, the Sevin on the automobile could have come into contact with wax which could have hastened its degradation. See Tr. 379-80, 404-05.

^{22/} See Supra at 13 n. 15.

In addition, the evidence indicating that there was no drift of Parathion or Sevin would also indicate that there was no drift of Kocide, since all three pesticides were combined into a single mixture.^{23/}

In sum, Complainant's proof of actual pesticidal drift rests on deducing from the asserted physical symptoms of pesticidal exposure, the fact that a drift did actually take place. The weight of the evidence, however, is simply against drawing such a conclusion and Complainant's claim of a pesticidal drift having occurred is rejected.

2. Were the Parathion and Kocide Applied
When Weather Conditions Favored Drift
From the Treated Area?

Proof that the pesticides did not drift from the treated area is probably sufficient in itself to also establish that the pesticides were not applied under weather conditions which favor drift. The converse, however, may not be true, that the fact that the pesticides did drift is proof that the weather conditions favored drift at the time. The evidence in this case indicates that there is an inherent risk of drift in aerial spraying which can be minimized, but not done away with entirely.^{24/}

^{23/} See Tr. 81, 94.

^{24/} Respondent's Ex. 37 at 2 talks of spraying techniques which can "minimize" drift hazards. Respondent's Ex. 35, a report of a speech by Complainant's expert witness, Mr. Barry Jacobsen, also refers to weather conditions and spraying techniques which will "reduce" drift problems. The impossibility of eliminating all risk of drift appears to also have been recognized in the case law dealing with liability for misuse of pesticides. See Annot., 37 A.L.R. 3d 837 (1971).

Wording the prohibition as relating to applications when weather conditions "favor" drift also seems to require that there be some assessment of what the weather conditions were at the time, and in particular, whether they were such as to enhance the risk of drift. If they cannot be said to have done so, then this label restriction would appear not to have been violated. Assuming that this is the proper interpretation, a finding on whether the pesticide was applied when weather conditions favored drift should be made to assist those who will review this decision in case they disagree with my conclusion that the pesticides did not drift.

A review of the weather conditions between 9:00 a.m. and 10:00 a.m., on June 24, 1980, show that the wind velocity was less than 6 miles per hour, but not dead calm, which appears to be the kind of wind conditions that are recognized as usually minimizing the potential for drift.^{25/} The mean temperature was about 76 degrees Fahrenheit and close to the recommended temperature of below 75 degrees.^{26/}

Complainant argues that the high humidity present during the day coupled with a temperature in the middle to upper 70s indicated that there was a temperature "inversion" over the area which increased the

^{25/} See Respondent's Exs. 35, 36; Tr. 85. Mr. Koerber, Complainant's expert on weather conditions, testified that under light winds, the wind direction is likely to be highly variable. See Tr. 53-56, 64. Nevertheless, the record does indicate that a condition of wind velocity under 6 miles per hour is desirable for purposes of reducing the risk of drift.

^{26/} See Respondent's Ex. 35. Complainant argues that the temperature at the time of spraying was 78 degrees Fahrenheit. That, however, was the temperature at 10:00 a.m. The temperature at 9:00 a.m. was about 74 degrees. See Complainant's Ex. 50; Respondent's Ex. 34. The mean temperature during the hour of about 76 degrees, would appear to be a more accurate indication of the temperature.

potential for lateral drift.^{27/} The presence of a temperature inversion, however, on June 24, 1980, is based on what Mr. Koerber interpolated from weather maps of the general area, and the testimony is too inconclusive to permit any determination that inversion conditions were actually present which increased the risk of drift.

In conclusion, while the weather conditions were possibly not the optimum considered to be desirable for avoiding drift, they appear to have been close enough to optimum conditions so that it cannot be said that the spraying was performed under weather conditions which favor drift.

As already noted, however, that the weather conditions did not favor drift does not mean that there was no risk of drift at all. This is all the more true in this case because the potential for drift is affected not only by weather conditions, but also by the application techniques used, the most significant of which seems to be the size of the droplets generated in the spraying. Droplets under a hundred microns in size have the highest potential for drift.^{28/}

In selecting the appropriate size of droplet for the combination of Parathion, Sevin and Kocide, Reabe had to balance the need to keep the droplets large enough to reduce the risk of drift against the need to have the droplets small enough for the mixture to be effective against

27/ See Tr. 76-77.

