DDT and other pesticides are among the most powerful weapons used by the agricultural industry in its continuing war against insects and other "pests" which may threaten crops. During the past three decades the new varieties of such chemicals and the extent of farmers' reliance upon them have greatly increased. While pesticides significantly contribute to agricultural productivity, it has become apparent that their benefits may not outweigh the danger they create for man and his environment. The Federal Insecticide, Fungicide, and Rodenticide Act and its amendments in the recent Federal Environmental Pesticide Control Act are the primary means by which the federal government controls the sale and use of pesticide products. This Comment examines these statutes in the context of recent pesticide litigation and analyzes their potential for facilitating environmental challenge to pesticides, for preventing indiscriminate pesticide use, and for reducing the threat which pesticides pose to public health and environmental welfare.

On June 14, 1972, William Ruckelshaus, Administrator of the Environmental Protection Agency (EPA), announced his decision to ban all use of DDT in the United States, an order which reflects years of public debate over the problems of pesticide pollution and control. For the past decade public interest group demands for a reevaluation of the policies governing the use of pesticides have increased in the face of agricultural overabundance and continuing discoveries related to the effects of pesticides on food, human health, and the environment. As our knowledge of delicately balanced ecosystems has
grown, concern has mounted over the lack of available information on the extent and pattern of pesticide use, the path such chemicals follow through various ecological chains, and their final residual effect on the environment.\(^8\)

Since 1947, pesticides have been controlled on the national level through the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).\(^4\) FIFRA was designed primarily to insure that the farmer would receive a reasonably effective product together with sufficient minimum safety instructions to make basic product use practicable.\(^5\) The main emphasis of the Act was on control of product quality and safety through adequate product labeling. As pollution of all types became a national concern, environmental groups attempted to use FIFRA to prevent the indiscriminate application of pesticides, to check their permeation of the environment, and to eradicate their danger to public health.

These efforts culminated in a series of court decisions\(^6\) demonstrating conclusively that FIFRA's narrow basis of regulation was inadequate to meet both its original product safety purposes and the new environmental responsibilities placed on it. The congressional response to criticism of FIFRA by courts, legal commentators, and environmental groups\(^7\) was the Federal Environmental Pesticide Control Act of 1972 (FEPCA).\(^8\)

This Comment examines whether the new Act provides a system of pesticide control that will be truly responsive to environmental and public health, as well as to basic agricultural needs, or whether the measure is merely a stopgap designed to correct only the most glaring deficiencies in the former regulatory scheme. Part I discusses the basic

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\(^2\) 1972 ENVIRONMENTAL QUALITY REPORT, supra note 1, at 18-19.


\(^5\) See text accompanying notes 28-68 infra.


provisions of FIFRA and analyzes the recent court decisions highlighting the inability of FIFRA to respond to environmental and health interests. The judicial efforts to interpret FIFRA so as to accommodate these interests provide the basis for the evaluation, in Part II, of FEPCA’s chances for success in curbing the dangerous and undesirable effects of pesticides.

I

FEDERAL INSECTICIDE, FUNGICIDE AND RODENTICIDE ACT

FIFRA’s enactment in 1947 represented an attempt to broaden existing public protection from the hazards associated with pesticide use by requiring the registration of all pesticides and other “economic poisons” intended for interstate sale. The goal of FIFRA registration was to insure that pesticides carried labels bearing sufficient information to make product use safe, easy, and effective. To register a pesticide manufacturers had to file a statement with the Administrator containing a complete copy of the label to accompany the pesticide, including directions for its use and a statement of all claims made for the product. The Administrator could also order a manufacturer to supply a description of the tests conducted on the pesticide, the results on which claims for the product were based, and the complete formula of the pesticide. If he determined that the article would not warrant the claims made for it or if its label did not meet statutory requirements, the manufacturer was notified and given an opportunity to make specified corrections. The Administrator could refuse to register the product if the changes were not made.

11. An economic poison is (1) any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects, rodents, nematodes, fungi, weeds, and other forms of plant or animal life or viruses, except viruses on or in living man or other animals, which the Secretary shall declare to be a pest, and (2) any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant. FIFRA § 135a.
14. FIFRA § 135b(a).
15. Id. § 135a(4).
16. Id. § 135b(b).
17. Id. § 135b(c). An unregistered product or one whose registration had been suspended or cancelled could not be sold in interstate commerce. Id. § 135a.
The standards for proper labeling under FIFRA reflected congressional concern with satisfying agricultural consumers. To be registered or to remain registered, product contents had to meet the standards of strength or purity listed on the label and have no substituted or unlisted ingredients. An “adulterated” product was one failing to meet these standards, while a product was “misbranded” if its label contained false or misleading statements or lacked directions for use which were necessary and adequate for public protection from direct injury.

If the Administrator found a product to be “adulterated” or “misbranded,” he either refused registration or issued a notice cancelling the existing registration, notifying the manufacturer of his action and the reasons for it. The manufacturer had thirty days to correct the problem or to file an objection and request that the matter be submitted to an advisory committee, composed of experts selected by the National Academy of Sciences. After studying the data submitted by both parties, the committee submitted a report containing its recommendations to the Administrator. If the Administrator again denied or cancelled the registration, the petitioner was entitled to a public hearing. On the basis of facts found at the hearing, the Administrator then issued an order granting, denying, or cancelling the product’s registration. If the Administrator decided that continued marketing of the product during the administrative proceedings involved in a cancellation would constitute an “imminent hazard to the public,” he could suspend the pesticide’s registration immediately. Judicial review in an appropriate Circuit Court of Appeals was permitted for any order of cancellation or suspension.

