Regulation and Liability in the Application of Pesticides

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REGULATION AND LIABILITY IN THE APPLICATION OF PESTICIDES

Large-scale farming practices of the twentieth century created a requirement for insect and weed control which resulted in the development of chemical insecticides and herbicides. This technological breakthrough has led to a spectacular growth of the crop dusting industry. In 1961, approximately eighty-five million acres of crops were treated with herbicides at a cost of ninety million dollars, and 165 million pounds of insecticides were distributed over sixty-nine million acres for insect control.[1] By the application of these chemicals, farmers have been able to retard weeds and harmful insects and thereby substantially increase production and profits.

However, these same chemicals that destroy weeds and insects have also been known to harm crops,[2] bees,[3] livestock,[4] and even humans.[5] Such deleterious effects provoked Rachel Carson in her recent best selling book, *Silent Spring,* to attack the increased use of chemical pesticides, claiming that they are slaughtering the nation's wildlife, contaminating water, poisoning food, and destroying the "balance of nature."[6]

Leaving the controversy over the *inherent* propriety of the use of chemical pesticides to Miss Carson and the President's Science Advisory Committee,[7] this Note will be limited to problems generated by the *application* of such chemicals.[8] Pesticides are primarily applied

[1] AGRICULTURAL STABILIZATION AND CONSERVATION SERVICE, U.S. DEP'T OF AGRICULTURE, THE PESTICIDE SITUATION FOR 1961-1962 12, 23 (1962).

[2] *E.g.,* Kennedy v. Clayton, 216 Ark. 851, 227 S.W.2d 934 (1950) (cotton crop); Romero v. Chris Crusta Flying Serv., Inc., 140 So. 2d 734 (La. Ct. App. 1962) (pepper crop); Vrazel v. Bieri, 294 S.W.2d 148 (Tex. Civ. App. 1956) (rice field).

[3] *E.g.,* Lundberg v. Bolon, 67 Ariz. 259, 194 P.2d 454 (1948); S. A. Gerrard Co. v. Fricker, 42 Ariz. 503, 27 P.2d 678 (1933); McKennon v. Jones, 219 Ark. 671, 244 S.W.2d 138 (1951); Brown v. Sioux City, 242 Iowa 1196, 49 N.W.2d 853 (1951).

[4] *E.g.,* Sanders v. Beckwith, 79 Ariz. 67, 283 P.2d 235 (1955) (cows); Southwestern Bell Tel. Co. v. Smith, 220 Ark. 223, 247 S.W.2d 16 (1952) (same); Hammond Ranch Corp. v. Dodson, 199 Ark. 846, 136 S.W.2d 484 (1940) (livestock); Cole v. New England Tree Expert Co., 53 R.I. 67, 163 Atl. 742 (1933) (cow).

[5] Lawler v. Skelton, 241 Miss. 274, 130 So. 2d 565 (1961).

[6] See CARSON, SILENT SPRING (1962). Miss Carson goes on to say:

> We have subjected enormous numbers of people to contact with these poisons without their consent and often without their knowledge. If the Bill of Rights contains no guarantee that a citizen shall be secure against lethal poisons distributed either by private individuals or by public officials, it surely is only because our forefathers, despite their considerable wisdom and foresight, could conceive of no such problem.
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> I contend furthermore, that we have allowed these chemicals to be used with little or no advance investigation of their effects on soil, water, wildlife, and man himself. Future generations are unlikely to condone our lack of prudent concern for the integrity of the natural world that supports all life. *Id.* at 12.

[7] See Time, May 24, 1963, p. 81. The Committee's investigation, prompted by the controversial *Silent Spring,* largely vindicated Miss Carson's scathing indictment of what she termed the indiscriminate use of chemical pesticides.

[8] This distinction has been judicially noted. See Faire v. Burke, 363 Mo. 562, 564, 252 S.W.2d 289, 290 (1952), where the court set itself to resolving the issue

in either of two forms—liquid spray or dust. Regardless of which form is used, precise control in the application is impossible. This is due primarily to the phenomenon of "drift" whereby chemical particles become suspended in the air and are often carried great distances by wind and convection currents.[9] Although aerial crop dusting presents the greatest hazard, even liquid spray is susceptible to drift.

With the perfection of the lethal qualities of pesticides,[10] the danger of uncontrolled application becomes readily apparent and the harm caused by the fallout in unexpected and undesired places is multiplied. It will be the purpose of this Note to analyze the requirements of recent legislation enacted to control and regulate the application of pesticides and to examine the legal responsibility and liability resulting from misapplication.

I. Legislative Control

Legislative control of the use and application of pesticides[11] is an exercise of the state's police powers under the federal constitution for the protection of the health and welfare of the people.[12] An awareness of the danger involved in the use of pesticides is evidenced by the fact that statutes governing the application of these chemicals have been enacted recently, or inadequate existing statutes updated, in a number of jurisdictions.[13] Although the statutes have been the product of individual state legislatures, a common pattern can be seen emerging in the treatment of the problem.

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of liability "without becoming involved in the current controversy in the chemical-agricultural world as to the beneficial or pernicious effects of chemical sprays upon soil or crops . . . ."

[9] For a comprehensive discussion of the problem of drift in the application of pesticides, see Note, 6 Stan L. Rev. 69, 72-75 (1953), where the author lists three uncontrollable factors affecting drift: (1) the size of the dust or spray particles; (2) the air disturbances created by the plane; and (3) natural atmospheric forces. The danger is dramatically evidenced by the fact that in a mere three-mile-an-hour wind, a three micron droplet will drift eight miles while falling from a height of ten feet. *Id.* at 73. The courts have recognized this propensity: "[T]he 2-4-D dust possessed the quality of floating for great distances when cast in the air, even for miles." Chapman Chem. Co. v. Taylor, 215 Ark. 630, 639, 222 S.W.2d 820, 824 (1949).