28/ See Tr. 71-73. The size of the droplets is controlled principally by the angle of the spray nozzle to the windstream. Respondent's Ex. 36 at 8.

the target pests.^{29/} Reabe determined to apply the pesticides with the spray nozzle pointed down into the windstream which resulted in a high percentage of small droplets below 100 microns, but which procedure was in conformity with standard operating procedures being followed in 1980.^{30/} The fact that the methodology produced a large number of small drops with the greatest potential of drift is a further indication that there was the danger of the spray drifting onto the adjoining property.

3. Did Reabe Keep All Unprotected Persons and Children Away From Where There Was Danger of Drift?

The proximity of the Center to the treated bean field would seem to have made it particularly vulnerable to drift from the spraying. The danger that the Center's occupants would have been exposed to the pesticide, however, could have been averted if the Center's staff had been notified in advance of the date and time of the spraying. This was not done. Reabe, disclaims any responsibility for not notifying the Center and spraying while the Center was occupied, arguing that it did not know and had no reason to know of the presence of the Center situated so close to the bean field, and that under its understanding with Del Monte, it was Del Monte's obligation to inform Reabe of the presence of the Center.

The record discloses that the Center had been at the same location for three years. It was licensed by the State of Wisconsin to operate

^{29/} Tr. 85.

^{30/} See Respondent's Ex. 37; Tr. 90. Mr. Jacobsen, the EPA's expert, however, would have recommended pointing the nozzle backward which would have resulted in a greater percentage of larger drops. See Tr. 90; Respondent's Ex. 35.

at the site where it was located and was funded by the State through the County.^{31/} Reabe's suggestion, therefore, that its location may have been in violation of local zoning requirements is simply not supported by the record. Signs notifying persons of the presence of the Center were posted on the intersection of 22nd Avenue and the road leading into the Center, and also at the intersection of 22nd Avenue with County Highway YY, north of the Center.^{32/}

The Center building itself was obviously big enough to accommodate fifteen adults and five children. Being of metal construction, and converted from a garage, the building at a distance may have borne some resemblance to a garage or machine shed. A closer look, however, should have put the observer on notice that it was being used by children, because of the presence of play ground equipment and of one or both of the Center's vans marked in big letters with the words "Bird's Nest Day Care Center" and on the back saying, "Caution: Pre-School Children."^{33/}

31/ Tr. 19, 32, 231-32.

32/ Tr. 20, 22-23; Complainant's Exs. 40, 63. County Highway YY was north of the bean field and Center and ran east and west, and 22nd Avenue was east of the bean field and Center and ran north and south.

33/ Tr. 20-22, 239-40, 249; Complainant's Exs. 58, 59.

Reabe stresses that the Center was located in a clump of trees which concealed it from the view of a person in the bean field and from the pilot in the plane.^{34/} Even so, the record establishes that the presence of the Center could have been discovered by a reasonably careful search of the area or by a reasonable inquiry from persons in the area.^{35/}

Reabe contends that a thorough investigation of the area was made by Randy Miller, a member of Del Monte's pest control crew who had prepared the map of the field to be sprayed for identification by Reabe's pilot. The record, however, shows that Mr. Miller's investigation fell far short of being the detailed search of the area Reabe claims that it was.

Mr. Miller entered the bean field on the north by means of a field road leading off County Highway YY, and the following the road alongside the bean field down to the middle of the bean field, from which place he did his observing of the bean field and the adjoining property.^{36/}

34/ See Respondent's Exs. 5-10.

35/ Reabe argues that even a longtime local resident Mr. Donald Wade, was not aware that the Center was in operation during the summer of 1980. That is based on Mr. Wade's testimony that he assumed the Center was closed because he had seen the Center's van occasionally parked at the Spring Lake Community Action Program building. Tr. 354-55. This seems to be a very tenuous basis on which to conclude that the Center was closed, as Mr. Wade's own testimony made clear. See Tr. 357. Mr. Wade cannot be said to have been an entirely disinterested witness since he was lessee of the bean field and contracted with Del Monte Corp. to grow beans for them in the summer of 1980. Tr. 351.

36/ Tr. 366-67, 372.

Mr. Miller offers an explanation as to why he failed to make a closer inspection of the wooded area at the southeast end of the bean field where the Center was located. Instead, as he, himself, admitted, his investigation was not thorough enough to determine whether there were any bee hives close to the edge of the bean field, even though his duties in this instance included "looking out" for bee hives because Parathion was highly toxic to bees.^{37/} If he had made a closer inspection along the edge of the bean field, it is likely that he would also have noticed the Center.^{38/}

What, then, was Reabe's obligation toward the Center in connection with its spraying of Parathion, one of the most highly toxic pesticides?