18. *Id.* § 135a(5).
19. *Id.* §§ 135(z)(1), (2)(c). Any pesticide which, when used in accordance with directions or commonly accepted practice, caused injury to man, plants, or non-target vegetation, was also “misbranded.” *Id.* § 135(z)(2)(g).
20. *Id.* § 135b(c).
21. Once an order of suspension or cancellation was issued by the Administrator, the burden fell on the manufacturer to prove that his product satisfied all of the requirements of the Act. *Id.*
22. *Id.*
23. *Id.* For an example of the full application of these lengthy procedures regarding a cancellation notice, see Southern National Mfg. Co. v. EPA, —F.2d—, 4 ERC 1881 (8th Cir. 1972) (challenge to imposition of new labeling instructions and outright cancellation of certain uses of lindane pellets).
24. FIFRA § 135b(c). In such a case, the registrant could have the matter submitted to an advisory committee and obtain an expedited hearing pursuant to the usual cancellation procedures. *Id.*
25. The section on suspension and cancellation orders provides: “Final orders of the Administrator under this section shall be subject to judicial review in accordance with subsection (d) of this section.” *Id.* § 135b(c) (emphasis supplied). Subsection (d) states:

In a case of actual controversy as to the validity of any order under this section, any person who will be adversely affected by such an order may obtain
The FIFRA system was designed, therefore, to insure that the agricultural user received an effective pesticide with suitable application instructions and safety warnings. To achieve these goals, it provided a system of interaction between the manufacturer and the Administrator by which the Administrator reviewed the makeup and proposed functioning of the product and, if the label adequately reflected all necessary factors, authorized it for sale. If the item was, or became, unsuitable under FIFRA standards, the Administrator could remove it from sale and the manufacturer could contest that decision.

This manufacturer-Administrator relationship appears well equipped to regulate product effectiveness and safety in the isolated setting of the single-crop field. No such controlled environment existed, however, and doubts arose concerning: the effects of pesticides on non-target animals and plants, and of their drift into other fields, forests, and water supplies; the effects on humans other than the applicator through direct exposure or through food; and the long-term effects of chemical residues. The central question was whether the Administrator could deal with such problems effectively through his control over labeling information.

Several courts recently confronted these broader problems of pesticide use. Their attempts to interpret FIFRA so as to remedy such problems revealed that the FIFRA system was inadequate to meet the task due to three major weaknesses. First, since Congress apparently had assumed that only manufacturers would be sufficiently interested in their products to bring suit under FIFRA, the only orders expressly contemplated for review under the Act were those of the Administrator to manufacturers refusing or cancelling registrations. The result was a process which appeared to have no provision for consumer or environmental input or challenge. Second, the important statutory standards to be used by the Administrator in determining whether to suspend or cancel registration were imprecisely defined. Finally, the reliance of the FIFRA scheme upon regulation of pesticide labels proved to be both unrealistic and inadequate to avoid injury to public health and to the environment.

A. Consumer Standing and Judicial Review

The first major deficiency in FIFRA protection delineated by the
courts was the closed process between the Administrator and the manufacturer regarding settlement of all questions about the production, use, and impact of pesticides. Because the Administrator was envisioned as instituting all actions under FIFRA, with the manufacturer as the only respondent, no provision had been made for outside consumer input. But if the Act was to be used as a vehicle for the protection of the environment or the public health against the deleterious effects of pesticides, a means had to be devised for consumer interests to enter the process to challenge the continued marketing of an allegedly harmful product. In *Environmental Defense Fund v. Hardin*, and its sequel *Environmental Defense Fund v. Ruckelshaus*, the District of Columbia Court of Appeals sought to make FIFRA more responsive to this growing public concern.

In *Hardin* five environmental groups petitioned the Secretary of Agriculture requesting him to issue cancellation orders for all economic poisons containing DDT and to suspend registration of all such products pending conclusion of the cancellation proceedings. The Secretary issued notices of cancellation for four uses of DDT, solicited comments on the remaining uses, and took no action on the request for registration suspension of DDT as "an imminent hazard to the public." The Secretary then moved for dismissal of the petition, contending that only registrants and applicants had standing under FIFRA to challenge his determinations. After stating that the legislative history of FIFRA did not bear out the Secretary's assertion, Judge Bazelon pointed out that FIFRA itself provided that review was to be afforded to "any person adversely affected" by an order. Since the zone of interests protected by the statute was not only economic in nature, but also included the interest of the public in safety from the biologically harmful effects of DDT, the court held the petitioners had standing as they had alleged

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29. 439 F.2d 584, 2 ERC 1114 (D.C. Cir. 1970). *Hardin and Ruckelshaus* are actually one case. When the *Hardin* court found it had insufficient information to decide issues relating to judicial review and standards for suspension and cancellation, it remanded the case to the Secretary of Agriculture. By the time the issues were again brought before the court, responsibility for FIFRA had shifted from the Secretary of Agriculture to the Administrator of EPA [see note 10 supra], hence William Ruckelshaus was substituted as defendant.
30. These groups, led by the Environmental Defense Fund, Inc., included the National Audubon Society, Sierra Club, and West Michigan Environmental Council. In addition the court granted leave to intervene to the Izaak Walton League of America. 428 F.2d at 1093 n.5, 1 ERC at 1347 n.5.
32. 428 F.2d at 1096, 1 ERC at 1349.
33. FIFRA § 135b(d). See note 25 supra.
sufficient injury in fact to create a constitutionally justiciable case or controversy.³⁴

At the core of the standing issue was the fact that the lack of an established public complaint procedure had forced the plaintiffs to sue the Secretary for inaction in failing to issue the requested notices. Because the provisions of FIFRA were equipped to handle only manufacturers' challenges to administrative action and then only after the completion of the entire administrative process, the Secretary had denied petitioners the right to review on the grounds that since he had not yet granted or denied the relief requested, he had not yet issued a final order reviewable by the court. Stating that "an order expressly denying the request for a suspension or for cancellation would clearly be ripe for review,"³⁵ the court in Hardin concluded that when administrative inaction has precisely the same impact on the rights of the parties as a denial of relief, an agency can not preclude judicial review by casting its decisions in the form of inaction rather than in the form of an order denying relief. . . . The controversy over interim relief is ripe for judicial resolution, because the Secretary's inaction results in a final disposition of such rights as the petitioner and the public may have to interim relief.³⁷

However, since the record before the court was inadequate to permit review of the justifiability of the Secretary's refusal to suspend DDT, the case was remanded to the Secretary to state his reasons for the refusal.³⁸

The issue of judicial review was again before the court in Ruckelshaus.³⁹ After declaring that DDT posed no imminent hazard to the public which required its suspension, the Administrator once more challenged the right of the court to review his refusal to suspend. He based his arguments on Nor-Am Agricultural Products, Inc. v. Hardin⁴⁰