[10] See Note, 6 Stan L. Rev. 69, 70-72 (1953). One gram (about a teaspoonful) of the weed killer, 2, 4-D can produce symptoms on all broad-leafed weeds on five or ten acres. It is invaluable as a herbicide because of its unusual property of selectivity, being relatively harmless to narrow-leafed crops such as corn and wheat. *Id.* at 71. For further discussion on the expansion and problems of the pesticide industry, see Note, 43 Minn. L. Rev. 531-34 (1959); Note, 40 Texas L. Rev. 527-29 (1962).

[11] Throughout this Note, the term "pesticide" will be used in a broad general sense to signify any chemical intended to destroy or repel insects, rodents, fungi, or weeds, including both insecticides and herbicides. Most pesticide acts set forth a precise statutory definition. See, *e.g.*, Ariz. Rev. Stat. Ann. § 3-371(12) (1956).

[12] See Leonard v. Abbott, 37 S.W.2d 778, 781 (Tex. Civ. App. 1962) (dictum).

[13] See, *e.g.*, Ariz. Rev. Stat. Ann. §§ 3-371,-386 (Supp. 1962); Cal. Agric. Code

A. The Scope of Statutory Regulation Generally

Under these recently enacted statutes, overall control of the use of pesticides, including testing, labeling, and marketing, as well as application, is vested in a state administrative agency.[14] This is usually the department of agriculture. The commissioner or secretary is empowered not only to enforce the requirements of the statute itself but is given broad powers to adopt and promulgate further regulations for the control of the chemicals and their application.[15]

Most of the statutes also require the licensing of commercial pesticide applicators.[16] This usually applies to both ground and airborne applicators. Licensees are required to pass an examination or otherwise demonstrate to the satisfaction of the commissioner that they possess adequate knowledge concerning chemical pesticides, proper techniques in their application, and the dangers involved and precautionary measures to be taken in their use.[17] However, persons applying pesticides to their own property, and their employees, are generally exempted from the license requirement, as are farmers who are trading work with other farmers.[18] Subsequent violations of the statute or regulations, such as failure to comply with safety precautions or to file required reports, may lead to suspension of an applicator's license.[19]

Many states now also require an applicant to show proof of financial responsibility as a prerequisite to licensing. This is usually provided for by either a deposit of money, liability insurance, or a surety bond of a statutory minimum amount.[20] Occasionally, such proof is not required until after a judgment is entered against the licensee at which time his failure to deposit the required security may result in license suspension.[21] Such a requirement greatly weakens the sanction of suspension because the injured party often may not risk the time and expense of litigation if he feels the offender will be unable to satisfy the judgment.

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§§ 160.1,-97; COLO. REV. STAT. ANN. §§ 6-17-1, -14 (Supp. 1961); ORE. REV. STAT. §§ 573.005,-.990 (Supp. 1961); TEX. REV. CIV. STAT. ANN. art. 135b-4 (1959). See generally Note, 6 STAN L. REV. 69, 87-89 (1953).

[14] See, *e.g.*, statutes cited note 13 *supra*.

[15] See *e.g.*, COLO. REV. STAT. ANN. § 6-17-8 (Supp. 1961); IDAHO CODE ANN. § 22-2213 (Supp. 1961); TEX. REV. CIV. STAT. art. 135b-4(8)(a) (1948).

[16] See, *e.g.*, ARIZ. REV. STAT. ANN. § 3-377 (1956); MINN. STAT. ANN. § 18.032 (Supp. 1962); WASH. REV. CODE ANN. § 17.21.070 (Supp. 1962).

[17] See, *e.g.*, ARIZ. REV. STAT. ANN. § 3-380 (1956); ORE. REV. STAT. § 573.055 (Supp. 1961); UTAH CODE ANN. § 4-4-17(b) (1953).

[18] See, *e.g.*, ARK. STAT. ANN. § 77-225 (Supp. 1961); MINN. STAT. ANN. § 18.034 (Supp. 1962) (exempt if application within 15 miles of farmer's residence); WASH. REV. CODE ANN. § 17.21.200 (Supp. 1962) (exemption applies to ground application only).

[19] See, *e.g.*, ARK. STAT. ANN. § 77-216 (Supp. 1961); COLO. REV. STAT. ANN. § 6-17-4(6) (Supp. 1961); IDAHO CODE ANN. § 22-2210(c) (Supp. 1961).

[20] See, *e.g.*, ARIZ. REV. STAT. ANN. § 3-378 (1956) (deposit, insurance, or bond); CAL. AGRIC. CODE § 160.93 (same); NEV. REV. STAT. § 555.330 (Supp. 1961) (insurance).

[21] See ORE. REV. STAT. § 573.147 (Supp. 1961).

Statutory provision is occasionally made for the inspection of apparatus used in the application of pesticides, including a check for proper repair,[22] while some statutes also require commission approval of the type of equipment employed.[23] Other safety regulations restrict certain areas from spraying or control the time during which spraying operations may be conducted.[24]

Common among the state regulations is the requirement that licensees maintain such records and file such reports as are required by the commissioner.[25] The information to be reported may include the location of the field treated, the name of the person for whom the application was made, the crop treated, and the type chemical used, as well as the rate and date of application.[26] A few states require the report to contain information concerning the direction and estimated velocity of the wind at the time of application.[27] All states having statutes and regulations declare their violation to constitute a misdemeanor, and the violator is subject to a fine or imprisonment or both.[28]

B. The Iowa Pesticide Act

This spring, the Iowa legislature repealed an old and inadequate insecticide statute[29] and enacted in its place a comprehensive Pesticide Act regulating the distribution, sale, transportation, and use of pesticides.[30] Although the thrust of the new Act relates to the product control of the chemicals and poisons themselves, including sale, registration, labeling, and adulteration,[31] limited requirements for the control of pesticide application are provided.