Whatever may have been its understanding or practice with Del Monte, Reabe, as the one actually doing the application, was responsible for seeing that all label requirements were complied with.^{39/} This would be true with respect to the application of any pesticide. It is of particular importance when the pesticide being applied is a restricted use pesticide such as Parathion. Restricting the use of a pesticide to certified applicators stresses that special care has to be taken to insure that the pesticide is applied not only effectively, but also safely, by which is meant that the applicator will give proper regard to the warnings and precautions put on the label to protect against injury

37/ Tr. 372.

38/ Id.

39/ There seems to be no question about Reabe's relation to Del Monte being that of an independent contractor.

to property and to other persons in or near the treated property.^{40/}

When it undertook to apply the Parathion, Reabe also took upon itself the obligation to exercise the requisite degree of care in complying with all label requirements.^{41/} Reabe has pointed to no authority under either state or federal law which would hold that Reabe could limit its obligation to use the pesticide correctly to following suitable techniques in aerial applications, and leave other matters of concern in applying the pesticide to some other party. Indeed, allowing Reabe to do so would seem to run counter to the purpose of certifying applicators as a means of exercising better control over the use of toxic pesticides.

Mr. Randy Miller, the Del Monte employee whom Reabe expected to identify features like the presence of the Center, when asked what was done in the case of a label warning such as that on the Parathion that

^{40/} See FIFRA, Section 4(a), 7 U.S.C. 136 b(a), which provides that an applicator shall be certified according to standards that demonstrate that the individual is competent to use and handle the pesticide covered by the application. See also 40 CFR 171.4(b) which sets forth the EPA's general standards for certification with which all state certification programs must comply in order for them to be approved.

^{41/} It has been assumed in this case, and not denied by Reabe that Reabe is a certified applicator. Reabe is also a commercial applicator under FIFRA, Section 2(e), 7 U.S.C. 136 b(e) supervising the employee who actually applied the restricted use pesticide. The record clearly shows that the procedures followed by the employee pilot, including that of relying on Del Monte for information about the presence of such matters as the Center were in accordance with Reabe's policies. Tr. 163-65, 364-65, 368. As such commercial applicator Reabe should be kept to the same standard of care as a certified applicator.

the product is highly toxic to bees, stated that "[W]e tried to be aware of bee hives that were in the area of places that we were going to spray."^{42/} When asked how he managed to be aware of all the bee hives in the neighborhood, he stated:

Experience is all. I mean the only way to be informed is if you get told of it, if somebody notices it. That is the only way to know. So if somebody doesn't drive around and notice a bee hive and say, hey, there is a bee hive that would be part of my job, look out for things like bee hives. I would tell Reabe that there is a bee hive in the area or they are aware of historically where there has been a place where there are bee hives.^{43/}

Certainly, there is as great an obligation to finding out whether people are in danger of being exposed to drift during the spraying as there is to finding out whether there are bees who may be injured by the pesticidal spray. It may be somewhat unusual to have a day care center situated so close to an agricultural field, although that would be a logical place for it considering the fact that it was for the children of migrant farm workers. Nevertheless, the highly toxic nature of Parathion requires that a careful investigation of whether people are present where drift may occur should be made by the applicator before it is applied. If Reabe had made a careful investigation

42/ Tr. 371.

43/ Tr. 372.

it does appear that it would have found out about the Center and taken steps to avoid spraying when people were there, either by notifying the Center of the day and time of spraying in advance, or by spraying on a day when the Center was not occupied.^{44/}

It is found, accordingly, that Reabe, in spraying Parathion while the Center was occupied by adults and children, violated the label direction that all unprotected persons and children be kept away from where there is danger of drift.^{45/} All other charges of the complaint are dismissed for the reasons noted above.^{46/}

^{44/} If Mr. Miller, for example, had searched for bee hives along the eastern boundary of the bean field, which for some unexplained reason he did not do, he probably would also have seen the Center. See Tr. 372.

^{45/} It is, of course, recognized that the label requirements must be given a practical interpretation. Reabe, however, has not defended its action on the ground that it would have been impractical to give advance notice, but on the ground that it was not negligent in failing to do so. It is not decided here that Reabe would have violated the label warning if Reabe had informed the Center in advance that it was going to spray, and the Center people chose to remain on the premises while the spraying was going on. The people were simply not given that choice in this case. Moreover, it seems clear that at least the Center children would have been kept away, if the Center had been warned in advance. See Tr. 8.

^{46/} Reabe's article entitled "The Reliability of Eye Witness Testimony, A Psychological Perspective," attached to its brief, has not been considered. Although characterized as "argument," it is really an attempt to offer opinion testimony without any explanation as to why it was not offered at the hearing through a qualified witness who could have been cross-examined on its contents.