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³⁴. The injury alleged by petitioner was the biological harm done to man and other living things by the failure to restrict DDT use. Noting the existence of numerous scientific reports indicating the wide spectrum of DDT's harmful effects, Judge Bazelon applied the standing test contained in the Administrative Procedure Act [5 U.S.C. § 702 (1970)] and concluded that since other consumers of regulated products had standing to insure the proper administration of that regulatory system, those who "consume" the effects of DDT were "persons aggrieved by agency action" and had standing to sue for proper administration of FIFRA. 428 F.2d at 1097, 1 ERC at 1350. The court also held that this form of consumers' interest in environmental protection could be represented by a membership association with an organizational interest in the problem and that EDF constituted such an association. Id.
³⁵. See note 25 supra.
³⁶. 428 F.2d at 1098, 1 ERC at 1351.
³⁷. Id. at 1099, 1 ERC at 1351.
³⁸. Id. at 1093, 1 ERC at 1350.
³⁹. 439 F.2d 584, 2 ERC 1114 (D.C. Cir. 1970). See note 29 supra.
⁴⁰. 435 F.2d 1151 (7th Cir. 1970).
in which the Seventh Circuit sitting en banc had held that a manufac-
turer could not obtain judicial review of a suspension order because
such an order will always be followed by further administrative pro-
ceedings to decide the cancellation issue, and is, therefore, not a final
order for purposes of review. The Administrator analogized that an
order denying suspension is also ineligible for review since it will al-
ways be followed by further administrative proceedings during the
challenge to the cancellation order.

The court in *Ruckelshaus* rejected this argument, saying that the
prospect of further administrative action does not solve the question
of reviewability, since the subsequent proceedings only resolve the ulti-
mate question whether cancellation is warranted and do not determine
whether the pesticide poses an "imminent hazard" requiring suspen-
sion in the interim. The fact that the important question of imminence
is not considered again in subsequent proceedings is enough to warrant
judicial review of the refusal to suspend. However, the Administra-
tor had not provided sufficient material on which to base a review of
his conclusion that DDT did not pose such a hazard and this part of
the case was remanded for further proceedings.

Similarly, the Administrator argued that his refusal to issue no-
tices of cancellation for the remaining uses of DDT was not reviewable
because investigations were still in progress and a final decision on the
question of the cancellations had not yet been made. The court, treat-
ing the petition as a request for relief in the nature of mandamus com-
pelling the Secretary to issue the notices, interpreted FIFRA as pro-
viding the cancellation proceedings to protect the public. The legisla-
tive scheme indicated an intention that whenever a substantial question
of the safety of a pesticide arose it should trigger the issuance of can-
celation notices and the holding of hearings, shifting to the manufac-
turer the burden of proving the safety of his product. Since the
Administrator had stated that he had found substantial questions con-
cerning DDT's safety, the court remanded the case to him with orders
to issue cancellation notices.

In granting environmental groups standing to sue under FIFRA
and to challenge the Administrator's inaction on requests for suspension
and cancellation, the court in *Hardin* and *Ruckelshaus* broke with tra-
ditional views of FIFRA enforcement. The court recognized that, al-

41. 439 F.2d at 591, 2 ERC at 1117. The problems that both the court and the
Administrator seemed to have had with the proper standards for issuance of suspension
orders are discussed at text accompanying notes 46-60 infra.
42. 439 F.2d at 596, 2 ERC at 1121.
43. Id. at 592, 2 ERC at 1118.
44. Id. at 594, 2 ERC at 1119.
45. Id. at 595, 2 ERC at 1120.
though FIFRA was designed to regulate the marketing of pesticides for the protection of the public, absent provision for consumer input evaluating such protection the statute's minimum regulatory effectiveness could be rendered nonexistent through the Administrator's discretionary power to refuse to take action and thus to prevent even persons directly affected by his inaction from compelling him to act. The efforts of the court to provide remedies for these defects strongly underscored FIFRA's inherent weakness as an environmental or public health statute.

B. Viability and Enforcement of Statutory Standards

A product was to be suspended under FIFRA when its continued use created "an imminent hazard to the public." But what constituted an "imminent hazard?" How much danger and to whom warranted a product's cancellation? There were no explicit answers to these questions in the statute—they were left to be developed from the Administrators' cancellation and suspension decisions in specific situations.

To the extent that the Administrator neglected or refused to issue such orders and failed to explain the reasons for his inaction, he inhibited the development of specific criteria determining when such orders were required. The decisions in Ruckelshaus and EDF v. EPA recognized that such standards were essential if the Administrator was to make rational and consistent decisions, and if public interest groups were to be able to utilize FIFRA seriously to challenge those decisions and prevent continued marketing of products allegedly in violation of statutory standards. To assist this development the court sought to compel the Administrator both to utilize the statutory provisions for public suspension and cancellation proceedings and to articulate clearly the basis for any decision made on those issues.

The court resolved the first of these issues in Ruckelshaus by holding that whenever the Administrator finds that a substantial question concerning the safety of a pesticide exists, he must issue cancellation notices to insure that public hearings will be held on the product. Emphasizing the importance of public examination of the safety issue, the

46. A report of the House Government Operations Committee found that the Pesticide Regulation Division of the Department of Agriculture had not taken prompt or effective cancellation action in many cases where it had reason to believe a registered product was ineffective or hazardous. Hearings on S. 232, S. 272, S. 660, and S. 745 Before the Subcomm. on Agricultural Research & General Legislation of the Senate Comm. on Agriculture & Forestry, 92d Cong., 1st Sess. 144 (1971) [hereinafter cited as Senate Hearings].

47. 465 F.2d 528, 4 ERC 1523 (D.C. Cir. 1972).