Supervision of the Act is the responsibility of the Secretary of Agriculture.[32] All commercial applicators[33] are required to obtain a

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[22] See, *e.g.*, ARIZ. REV. STAT. ANN. § 3-375 (1956) (must obtain permission of owner); NEV. REV. STAT. § 555.370 (Supp. 1961); UTAH. CODE ANN. § 4-4-25 (1953).

[23] See, *e.g.*, CAL. AGRIC. CODE § 160.4; COLO. REV. STAT. ANN. § 6-17-4(5)(b) (Supp. 1961); IDAHO CODE ANN. § 22-2210(b) (Supp. 1961) (commissioner may issue restricted license).

[24] See, *e.g.*, IDAHO CODE ANN. § 22-2224 (Supp. 1961); ILL. ANN. STAT. ch. 5, § 87a.4 (Smith-Hurd Supp. 1962); MICH. STAT. ANN. § 12.366(4) (Supp. 1961).

[25] See, *e.g.*, ARK. STAT. ANN. § 77-218 (Supp. 1961); CAL. AGRIC. CODE § 160.3; OKLA. STAT. tit. 2, § 3-83 (1961).

[26] See COLO. REV. STAT. ANN. § 6-17-7(1) (Supp. 1961).

[27] See ARIZ. REV. STAT. ANN. § 3-381 (1956); WASH. REV. CODE ANN. § 17.21.100(6) (Supp. 1962).

[28] See, *e.g.*, N.J. STAT. ANN. § 4:8A-8 (1959); N.C. GEN. STAT. § 106-65.7 (1960); TENN. CODE ANN. § 43-608 (1955).

[29] IOWA CODE ch. 206 (1962).

[30] See S.F. 237 as amended, 60 G.A. (1963), to become effective Jan. 1, 1964 [hereinafter cited as Iowa Pesticide Act].

[31] See Iowa Pesticide Act §§ 3, 4, 7, 8.

[32] Iowa Pesticide Act § 2(10).

[33] Section 2(12) defines "commercial applicator" as any person or corporation who enters into a contract or an agreement for the sake of monetary payment and agrees to perform a service by applying any pesticide but shall not include

license and a permit from the Secretary, who shall require "proof of competence and responsibility" before issuing a license;[34] however, farmers trading services with another are expressly exempt.[35] The Secretary also is given discretion to refuse a license if he has reason to believe it would not be in the public interest.[36] The initial license fee is ten dollars; annual renewal fees are five dollars.[37] Aerial applicators may also register with the Iowa aeronautics commission.[38] The Secretary is further authorized to revoke or suspend an applicator's license after conviction for any violation of the Act.[39]

The Act declares that it shall be unlawful to apply any pesticide in "such a way as to damage seriously the health, welfare, or property

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a farmer trading with another. "Person" is further defined by § 2(8) to include partnerships, associations, and organized groups whether incorporated or not. Public officers or foremen who apply or supervise the application of pesticides on public property are expressly required by § 5(1) to obtain a license, although payment of fees is waived. A landowner applying pesticides to his own property appears clearly exempt under the definition in § 2(12).

[34] Iowa Pesticide Act § 5(1). The disctinction between a license and a permit is not apparent. The Act would seem to authorize the Secretary to require written examinations as "proof of competence." The House bill expressly required written tests to demonstrate satisfactory knowledge of the characteristics and effects of pesticides, methods and conditions of application, and rules and regulations governing pesticides. See H.F. 504, 60 G.A. § 7(1) (1963) [hereinafter cited as H.F. 504]. Such an examination seems desirable and could be established by administrative regulation. For discussion of the term "responsibility," see note 46 *infra* and accompanying text.

[35] See Iowa Pesticide Act § 2(12).

[36] Iowa Pesticide Act § 5(1). As there is no provision for notice or a hearing, it is questionable whether the Act satisfies the constitutional requirements of due process. *Cf.* Gilchrist v. Bierring, 234 Iowa 899, 909-16, 14 N.W.2d 724, 730-33 (1944) (license to operate school of cosmetology).

[37] Iowa Pesticide Act § 5(2).

[38] Iowa Pesticide Act § 5(4). Registration appears optional rather than mandatory and thus is of little practical effect.

[39] Iowa Pesticide Act § 5(3). The language "shall revoke" upon conviction has been construed to be mandatory and thus is not an unconstitutional delegation of judicial authority. *Cf.* Spurbeck v. Statton, 252 Iowa 279, 283, 106 N.W.2d 660, 662, (1960) (dictum) (revocation of motor vehicle operator's license under Iowa Code § 321.209). Section 9(2) declares "any person violating any provision of this Act [except § 3(1)(a)] shall be guilty of a misdemeanor and upon conviction shall be fined not more than [$500] for the first offense . . . ." It is provided by § 7 that if the Secretary contemplates instituting criminal proceedings against any person, the violator shall first be given notice and an opportunity to be heard. Thereafter, if in the opinion of the Secretary it appears the Act has been violated, the facts shall be referred to the county attorney; provided, however, for minor violations, the Secretary may issue a written warning in lieu of criminal prosecution whenever he believes it will best serve the public interest. Section 5(3) does not authorize the Secretary to revoke or suspend an applicator's license for violations of administrative rules or regulations; it therefore appears there are no sanctions by which the Secretary may enforce such rules and regulations.

of any person . . . or cause pollution of public waters."[40] However, applicators are exonerated from criminal liability for any damage caused by application in accordance with approved label requirements.[41] The Secretary is specifically empowered to bar the use of pesticides in specified areas or during certain periods upon evidence that the pesticides caused widespread serious damage to crops or livestock.[42]

It is significant that the approach adopted by the legislature is restrictive in the scope of the requirements of the Act itself. This approach constitutes a marked difference in administrative philosophy from the bill proposed in the House which contained numerous detailed requirements.[43] Instead, the Senate version ultimately adopted leaves to the Secretary the task of implementing the statute by the promulgation of more comprehensive rules and regulations.[44] Although this is considered a judicious choice because it facilitates greater flexibility, there would seem to be some concern that the Act does not provide a sufficient foundation for a proper discharge of the Secretary's rule-making function. By the language of the Act, the Secretary's authority is limited to making "appropriate rules and regulations for carrying out the *provisions* of this Act."[45] Consequently, an express provision would appear necessary upon which to found each regulation. Unfortunately, the Act recites no general purpose clause which might have alleviated this necessity. However,

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[40] Iowa Pesticide Act § 3(2)(d).