The Appropriate Penalty

FIFRA, Section 14(a)(4), 7 U.S.C. 136 1(a)(4) provides that in determining the amount of the penalty the Administrator shall consider the appropriateness of the penalty to the size of the business of the person charged, the effect on the person's ability to continue in business, and the gravity of the violation. The rules of practice governing these proceedings, 40 CFR 22.35(c), provide that in addition to the above criteria, the Presiding Officer shall also consider Respondent's history of compliance with FIFRA, and any evidence of good faith or lack thereof. The Presiding Officer must also consider the guidelines for the assessment of civil penalties under FIFRA published in 39 Federal Register at 27711 (1974). He is not, however, required to follow the guidelines.

Initially, it should be pointed out that Reabe has not put in issue its financial ability to pay the penalty proposed in the complaint, nor does it seem to question Complainant's claim that Reabe's size of business would fall into Category V of the penalty guidelines, which encompasses all firms whose gross sales for the prior fiscal year were in excess of one million dollars.^{47/} So far as the statutory criteria are involved, then, the determination of the appropriateness of the penalty hinges upon the gravity of the violation. That has been held to involve the evaluation of two factors: gravity of harm and gravity

^{47/} Letter of Reabe's attorney dated August 18, 1981, in response to my direction for prehearing exchange of information, and letter filed September 18, 1981, by Complainant's attorney also in response to my direction for a prehearing exchange.

of misconduct.^{48/} In view of the fact that the pesticide did not drift and Reabe followed what was recognized as good industrial practice at the time in spraying the bean field, the risk of the pesticide drifting cannot be said to have been great. The potential for harm, however, if an exposure had occurred was great, given the toxic nature of Parathion. As to gravity of misconduct, while Reabe was negligent in carrying out its duties, it cannot be said to have been grossly negligent. As to Reabe's history of compliance, this appears to be the first time Reabe has been cited by the EPA for a violation.^{49/} On the other hand, with respect to its good faith, Reabe cannot be said to have acted in complete good faith because it was unwilling, after the spraying, to give any information to the Center's staff about the ingredients in the spray.^{50/} Reabe's explanation for not giving the information to the Center's staff appears to be Reabe's conviction that there was no overspraying and the staff's refusal to cooperate with Reabe by giving the names of the children involved. It is difficult to see, however, why supplying the information about the ingredients of the spray would have compromised Reabe in any way. Certainly, the persons who thought they were exposed to the spray were entitled to know the ingredients as soon as possible so they

48/ Amvac Chemical Corp., EPA Notice of Judgment (June, 1975) No. 1499 at 986.

49/ Complainant argues that the State of Wisconsin has issued at least 10 other complaints against Reabe for misuse. It is not known, however, what the nature of those complaints were or their respective merits. See Tr. 341. Accordingly, it is impossible to assess what weight they should be given in determining the penalty.

50/ See Tr. 13-15.

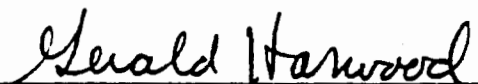
would be given proper medical treatment. Even if their attitude toward Reabe was uncooperative, Reabe should still not have withheld from the Center's staff the identity of the ingredients, and that it did so, is a factor to be taken into account in assessing the appropriate penalty.

In conclusion, it would appear that the probability of drift occurring was small, but if drift had occurred, the probability of adverse effects would have been great. Consequently, the violation cannot be said to have been de minimis. Some penalty should be imposed. The maximum penalty recommended by Complainant seems too high, but the penalty should be of sufficient size to deter the violation from being repeated. Under the circumstances of this case, it is believed that a penalty of \$600 would be appropriate.

FINAL ORDER^{51/}

Pursuant to the Federal Insecticide, Fungicide and Rodenticide Act, Section 14(a)(1), 7 U.S.C. 136 1(a)(1), a civil penalty of \$600 is assessed against Respondent Reabe Spraying Service, Inc., for violation of the Act found herein.

Payment of the full amount of the civil penalty assessed shall be made within sixty (60) days of the service of the final order upon Respondent by forwarding to the Regional Hearing Clerk a cashier's check or certified check payable to the United States of America.



Gerald Harwood
Administrative Law Judge

^{51/} Unless an appeal is taken pursuant to the rules of practice, 40 CFR 22.30, or the Administrator elects to review this decision on her own motion, the Initial Decision shall become the final order of the Administrator. See 40 CFR 22.27(c).