48. In Ruckelshaus, the court noted: "If hearings are held only after the Secretary is convinced beyond a doubt that cancellation is necessary, then they will be held too seldom and too late in the process to serve either of those functions effectively." 439 F.2d at 595, 2 ERC at 1120.
court stressed the beneficial interaction which would occur between the manufacturer, the scientific community, and the public in debating the question in open hearings.\footnote{Id. at 594, 2 ERC at 1119.} The Administrator could not be permitted to avoid public scrutiny of his decisions by refusing to issue the notices necessary to initiate administrative proceedings, nor could he conduct his own private investigation outside of statutory procedures.\footnote{Id. at 595, 2 ERC at 1120.}

In 
\textit{Ruckelshaus} the Administrator had not acted on the request for cancellation orders for the remaining uses of DDT, but had issued a statement acknowledging the dangers of DDT and concluding that its uses should be reduced in an orderly manner on the basis of comprehensive study of its effects and possible substitutes. In view of this position, the court stated that the Administrator had found a substantial question of safety of the type envisioned by the statute and remanded the case for the issuance of the orders.\footnote{Id.}

The propriety of suspension orders for all DDT use posed a more difficult issue. The court was forced to confront the question, left open by \textit{Hardin},\footnote{See text accompanying notes 37-39 supra.} of what constituted an "imminent hazard" requiring the issuance of suspension orders. Examining the statutory scheme, Judge Bazelon found that the Administrator, at a minimum, must consider the magnitude of the anticipated harm from the pesticide and the likelihood of the harm occurring.\footnote{439 F.2d at 595, 2 ERC at 1120.} While the Administrator might formulate any standards he chooses which adequately reflect these basic factors, the courts have an obligation to insure that the standards conform to statutory purpose and are uniformly applied.\footnote{Id. at 596, 2 ERC at 1121.}

For the courts to fulfill this function, however, the Administrator must articulate the criteria on which he relies in making a decision, even if the decisions themselves must be made on a piecemeal, individual basis. Whether the Administrator uses a benefit-risk balancing test on a case-by-case basis or formulates a regulation of general applicability is left to his administrative discretion; what is essential is that the basis for his decision be clear so it may be subject to public scrutiny and be utilized in future actions. Because the court felt that the Administrator had not provided an adequate explanation of his refusal to issue suspension orders, the case was again remanded to him for further articulation.\footnote{"We cannot assume, in the absence of adequate explanation, that proper standards are implicit in every exercise of agency discretion." Id. at 596, 2 ERC at 1121.}

\footnotesize{\begin{itemize}
  \item \textit{Id.} at 594, 2 ERC at 1119.
  \item \textit{Id.} at 595, 2 ERC at 1120.
  \item \textit{Id.}
  \item See text accompanying notes 37-39 supra. The "imminent hazard" standard was the only criterion provided under FIFRA for the issuance of suspension orders. FIFRA § 135b(c).
  \item 439 F.2d at 595, 2 ERC at 1120.
  \item \textit{Id.} at 596, 2 ERC at 1121.
  \item "We cannot assume, in the absence of adequate explanation, that proper standards are implicit in every exercise of agency discretion." \textit{Id.} at 596, 2 ERC at 1121.
  \item \textit{Id.}
\end{itemize}}
In *EDF v. EPA*, petitioners asked the court to order the Administrator to issue suspension orders for all uses of aldrin and dieldrin, two chlorinated hydrocarbon pesticides. As had occurred in *Hardin* and *Ruckelshaus*, the case had been remanded previously to the Administrator for a statement of reasons for his refusal to suspend. In the instant proceeding the Administrator had returned with a statement of reasons, having elected to develop suspension criteria case-by-case because the variables inherent in each decision made binding general regulations impractical. He noted, however, that in every case a decision regarding suspension orders would be based on a balance struck between the benefits and dangers to the public welfare from a product's use. Applying this balancing test to aldrin and dieldrin, the Administrator found that continued use of these chemicals did not constitute an imminent hazard since the chemicals are usually ground-inserted and thus have little environmental mobility, and because past history showed little residue left from their use. The statement simply mentioned the products' major uses but failed to discuss the benefits resulting from their continued use.

Upon EDF's challenge to the incomplete statement of benefits, the court emphasized that although the Administrator is free to choose the policy he will follow in respect to suspension orders, he must carry out fully that policy chosen. The factors on both sides of the question in a balancing test must be explained fully and a mere statement of uses cannot stand as an adequate explanation of benefits. "The interests at stake here are too important to permit the decision to be sustained on the basis of speculative inference as to what the Administrator's findings and conclusions might have been regarding benefits." Behind this insistence on explicit, articulated standards is the strong implication that there must be review of administrative actions to insure fulfillment of legislative intent. Since inadequate information was before the court on the actual benefits of aldrin and dieldrin, the case was remanded to the Administrator for further elaboration.

The seemingly endless series of remands in cases involving FIFRA standards reflects the same tension between entrenched agency views

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57. 465 F.2d 528, 4 ERC 1523 (D.C. Cir. 1972).
58. The Administrator stated that the anticipated harm need not have occurred, but that significant potential or actual injury to plants or animals could justify a finding of imminent hazard to the public. The extent of the expected or actual injury would then be weighed against the chemical's benefits in disease control or food production. *Id.* at 535, 4 ERC at 1527.
59. *Id.* at 539, 4 ERC at 1530.
60. "Our own responsibility as a court is as a partner in the overall administrative process . . . acting with restraint, but providing supervision. We cannot discharge our role adequately unless we hold EPA to a high standard of articulation." *Id.* at 540-41, 4 ERC at 1531.
61. *Id.* at 541, 4 ERC at 1532.
and expanding public participation identified in the discussion of standing. Traditionally, the Administrator had exercised his regulatory powers with maximum emphasis on discretion and minimal articulation of the criteria used in his decision making. Effective regulation proved, however, necessarily to require provisions for evaluative responses from the regulated public and adherence to basic but explicit and judicially reviewable standards for the removal of products from the market.

Agency regulation, as we know it, does appear to have certain advantages over judicial implementation of pesticide statutes, particularly in matters requiring scientific expertise and familiarity with specific issues and developing problems. These resources are crucial in a field as complicated as pesticide control. It is equally true, however, that there must be some floor to agency discretion in developing the decision-making criteria with which administrative action was to be challenged. The Administrator had shown that he would resist any inroads on that discretion, and while the courts in *Ruckelshaus* and *EDF v. EPA* forcefully indicated that they would intervene to prevent him from shielding his inaction behind overly broad and non-specific standards, the need for concrete, legislated guidelines was made clear.

**C. Labeling as a System of Control**

FIFRA's major regulatory provisions required a manufacturer to list the ingredients of his product prior to marketing, to give instructions for effective use, and to explain any safety precautions necessary on an immediately visible part of the product's label. In assuming that an adequate label would guarantee safe use of the product, the statute presupposed a literate, conscientious user. It was this dependence on user cooperation that was at the core of FIFRA's major failures as a public health and environmental protection regulation. No provision covered the situation where a manufacturer had fulfilled his statutory duty to provide an adequate label, but no one read or followed the label instructions. It was not an offense willfully or negligently to use a product contrary to its instructions.