[41] *Ibid.*

[42] Iowa Pesticide Act § 6(5).

[43] See H.F. 504.

[44] See Iowa Pesticide Act § 6(2). It is interesting to note that the Act contemplates future federal regulation of pesticides and authorizes reliance on federal standards. See, for example, § 4(1) which directs the Secretary to register and permit the sale of any pesticide duly registered under the Federal Insecticide, Fungicide and Rodenticide Act; § 6(4) which authorizes the Secretary to adopt such regulations as may be prescribed by the United States Department of Agriculture with respect to pesticides and § 11 which authorizes the Secretary to cooperate with, and enter into agreements with, the United States Department of Agriculture for the purpose of carrying out the provisions of the Act and securing uniformity of regulations.

[45] Iowa Pesticide Act § 6(2). (Emphasis added.) There would also appear to be some concern over the constitutionality of this provision. It is well established that the legislature cannot grant an administrative agency the power to regulate unless some standard of yardstick is provided in the act as a guide to the administrative agency. See Demers v. Peterson, 197 Ore. 466, 254 P.2d 213 (1953), in which the Oregon pesticide act was held unconstitutional as an invalid delegation of legislative rule-making authority. The act there provided: "The department may, after public hearing, make regulations for carrying out the provisions of this Act." The court said that this gave the agency "unlimited power" to make regulations to carry out the provisions of the act, and that there was "no suggestion . . . in the act itself of the nature, extent or character of the regulations." *Id.* at 470, 254 P.2d at 215. As § 6(2) of the Iowa Act uses almost identical language, it raises serious doubts regarding the sufficiency of the act's rule-making standards.

it is arguable that a general purpose to regulate the use of pesticides may be implied from a liberal construction of the Act as a whole, thereby vesting the Secretary with broad rule-making authority. Such an inference would be necessary to justify regulations prescribing periodic reports or equipment standards, for example, as there are no express provisions authorizing such requirements in the Act itself. It is also unclear whether or not the Act contemplates a financial responsibility requirement. The Act merely directs the Secretary to "require proof of . . . *responsibility* before issuing a license."[46] Although the House bill provided explicitly for financial responsibility,[47] the legislative intent of the Act as passed appears ambiguous. It is at least arguable from its language that financial responsibility was intended, but if this is true, it is unfortunate the drafters did not see fit to include the word "financial."

Another possible defect in the Act arises from the section providing for service of process of original notice on a nonresident applicator.[48] The Act authorizes service of process on the Secretary as his agent by implied consent. Litigation in other areas of the law raises grave doubts as to the constitutionality of such a scheme under the due process requirements of the *Mullane* case.[49]

The Iowa Pesticide Act is a welcome improvement in the regulation of pesticide application. However, due to the approach taken, its real success must depend on the initiative of the Secretary of Agriculture in its implementation. Only a vigorous administration within the framework of the Act will provide Iowa with effective pesticide control.

II. Civil Liability

Although legislation has only recently brought the use of pesticides under effective governmental control and regulation, the problem of civil liability for harm caused by pesticide application has long been considered by the courts. Until the last few years, liability has always been predicated on the traditional tort concept of negligence. However, as a result of the expanded use and the inherently dangerous nature of pesticides, several jurisdictions have recently adopted the doctrine of strict liability with respect to pesticides.[50]

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[46] Iowa Pesticide Act § 5(1). (Emphasis added.)

[47] H.F. 504 § 7(2).

[48] Iowa Pesticide Act § 5(5).

[49] See Mullane v. Central Hanover Bank & Trust Co., 339 U.S. 306 (1950). Due process requires a method of notice reasonably calculated to afford interested parties an opportunity to appear and be heard. Section 5(5) provides only for service of notice on the Secretary but does not require the Secretary to forward mailed notice to the defendant applicator. Such a defect has been held fatal. *Cf.* Wuchter v. Pizzutti, 276 U.S. 13 (1928) (nonresident motorist statute held unconstitutional). For a complete discussion of notice requirements under the *Mullane* doctrine involving other statutes, see Note, 48 Iowa L. Rev. 968 (1963).

[50] See Gotreaux v. Gary, 232 La. 373, 94 So. 2d 293 (1957); Young v. Darter, 363 P.2d 829 (Okla. 1961); Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961).

A. Theories of Liability

1. Negligence Theory

The majority rule is that the injured landowner must prove that the spraying operation was done negligently before damages may be recovered.[51] What the plaintiff must *actually* prove in order to recover on the negligence theory is not clear from the decisions.[52] The cases following the negligence rule have adopted two distinct views. Under the first view the plaintiff must prove that the defendant failed to exercise due care in applying the spray which resulted in damage to the plaintiff. Accordingly, courts have been specific as to what constituted the negligent act; for example, failing to shut off spray while flying over plaintiff's land,[53] spraying despite winds blowing toward plaintiff's land,[54] failing to notify plaintiff of the spraying,[55] and spreading of poison so close to plaintiff's fence that his cattle could reach it[56] have been held sufficient. However, even under this view, courts have been liberal in sustaining a recovery upon the introduction of any evidence tending to show negligence.