Although "[t]he problem of pesticides is often not so much a problem of mere use but rather a problem of their use in the wrong amount, in the wrong place, at the wrong time," several courts have

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62. The present law puts almost its entire emphasis, control and regulatory emphasis, on the use of labels. Once a label is approved, the law tends to assume that the pesticide will then be used according to the label, and hopefully thus not misused. *Senate Hearings, supra* note 46, at 164 (statement of Russell E. Train, Chairman, Council on Environmental Quality).

63. *Id.* at 162.
held that misuse of an otherwise properly labeled product could not be prevented by recourse to the cancellation and suspension sanctions in FIFRA.\(^64\) The most striking example is *Stearns Electric Paste Co. v. EPA*.\(^65\) In *Stearns*, the EPA attempted to cancel the registration of phosphorous paste for use as a home roach and rat killer following nationwide reports of deaths to adults and children from misuse of the product. EPA contended that regardless of label contents the product was too dangerous for use because "the general public is incapable of handling these things and following directions."\(^66\)

The court, however, noting that the record showed a long history of safe use of the product when label directions were followed, held the manufacturer had made a prima facie showing that the product satisfied the statutory standard for continued marketing.\(^67\) The court explicitly rejected EPA's attempt to use the product marketing safety standard enunciated in *Ruckelshaus*, one based on a balance between the benefits and dangers to the public health and welfare. It acknowledged that use of the safety standard was appropriate to determine whether to permit continued marketing of a product such as DDT which has a known potential for harm even when used in compliance with directions. The court decided that "[a] different situation is presented when the harm is entirely, or at least primarily, attributable to misuse of the product," and ruled that there was no statutory support for the application of the product safety standard in the latter case.\(^68\)

\(^{64}\) See, e.g., Continental Chemiste Corp. v. Ruckelshaus, 461 F.2d 331, 4 ERC 1181 (7th Cir. 1972) (registration of smoke insecticide under FIFRA cannot be cancelled by EPA if product meets safety requirements of FIFRA, even though misuse of the product near food results in residues impermissible under the safety requirements of the Food, Drug and Cosmetic Act). Nor-Am Agricultural Products, Inc. v. Hardin, 435 F.2d 1133, 1 ERC 1460 (7th Cir. 1970), involved a farmer in Alamogordo, New Mexico, who fed his hogs waste grain products which had been contaminated by mercury. After one of the hogs was butchered and eaten by the man's family, three family members who had consumed the contaminated meat received permanent injuries from mercury poisoning. Fourteen of the hogs became blind and afflicted by a gait disturbance; twelve of these hogs subsequently died. In his concurring opinion in the case, Judge Swygert stated:

The Alamogordo incident was a freak occurrence, the result of the combined negligence of the granary where the seed was treated and the head of the afflicted family. The tragic events came about through misuse rather than normal use of the treated grain. Accordingly, the district court correctly concluded, in my opinion, that the suspension order, based on this single, abnormal incident, was an arbitrary exercise of the Secretary's emergency authority under the statute.

*Id.* at 1146, 1 ERC at 1471.

\(^{65}\) 461 F.2d 293, 4 ERC 1164 (7th Cir. 1972).

\(^{66}\) *Id.* at 297, 4 ERC at 1165.

\(^{67}\) *Id.* at 306, 4 ERC at 1172.

\(^{68}\) *Id.* at 307, 4 ERC at 1173. The court did acknowledge that the safety standard was appropriate when deciding to prohibit continued marketing of a product like DDT, having a known potential for harm even when used in compliance with directions. But the court was satisfied that the facts of its case did not reveal such a situation.
Stearns and other cases thus limited FIFRA's control over pesticides to the marketing of properly labeled products whose directions, if followed, assured moderately safe use. It is obvious that such a system, lacking sanctions against misuse of dangerous chemicals, could not provide the sophisticated level of public health and environmental protection demanded by today's public. The factors involved in making an environmentally sound decision about the use of any individual pesticide are too complex and vary too much from area to area to be presented adequately on a product label. Such a decision often requires a balancing of potential risks against benefits, knowledge of local conditions, and impartiality—which could not be expected to be reflected on a manufacturer's label of a nationally distributed product. The clear lesson of the FIFRA experience is that supervision and control of use, as well as marketing, are essential to achieve the maximum benefits of pesticide use at the minimum public cost.

Judicial examination of FIFRA thus identified at least three provisions necessary to introduce adequate environmental and health considerations into the regulation of pesticides: allowance for consumer and environmental group input into the decision-making process; explicit standards defining what adverse effects of pesticides would and would not be tolerated; and some system for the monitoring and control of pesticide use and manufacture. At a minimum the ultimate success of FEPCA as an environmental measure will depend on the extent to which both the statute and EPA administration incorporate these basics into the regulatory scheme.

II
THE FEDERAL ENVIRONMENTAL PESTICIDE CONTROL ACT OF 1972

By 1970 the mounting turmoil over pesticide pollution, highlighted by the judicial battle over DDT and other residual pesticides, had created a situation which clearly required a legislative response. The judicial implementation of FIFRA was criticized by environmentalists and the pesticide industry alike as too unpredictable a means of regulation. Several states had enacted pesticide control legislation, but

69. Much contamination and damage results from the indiscriminate, uncontrolled, unmonitored and excessive use of pesticides, often in situations where properly supervised application . . . would confine them to target areas and organisms, and at concentrations necessary for their beneficial use without damage to the environment.

Mrak Commission Report, supra note 2, at 22.


71. That the federal government was aware of this criticism is clear from re-
the situation on the federal level was too confused to incorporate these plans into a nationwide regulatory system. Accordingly, as part of an environmental package, President Nixon proposed in February 1971 new federal pesticide legislation.73 The result, after nearly two years of legislative hearings and redrafting, was the Federal Environmental Pesticide Control Act of 1972 (FEPCA).

Clearly designed to fill in the gaps in FIFRA coverage, as well as to respond to the most pressing environmental demands, FEPCA expands previous registration measures to provide product control at more points in the manufacturing and sale process. It also initiates a system of use control, to correct one of the most glaring deficiencies in FIFRA. Finally, FEPCA contains a procedure for granting indemnity payments to those who are left with unusable stock after a cancellation order. Although FEPCA will not be in complete operation for some time,74 the past experience with FIFRA has outlined basic criteria by which to judge FEPCA's potential.

A. Registration and Marketing of Pesticides Under FEPCA

FEPCA continues FIFRA's use of product registration as a basis for control, but it greatly expands registration, cancellation, and suspension criteria to include consideration of factors beyond the mere efficacy of the label. Provision has been made for increased public input and basic data collection at several steps in the administrative process. The jurisdiction of the system itself has been widened to include intra-state, as well as interstate, marketing of products.75

The procedure for registering a product under FEPCA is much the same as under FIFRA, but added are new requirements aimed at

marks made by the Administrator of EPA while testifying in Senate hearings on S.B. 745, a forerunner of FEPCA:

Finally, I wish to point out that the courts are currently taking the initiative in attempting to correct the deficiencies of the current law. It would indeed be unfortunate if the courts were to assume the responsibility for deciding the very delicate issues that arise in dealing with the use of pesticides. The recent development of extensive litigation on these matters reflects an upsurge of public dissatisfaction with the present regulatory framework. This is in addition to technical deficiencies in the present law. This has created considerable uncertainty as to the continued availability of many important pesticides. We believe this bill will resolve that uncertainty.

Senate Hearings, supra note 46, at 296-97 (statement of William Ruckelshaus).


73. 1972 ENVIRONMENTAL QUALITY REPORT, supra note 1, at 365, 372.


75. FEPCA § 3(a).
providing more consumer information and protection. A full sample label and product formula must be submitted with the application for registration, although a request for the test results on which the manufacturer's label is based and his claims for the product are still left to the Administrator's discretion.\textsuperscript{76} A request for registration must be published in the Federal Register, as must all data relevant to and the reasons for approval or denial of a registration.\textsuperscript{77}

Approval of registration remains based on the "adulterated-misbranded" standard; \textit{i.e.}, the label must truthfully describe the product's capabilities and include clear directions for use.\textsuperscript{78} However, the manufacturer's responsibility no longer ends here. He must now show that his product can both "perform its intended functions" and be "used in accordance with widespread and commonly accepted practice" without causing "unreasonable adverse effects on the environment."\textsuperscript{79}

Despite the apparent consumer orientation of much of the revised registration process, environmental and health protection is restricted by the last provision concerning registration. Section 3c(5) prohibits the Administrator from making "lack of essentiality" a criterion for denying registration or for registering one pesticide in preference to another where both meet statutory requirements.\textsuperscript{80} This provision severely limits the Administrator's ability to check the proliferation of pesticides, for he may not refuse to register a potentially dangerous chemical on the grounds that an equally effective product is already in use. Nor is he required to consider the alternative of biological pest control before approving a chemical pesticide for registration.\textsuperscript{81}

\textsuperscript{76} Id. § 3(c)(1). But FEPCA gives the Administrator new discretionary powers to impose any other requirements for registration information he feels necessary or helpful. \textit{Id.} § 3(c)(2).

\textsuperscript{77} Id. § 3(c)(4). Thirty days must be given for interested persons to comment on the application.

\textsuperscript{78} Id. §§ 2(q), 3(c)(5).

\textsuperscript{79} Id. "Unreasonable adverse effects on the environment" are defined to mean "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide." \textit{Id.} § 2(bb). "Environment" is further defined as including "water, air, land and all plants and man and other animals living therein, and the interrelationships which exist among these." \textit{Id.} § 2(j).

\textsuperscript{80} Id. § 3(c)(5).

\textsuperscript{81} During the public hearings leading to the passage of FEPCA, much attention had been focused on "integrated systems" of pest control. This method relies on the introduction of the natural biological enemies of a pest into an area as a means of curtailing pest populations. The field has been developing rapidly and California is considering requiring a review of these alternatives before a chemical application is permitted. \textit{See} Dunning, \textit{Pests, Pesticides, and the Living Law: The Control of Pesticides in California's Imperial Valley}, 2 \textit{ECOLOGY L.Q.} 663 (1973). Senator Nelson's alternative pesticide control measure before Congress at the same time as FEPCA explicitly required the consideration of biological alternatives before approving a chemical pesticide for registration. \textit{Senate Hearings, supra} note 46, at 11.
In making his decision to register a pesticide for marketing, the Administrator must decide whether to register a pesticide for general or restricted use based on the product's possible unreasonable adverse effects on the environment. A product is registered for general use if it is unlikely to have such effects if properly used. If use of a product in accordance with directions but without further restrictions may nonetheless result in unreasonable adverse effects, the product is registered for restricted use and may only be used under the direct supervision of a certified applicator. This classification of pesticides is the core of FEPCA's system of use control.

One major weakness of FIFRA registration was that the Administrator had little information on which to make a decision to permit marketing of a pesticide. Under the new act the Administrator may issue an experimental use permit to a manufacturer to enable him to test his pesticide in actual working conditions and to accumulate enough information to qualify the product for registration. Such use is to be under the supervision of the Administrator and for a term he prescribes. If there is some question about a product's initial safety, or if it is an entirely new chemical, the Administrator may require the manufacturer to conduct studies of the product's possible detrimental effects on the environment before allowing use to begin under the permit. The permit provisions, coupled with the new registration requirements added by FEPCA, clearly will contribute to more knowledgeable evaluation of pesticides submitted for registration than was possible under FIFRA.

FEPCA also extends regulation to the manufacturer's premises themselves. The producing establishment must be registered with the Administrator, and information covering the amount and types of pesticides currently in production and their sales and distribution must be submitted annually. Inspection of registered premises may occur upon written notice to the owner, whether or not a violation of the Act's provisions is suspected. However, where no violation is suspected, officials must present "an alternate and sufficient reason" for entering. The Act does not further indicate what alternative justifications might be "sufficient."