Under the second view, the defendant will be held liable if the plaintiff establishes merely the fact that it was the defendant's act which *caused* his injury.[57] In *Kentucky Aerospray, Inc. v. Mays,*[58] the court said, "[W]e must hold that, if appellant allowed the chemical compound to fall and settle in the pond in the spraying operation so that the minnows were poisoned, appellant was guilty of negligence."[59] This was the only discussion in the opinion as to any negligence on the part of the defendant. Thus, the court must have regarded the drifting of the spray itself, without more, as constituting the negligent act. Another court has held spraying to be a negligent act if the defendant knew or should have known that the spray might cause damage.[60]

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[51] See, *e.g.,* Lundberg v. Bolon, 67 Ariz. 259, 194 P.2d 454 (1948); Burns v. Vaughan, 216 Ark. 128, 224 S.W.2d 365 (1949); Faire v. Burke, 363 Mo. 562, 252 S.W.2d 289 (1952).

[52] "In some [crop dusting] cases, it is difficult to detect what theory the court was following." Loe v. Lenhardt, 227 Ore. 242, 246, 362 P.2d 312, 314 (1961) (dictum).

[53] Hammond Ranch Corp. v. Dodson, 199 Ark. 846, 136 S.W.2d 484 (1940).

[54] W. B. Bynum Cooperage Co. v. Coulter, 219 Ark. 818, 244 S.W.2d 955 (1952); Burns v. Vaughan, 216 Ark. 128, 224 S.W.2d 365 (1949); Parks v. Atwood Crop Dusters, Inc., 118 Cal. App. 2d 368, 257 P.2d 653 (4th Dist. 1953).

[55] Brown v. Sioux City, 242 Iowa 1196, 49 N.W.2d 853 (1951). *But see* Lundberg v. Bolon, 67 Ariz. 267, 194 P.2d 459, *modifying and affirming,* 67 Ariz. 259, 194 P.2d 454 (1948) (dictum).

[56] Underhill v. Motes, 158 Kan. 173, 146 P.2d 374 (1944).

[57] See, *e.g.,* Lundberg v. Bolon, 67 Ariz. 259, 194 P.2d 454 (1948); S. A. Gerrard Co. v. Fricker, 42 Ariz. 503, 27 P.2d 678 (1933); Heeb v. Prysock, 219 Ark. 899, 245 S.W.2d 577 (1952); McKennon v. Jones, 219 Ark. 671, 244 S.W.2d 138 (1951); Kennedy v. Clayton, 216 Ark. 851, 227 S.W.2d 934 (1950); Miles v. A. Arena & Co., 23 Cal. App. 2d 680, 73 P.2d 1260 (4th Dist. 1937).

[58] 251 S.W.2d 460 (Ky. 1952).

[59] *Id.* at 462.

[60] See Schultz v. Harless, 271 S.W.2d 696 (Tex. Civ. App. 1954).

Under this criterion of negligence few defendants would escape liability.

The practical effect of the cases following the latter view is that the result reached is the same as that imposed under the theory of strict liability. Technically, however, the rationale behind this result is different. Under the negligence theory, the risk of damage being done is said to be outweighed by the utility of the act, and liability is imposed only for negligence. Conversely, under the strict liability theory, the risk is said to outweigh the utility of the act, and, therefore, the one benefiting from the activity should pay for any damage caused regardless of fault.[61]

Seemingly, the courts are either unaware of or have refused to consider the distinction. At least courts continue to ignore the difference in rationale and fail to note the practical effect of its disregard. Two recent Texas decisions exemplify this unfortunate situation.

In *Vrazel v. Bieri*,[62] plaintiff proved the causal connection between defendants' crop dusting and damage to his crop but failed to prove that the defendants were negligent. On appeal from a judgment for the defendants, the Court of Civil Appeals adopted the traditional theory of negligence. In rejecting plaintiff's argument that the existence of some drift and resulting damage were sufficient evidence of negligence, the court noted that such finding would impose strict liability on the defendants, a doctrine which Texas does not recognize. Subsequently, however, the same court in *Leonard v. Abbott*[63] held that drift alone was sufficient to support a verdict of negligence, thereby rejecting the true negligence notion and imposing strict liability in the guise of negligence. As the court in *Leonard* was aware of the *Vrazel* decision,[64] it must also have been aware of the effect of its decision. Therefore, it can only be concluded that although the court reached the result of strict liability, it consciously refused to give verbal sanction to the doctrine.

2. *Strict Liability*

Recently, three jursidictions have expressly adopted the doctrine of strict liability as being applicable to crop spraying. In the case of *Young v. Darter*,[65] the Supreme Court of Oklahoma held that a

[61] See HARPER, TORTS § 155, at 333 (1933).

[62] 294 S.W.2d 148 (Tex. Civ. App. 1956).

[63] 357 S.W.2d 778 (Tex. Civ. App. 1962).

[64] The *Vrazel* decision was cited by the court in *Leonard*. *Id.* at 780.

[65] 363 P.2d 829 (Okla. 1961). The court said the facts of the case brought it within the rule of *Rylands v. Fletcher*. *Id.* at 833. The rule was there stated by Lord Cranworth:

> If a person brings or accumulates on his land anything which, if it should escape, may cause damage to his neighbour, he does so at his peril. If it does escape and cause damage he is responsible, however careful he may have been, and whatever precautions he may have taken to prevent the damage. [1868] 3 H.L. 330, 334 (concurring opinion).

For extensive commentary on this doctrine, see Bohlen, *The Rule in Rylands v. Fletcher*, 59 U. PA. L. REV. 298, 373, 423 (1911). For discussion of the extent to which the doctrine has been adopted by American courts, see HARPER, TORTS § 156 (1938); PROSSER, TORTS § 59 (2d ed. 1955).

landowner using a herbicide on his land did so at his own peril and was liable for damages caused to adjacent crops regardless of the lack of negligence or the precautions taken. In an action for trespass, the Supreme Court of Oregon likewise held in *Loe v. Lenhardt*[66] that liability would be imposed in the case of an unintentional intrusion when damage arose out of some extrahazardous activity. In *Gotreaux v. Gary*,[67] the Supreme Court of Louisiana also held that negligence or fault was not a requisite to liability under the Louisiana civil code and subsequent Louisiana decisions have reaffirmed the strict liability doctrine in that state.[68]

The rationale for strict liability, as explained by Dean Prosser, is that "the hazardous enterprise, even though it be socially valuable, must pay its way, and make good the damage inflicted."[69] Inasmuch as the application of pesticides involves the use of lethal poisons in a form in which precise control is impossible, it would seem to be the type of hazardous enterprise contemplated by the doctrine. At the same time there can be no doubt that pesticides are socially valuable in the control of insects, weeds, and other pests, and benefit society both by better health and increased production. Whether strict liability or traditional negligence principles should be applied amounts to a balancing of conflicting social interests.[70] It devolves on the courts

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[66] 227 Ore. 242, 362 P.2d 312 (1961). The court held aerial spraying to be an "ultra-hazardous" activity within the meaning of the *Restatement* which was cited with approval. *Id.* at 249, 362 P.2d at 316. The *Restatement* provides:

> [O]ne who carries on an ultrahazardous activity is liable to another whose . . . land . . . the actor should recognize as likely to be harmed by the unpreventable miscarriage of the activity for harm resulting thereto from that which makes the activity ultrahazardous, although the utmost care is exercised to prevent the harm. RESTATEMENT, TORTS § 519 (1938).
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> An activity is ultrahazardous if it
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> (a) necessarily involves a risk of serious harm to the . . . land . . . of others which cannot be eliminated by the exercise of the utmost care, and
>
> (b) is not a matter of common usage.
>
> *Id.* § 520.

It was argued that crop spraying did not meet the requirement of § 520(b), but the court dismissed the contention. "[T]he real issue involves the appropriateness of the activity at the time and place rather than whether or not the activity is one of natural or common usage." 227 Ore. at 251, 362 P.2d at 317.

[67] 232 La. 373, 94 So. 2d 293 (1957). The decision was criticized for misconstruing the civil code, although the result was approved. See 32 TUL. L. REV. 146 (1957).

[68] See Romero v. Chris Crusta Flying Serv., Inc., 140 So. 2d 734 (La. Ct. App. 1962); Trahan v. Bearb, 138 So. 2d 420 (La. Ct. App. 1962); Jones v. Morgan, 96 So. 2d 109 (La. Ct. App. 1957). In the *Jones* case the trial court found the defendant guilty of negligence; the court of appeals said this was not necessary to the decision since strict liability would apply. *Id.* at 113 (dictum).

[69] PROSSER, TORTS § 59, at 332 (2d ed. 1955).

[70] See Carpenter, *The Doctrine of Green v. General Petroleum Corporation*, 5 So. CAL. L. REV. 263, 271 (1932), where the author states:

> Some activities, when carried on without negligence, are so essential that they must be carried on somewhere, yet the risk of damage may be great nevertheless. To require the actor to bear the burden of any loss

to resolve the social conflict as a matter of public policy.[71] In attempting to balance the risk against the utility of crop spraying, the precise question becomes who should bear the loss of damage caused by pesticides.[72] It is said that strict liability should be imposed where the risk of harm outweighs the benefit to be received from the hazardous enterprise, thereby throwing the loss on the party benefiting from the spraying. Although guilty of no fault in the sense of culpable conduct, the applicator is held liable under the policy, in view of the exigencies of social justice, that where there is blame on neither side the party seeking to benefit from his own activities ought to bear the risk.[73]

However, courts have been reluctant to expressly adopt the strict liability doctrine. The chief reason for this is probably the historical conservatism of the judiciary resulting in a strong reticence to deviate from the traditional tort concept of fault.[74] The fact is, however, that strict liability is being applied by many courts through the guise of negligence. Anything less than a forthright approach to the problem can lead only to confusion, uncertainty, and a dulling of legal thought. Regardless of which standard is adopted, the theory should be chosen as a matter of conscious policy and then articulated as such by the courts.

B. Vicarious Liability

Modern specialized equipment and techniques of pesticide application have increasingly resulted in the employment of commercial

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he incurs without prohibiting his activity may be the most satisfactory means of balancing the social interests and the interests of the actor and of the injured person.

[71] See Loe v. Lenhardt, 227 Ore. 242, 250, 362 P.2d 312, 316 (1961), where the court "recognizes the judicial balancing of interests as a function of the court."

[72] The question is "whether or not the activity should pay its way." *Id.* at 251, 362 P.2d at 317.

[73] See PROSSER, TORTS § 56, at 317-18 (2d ed. 1955); *cf.* Green v. General Petroleum Corp., 205 Cal. 328, 333, 270 Pac. 952, 955 (1928) (injury caused by nonnegligent "blowing out" of defendant's oil well). Dean Prosser notes that "fault" has never been quite synonymous with moral blame and that liability without fault is nothing new; socially such defendants are at fault. See PROSSER, *supra* at 316-17. Commercial applicators are also in a better position to predict the risk of loss involved in spraying and absorb it through insurance, ultimately spreading the loss among all consumers as a cost of doing business. See generally Gregory, *Trespass to Negligence to Absolute Liability*, 37 VA. L. REV. 359 (1951); Morris, *Hazardous Enterprises and Risk Bearing Capacity*, 61 YALE L.J. 1172 (1952); Note, 43 MINN. L. REV. 531, 541-43 (1959).