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82. FEPCA § 3(d)(1).
83. Id. § 3(d)(1)(B).
84. Id. § 3(d)(1)(C).
85. See text accompanying notes 118-22 infra.
86. FEPCA § 5.
87. Id. § 5(d).
89. Id. § 9. However, where no violation is suspected, officials must present "an alternate and sufficient reason" for entering. Id. § 9(a). The Act does not further indicate what alternative justifications might be "sufficient."
ments as he feels are necessary for effective FEPCA enforcement.\textsuperscript{90}

If effectively administered, the right to register and inspect manufacturing plants will facilitate more continuous and complete enforcement of pesticide regulations. Coupled with access to shipment and sale information, this procedure could provide a basis for accurately determining the extent of pesticide production and use. These figures have only been roughly estimated in the past and the pattern of distribution and use of different chemicals in separate areas has never been comprehensively charted.\textsuperscript{91} Knowledge of present use trends should be of great value in the development of programs for the reduction of chemical dependence and the introduction of alternative pest control methods.

\textbf{B. Administrative Enforcement Through Cancellation and Suspension Orders}

This system of regulation through registration is enforced, as under FIFRA, by the exercise of the Administrator's power to cancel and suspend the registration of a product violating the Act's provisions. But, as with the revised registration process itself, these procedures have been strengthened by expanding the range of factors to be considered, allowing greater public access to administrative proceedings and granting the Administrator more comprehensive regulatory tools.

1. \textit{Increased Public Input and New Regulatory Techniques}

A product's registration still may be cancelled if its label does not comply with requirements for accuracy and completeness. But the new Act specifically requires cancellation when a product has unreasonable adverse effects on the environment when used in compliance with label directions, thus permitting more effective regulation of pesticides whose use always involves some degree of risk to the applicator or the surrounding natural environment.\textsuperscript{92} Standards for the issuance of suspension orders have also been altered. An "imminent hazard" is still required to trigger suspension of a product's use,\textsuperscript{93} but "imminent hazard" has been given a more explicit definition:

\begin{itemize}
\item \textsuperscript{90} \textit{Id.} § 8. Industry pressure seems effectively to have limited these required records to those relating to pesticide shipments, since records including financial, sales, pricing, personnel, and research data are explicitly not required. \textit{Id.}
\item \textsuperscript{91} 1972 \textit{ENVIRONMENTAL QUALITY REPORT, supra note 1, at 17.}
\item \textsuperscript{92} FEPCA § 6(b). Although serious definitional problems remain in specifying what constitutes an "unreasonable adverse effect on the environment" [see part II, A, 2, b infra], this provision seems to represent a direct response to the previously discussed DDT, aldrin and dieldrin litigation. If broadly interpreted and enforced, it could be used to withdraw from sale all persistent pesticides whose lingering effects on the environment cannot be prevented even through trained, careful use.
\item \textsuperscript{93} \textit{Id.} § 6(c)(1).
\end{itemize}
a situation which exists when the continued use of a pesticide during the time required for cancellation proceedings would be likely to result in unreasonable adverse effects on the environment or will involve unreasonable hazard to the survival of a species declared endangered by the Secretary of the Interior.94

This definition, although not as specific as might be desired,95 nonetheless better identifies the requisite danger than did the former phrase “imminent hazard to the public.”

The procedures for cancellation have been similarly revised to take account of a wider range of interests. Unlike FIFRA, FEPCA requires the Administrator to make public any notice of intent to cancel,96 enabling other manufacturers and interested groups to prepare evidence for potential challenges to administrative determinations. Although a public hearing on cancellation can only be instigated by the affected manufacturer or by the Administrator, the statute specifically provides that the purpose of the hearing is to receive evidence relevant to issues raised by the manufacturer, the Administrator or “other interested parties.”97 The Administrator’s decision to cancel or not to cancel a product’s registration, or to reclassify the product, must be made in an order based on the evidence adduced at the hearing and must contain detailed findings of fact.98 However, FIFRA contained the same requirements,99 thus the problem considered in EDF v. EPA remains under FEPCA. The benefits of such requirements will be directly proportional to the willingness of the Administrator to be complete and explicit in his explanations. Unless the increased opportunities for consumer input are utilized to generate pressure on the Administrator to be more precise, the informational results may prove to be less than satisfactory.

94. Id. § 2(l).
95. See text accompanying note 118 infra.
96. FEPCA § 6(b). The cancellation order will become final in 30 days if the manufacturer has not made needed corrections or has not requested a public hearing. Id.
97. Id. § 6(d). The hearing is to be conducted by a hearing examiner who has the power of subpoena to compel testimony and the production of documents upon a request and showing of relevance by any party.

A change has been made in the availability of outside scientific judgment at the hearing. Under FIFRA, a registrant was entitled, at his request, to a referral to the scientific committee in addition to the hearing. FIFRA § 135b(c). FEPCA allows referral as part of the public hearing, but only at the discretion of the hearing examiner. FEPCA § 6(d). Undoubtedly the length of hearings and referrals dulled FIFRA’s effectiveness in the past. See, e.g., Pax Co. of Utah v. United States, 454 F.2d 93, 94-95, 3 ERC 1591, 1593 (10th Cir. 1972). But the denial of an interested party’s right to consult impartial scientific authority as to the value and potential dangers of a given chemical is a dubious and possibly expensive means of achieving shorter proceedings.

98. FEPCA § 6(d).
99. FIFRA § 135b(c).
When the Administrator desires to suspend a product's registration pending cancellation proceedings, the manufacturer may request an expedited hearing to determine whether the product in fact poses an "imminent hazard." Although FEPCA, unlike FIFRA, does not explicitly state that such hearings are to be public, the right of other manufacturers and public interest groups to participate can be implied from the provisions controlling emergency suspensions. The Administrator is permitted, under certain circumstances, to suspend the registration of a product before notifying the manufacturer. This "emergency" suspension order remains in effect until the completion of suspension hearings. FEPCA provides that no party other than the registrant and EPA may participate in hearings on such emergency orders, although any person adversely affected may file briefs with the Administrator. Such an explicit restriction would seem to have been unnecessary unless it was intended that other interested parties would be permitted to participate in the regularly held suspension hearings.

FEPCA expands these enforcement sanctions through the addition of "stop sale, use and removal" orders to the Administrator's powers. Previously, a finding that a pesticide violated FIFRA or the issuance of a cancellation or suspension order only prevented the further sale of the pesticide in interstate commerce, but did not prohibit purely local sales or the continued use of supplies of the product already on hand. Through use of FEPCA's extended intrastate authority and his ability to inspect manufacturers' shipment records, the Administrator can now issue a "stop sale, use or removal" order to any person who owns or has custody of such a pesticide and thereby prohibit all further sales and use. Although their coverage will be far from comprehensive, these orders will give the Administrator the necessary power to enforce registration regulations to a more complete and logical end.