[74] See Chapman Chem. Co. v. Taylor, 215 Ark. 630, 646, 222 S.W.2d 820, 828 (1949) (dissenting opinion), in which Justice Smith opposed the court's imposition of strict liability saying, "I can hardly see the point at which its application may logically be said to end." The case involved damage to plaintiff's cotton crop from the then new herbicide, 2,4-D, for which the majority held the defendant *applicator* not liable under traditional negligence principles, but imposed strict liability in holding the defendant chemical *manufacturer* liable. For a comprehensive analysis of manufacturer's product liability, see Note, 48 IOWA L. REV. 630 (1963).

applicators. Consequently, tort actions arising out of the application of pesticides often raise the ancillary issue of *respondeat superior.*

Under traditional agency notions, no vicarious liability is imposed upon the employer of an independent contractor.[75] However, a well recognized exception to the rule continues to hold an employer liable if the act engaged in by the independent contractor is inherently or intrinsically dangerous.[76] It is felt that an employer should not be able to pass on the responsibility for damages resulting from such peril.[77] As crop dusting has been labeled "inherently dangerous" by almost all courts, the exception has been invoked and liability imposed on employer-landowners although the spraying has been done by an independent contractor.[78] In those judisdictions which have adopted the doctrine of strict liability, the courts have already made the determination that crop dusting is inherently dangerous and, a fortiori, the exception should logically be applied.[79]

C. Statutory Provisions Relating to Liability

Although the primary thrust of the recent pesticide statutes has been regulatory, a number of the acts have also included some provisions affecting civil liability.

Several jurisdictions have enacted a provision that no action shall be commenced against an applicator unless the claimant has filed a damage report within the time required by the act.[80] Although these provisions are cast in the absolute terms of a condition precedent, it has been held by one court that substantial compliance with the requirement was sufficient to permit recovery.[81] It may be noted that

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[75] See, *e.g.*, S. A. Gerrard Co. v. Fricker, 42 Ariz. 503, 27 P.2d 678 (1933); McKennon v. Jones, 219 Ark. 671, 244 S.W.2d 138 (1951); Pendergrass v. Lovelace, 57 N.M. 661, 262 P.2d 231 (1953).

[76] See, *e.g.*, S. A. Gerrard Co. v. Fricker, *supra* note 75; McKennon v. Jones, *supra* note 75; Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961).

[77] See, *e.g.*, McKennon v. Jones, 219 Ark. 671, 244 S.W.2d 138 (1951); Lawler v. Skelton, 241 Miss. 274, 130 So. 2d 565 (1961); Leonard v. Abbott, 357 S.W.2d 778 (Tex. Civ. App. 1962).

[78] See, *e.g.*, cases cited notes 75-77 *supra. Contra,* Pitchfork Land & Cattle Co. v. King, 162 Tex. 331, 346 S.W.2d 598 (1961). The effect of this decision was drastically curtailed by Leonard v. Abbott, 357 S.W.2d 778, 781 (Tex. Civ. App. 1962), where the court found that the Texas Herbicide Control Act, by implication, declared the use and application of herbicides to be inherently dangerous and thus the exception applied.

[79] See Loe v. Lenhardt, 227 Ore. 242, 254, 362 P.2d 312, 318 (1961): "[T]he rule of non-delegability followed in the so-called inherently-dangerous-activity-negligence cases . . . applies with equal or greater force to the conduct of extra hazardous activity."

[80] See, *e.g.*, MISS. CODE ANN. § 5000-23(2) (Supp. 1962); OKLA. STAT. tit. 2, § 3-82(d) (1961); ORE. REV. STAT. § 573.210 (Supp. 1961).

[81] Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961). Plaintiff failed to plead compliance with the statute, and the trial court directed a verdict for defendant based on defendant's allegation of noncompliance. On appeal, the supreme court

although the House version of the new Iowa statute contained a provision of this type,[82] the Act as finally passed contains no such requirement.

Other statutes require a report to be filed within a specified time after the damage becomes known, and proof of failure to file raises a rebuttable presumption that no loss or damage occurred.[83] Although no case has been found construing such a provision, the presumption would appear to be of no practical effect at trial. First, the burden of proof is already on the plaintiff and, secondly, under the majority rule, such a presumption, since it does not give rise to any logical inference, has no residual probative value upon the introduction of any believable rebuttal testimony on the issue of damage, and therefore the presumption disappears completely.[84]

As previously discussed, many states also require applicators to show some form of financial responsibility.[85] This should insure that a successful plaintiff will be able to collect on his judgment, at least to the extent of the statutory security. In light of the dangerous character of pesticide application, financial responsibility is considered prudent in the interests of justice as a shield against the financially irresponsible.

Although it is not clear whether the new Iowa Act, as adopted, provides for financial responsibility,[86] it is interesting to speculate on the possible side-effects of the House bill had it been approved. It provided for financial responsibility "in favor of any and all persons injured by *improper* application of a pesticide."[87] It would have been arguable that this language constituted a legislative intent to sanction

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reversed, holding substantial compliance was sufficient as the statute required a liberal construction. *Id.* at 256, 362 P.2d at 319-20. See also Cross v. Harris, 230 Ore. 398, 370 P.2d 703 (1962), where the same court sitting en banc affirmed a verdict for the plaintiff, although he had not given the required statutory notice, on the ground that defendant failed to allege noncompliance. The court reasoned that because the plaintiff's cause of action was a *common law* action for tort negligence, the notice in question was not essential to his pleading but was an affirmative defense which the defendant waived by not raising it in his answer. The court distinguished notice requirements for *common law* actions from those for *statutory* actions, the latter being an essential element of the cause of action itself and, therefore, compliance must be pleaded as a condition precedent. *Id.* at 401-05, 370 P.2d at 705-07.

[82] See H.F. 504 § 12. A similar amendment to the Senate bill was proposed and passed but was later withdrawn by unanimous consent of the Senate at the request of the Committee on Agriculture.

[83] See, *e.g.*, ARIZ. REV. STAT. ANN. § 3-384(c) (1956); CAL. AGRIC. CODE § 160.97; TEX. REV. CIV. STAT. ANN. art. 135b-4(10) (1959).

[84] See Silva v. Traver, 63 Ariz. 364, 162 P.2d 615 (1945); UNIFORM RULE OF EVIDENCE 14(b); MODEL CODE OF EVIDENCE rule 704(2) (1942); LADD, EVIDENCE 834-36 (2d ed. 1955); Note, 44 IOWA L. REV. 147 (1958).

[85] See note 20 *supra* and accompanying text.

[86] See note 46 *supra* and accompanying text.

[87] H.F. 504 § 7(2). (Emphasis added.)

the negligence theory of liability and to preclude the courts from imposing the doctrine of strict liability.

However, a contrary inference may be implied from the Act itself which makes unlawful the application of a pesticide "*in such a way* as to damage . . . any person."[88] Thus, intent or negligence are not necessary elements of the offense, and causation alone is sufficient. It can therefore be argued that, as the Act imposes absolute criminal liability, public policy likewise dictates that the courts impose strict civil liability.

In those jurisdictions already committed to the traditional negligence theory, statutes or administrative regulations prescribing minimum standards of safety for the application of pesticides may have a secondary impact on civil liability. By implication, any violation of such standards would infer lack of due care; for example, spraying at a time when the wind exceeded a prescribed maximum. Evidence of such violations might be quite persuasive with the courts in the proof of negligence.[89] It is possible a violation might even be held to constitute negligence per se.[90] Therefore, such violations will not only subject an errant applicator to license revocation and possible criminal sanctions but may also have collateral implications affecting his civil liability.

III. Conclusion

The expanded use of pesticides with its attendant hazards had created a pressing social need for more stringent and well-delineated governmental regulation. Modern pesticide acts appear to offer considerable improvement in the control of these hazards. Current federal investigation of pesticides may suggest the propriety of further controls.[91] A few shortcomings of recent legislation are readily ap-

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[88] Iowa Pesticide Act § 3(2)(d). (Emphasis added.)

[89] *Cf.* Samuelson v. Siefer, 62 Cal. App. 2d 320, 144 P.2d 879 (3d Dist. 1944) (traffic violation prima facie evidence of negligence); Worthington v. McDonald, 246 Iowa 466, 474, 68 N.W.2d 89, 93 (1955) (traffic violation only prima facie evidence of contributory negligence); Senchack v. Sterling, 252 App. Div. 894, 300 N.Y. Supp. 297 (1937) (violation of motor vehicle statute only prima facie evidence of negligence). Conversely, adherence to prescribed standards should *not* conclusively relieve an applicator from liability. As the statutes and regulations are intended only to delineate *minimum* standards of conduct, the issue of negligence should turn on the facts of each case. *Cf.* Youngs v. Fort, 252 Iowa 939, 945, 109 N.W.2d 230, 233 (1961) ("There may be negligence even though the speed is less than the statutory maximum.").

[90] *Cf.* Silvia v. Pennock, 253 Iowa 779, 783, 113 N.W.2d 749, 752 (1962) (dictum) (violation of statutory rules of road negligence per se). The general rule in Iowa is that violations of the motor vehicle rules of the road are negligence per se unless justified by a legal excuse. Failure to yield one half of the traveled way is an exception to the rule and is merely prima facie evidence of negligence. *Ibid.* See generally Note, *Effect of Statutory Violations in Automobile Negligence Actions in Iowa,* 8 Drake L. Rev. 110 (1959).

[91] See note 7 *supra* and accompanying text.

parent: some statutes fail to apply to ground as well as aerial application;[92] other acts apply only to herbicides or insecticides;[93] and inspection or approval of equipment is not always required.[94] However, the necessity of government intervention is now well recognized and continual reappraisal should adequately safeguard legitimate public interests.

At the same time, no measure of control can eliminate all damages from pesticides. Many courts have tacitly recognized the need for strict liability but continue to veil their rationale in terms of negligence.[95] Although this rationale is laudable in result, express acceptance of strict liability would be preferable. Happily, a trend in this direction is indicated.[96]

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[92] See, *e.g.*, CONN. GEN. STAT. REV. § 15-99 (1958); KAN. GEN. STAT. ANN. § 3-902 (Supp. 1961); VT. STAT. ANN. tit. 5 § 186 (1958). Although aerial spraying presents the greatest danger, damage has resulted from ground application. See, *e.g.*, Faire v. Burke, 363 Mo. 562, 252 S.W.2d 289 (1952); Young v. Darter, 363 P.2d 829 (Okla. 1961); Schultz v. Harless, 271 S.W.2d 696 (Tex. Civ. App. 1954).

[93] See, *e.g.*, ILL. ANN. STAT. ch. 5, §87a.1 (Smith-Hurd Supp. 1962) (herbicides); IOWA CODE ch. 206 (1962) (insecticides and fungicides); MISS. CODE ANN. § 5000-23(a) (Supp. 1962) (herbicides); TEX. REV. CIV. STAT. art. 135b-4(1) (1959) (same). The Mississippi statute was expressly construed as not applying to the aerial application of insecticides. See Lawler v. Skelton, 241 Miss. 274, 289, 130 So. 2d 565, 570 (1961).

[94] However, such requirements are often deliberately left to administrative regulation.

[95] See notes 57-64 *supra* and accompanying text.

[96] See notes 65-67 *supra* and accompanying text.