100. FEPCA § 6(c)(2).
101. FIFRA § 135b(c).
102. FEPCA § 6(c)(3).
103. Id.
104. A person so filing shall be considered a party to the hearing and entitled to judicial review of the decision as to suspension. Id.
105. It seems equally unlikely that the Administrator would succeed in arguing that persons adversely affected only included other manufacturers potentially threatened by suspension, and that therefore they alone would be able to file briefs at an emergency hearing and, by implication, participate in a regular suspension hearing. The matter may be academic as EPA's initial administrative plans seem in general to favor optimal public participation: "Congress has made clear the right to third parties (user and public interest groups) to invoke agency processes and participate fully in agency proceedings." EPA Plan for Operating Under the Federal Environmental Pesticide Control Act of 1972, 38 Fed. Reg. 1142, 1143 (1973), 3 Env Rptr.—Curr. Dev. 1091, 1093 (1973).
106. FEPCA § 13.
FEPCA's revised enforcement proceedings also resolve the dispute presented in *Stearns*¹⁰⁷ by indicating that the enforcement sanctions of cancellation and suspension are only to be directed against use of an improperly made or labeled product and are not to be used to guard against misuse of approved products.¹⁰⁸ The potentially harsh results of this confinement of administrative action should, however, be mitigated by FEPCA's use control sections, which provide sanctions for product use contrary to label directions.¹⁰⁹

2. **Revised Standards: Remaining Definitional Problems**

FEPCA's registration system attempts to extend EPA's supervisory powers to every major step in the production and marketing process. But how much affirmative protection this structure will provide will be determined by the underlying standards. Most important is the phrase "no unreasonable adverse effects on the environment."¹¹⁰ Not simply an old concept in new phraseology, this language represents a definite statement of congressional intent to shift regulatory emphasis from mere agricultural effectiveness and product safety to include a more extensive consideration of the potential health and environmental effects of pesticide use. In codifying the balancing test for cancellation orders proposed in *Ruckelshaus* and *EDF v. EPA*, it ensures that at least certain of these broader basic interests will be represented in the agency decision-making process and puts some sort of floor under the exercise of administrative discretion in issuing such orders.

Despite the definite environmental orientation of the new standards, the problems troubling the courts in *Ruckelshaus* and *EDF v. EPA*—lack of an explicitly stated threshold danger level and agency inarticulateness—may remain. Although it is now clear that environmental impact can constitute an adverse effect causing cancellation, it is still uncertain how much effect is required before a situation becomes "adverse" and what weight the varying factors will command in the balancing process.

While the problem of agency inaction is likely to recede under FEPCA, the continued development of standards on a case-by-case basis will make it difficult for courts and public interest groups to determine whether environmental or health interests are receiving the consideration due them. Though admittedly difficult to design on a national level, it would seem that a basic checklist of environmental effects—e.g., drift, amount of residue left in soil, potential spread

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¹⁰⁷. See text accompanying notes 65-68 *supra*.
¹⁰⁸. FEPCA § 6(b).
¹⁰⁹. See text accompanying note 126 *infra*.
¹¹⁰. See note 79 *supra*.
through water and food systems—and of agricultural benefits could be drawn and a statement concerning the existence of each of these factors required in any order. While it obviously could not be exhaustive, such a provision would insure consideration of certain fundamental issues, thereby restricting total administrative discretion and providing a record more susceptible to outside review, as well as avoiding the useless expenditures required by constant remands for further articulation.

Expanded opportunities for public notice and involvement in the FEPCA decision-making process should have the effect of forcing EPA to act at a relatively lower threshold of ecological "danger" than has been possible in the past. Public participation will be crucial in assuring the production of evidence at suspension and cancellation hearings, in influencing the weight given to competing interests in administrative and judicial decisions, and in contributing to the development of standards representative of broader public values.

3. Judicial Review of Administrative Action

Although many of the FEPCA registration provisions show a definite awareness of the increased public interest in pesticide control, public concern has had its greatest impact in the area of judicial review. Many of the judicial attempts to break the closed Administrator-manufacturer procedure of FIFRA and to allow public challenges have been codified in FEPCA. Primary among these is Section 16(a), which provides that agency refusals to cancel or suspend registration or change classifications which do not follow a hearing, and other final agency actions not committed to agency discretion by law, are judicially reviewable in the district courts. This is a direct legislative response to the problems raised in the Hardin and Ruckelshaus cases and provides the crucial consumer remedy for agency inaction. Because only the Administrator or the directly affected manufacturer may obtain a cancellation or suspension hearing, it is necessary that the public have some means of compelling consideration of their claims concerning a product's inadequate or dangerous qualities. This section of FEPCA has removed a major impediment to publicly-initiated pesticide policy and should stimulate more challenges by public interest groups to existing pesticide use.

FEPCA has clarified the issue of availability of judicial review of

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111. It has been similarly recommended that the AEC promulgate national generic standards to avoid the present case-by-case review of potential environmental effects in atomic power plant licensing proceedings. Murphy, The National Environmental Policy Act and the Licensing Process: Environmentalist Magna Carta or Agency Coup-de-Grace?, 72 COLUM. L. REV. 963 (1972).

112. FEPCA § 16(a).
administrative orders following a hearing. Section 16(b) provides
that in the case of an actual controversy over the validity of any order
issued by the Administrator following a public hearing, any person
who will be adversely affected by such an order, and who was a party
to the hearing, may obtain judicial review of the order in an appropri-
ate court of appeals. These revised sections dealing with cancella-
tion and suspension orders indicate that a decision not to cancel or sus-
pend is also a final order under FEPCA and therefore suitable for re-
view. In making more explicit what had been only implied by the
language of FIFRA, FEPCA can be more easily used by public interest
groups opposing orders denying suspension or cancellation.

FEPCA also addresses itself directly to a remaining problem of
judicial review posed by Nor-Am Agricultural Products, Inc. v. Har-
din, in which the court held that an order granting suspension was not
subject to judicial review, since it would always be followed by further
administrative action during the cancellation proceedings. FEPCA
permits judicial review of a suspension order following a hearing and
subjects any order issued prior to a hearing to immediate review in an
action by the registrant in the district courts. In the latter situation,
that involving emergency suspension orders, judicial review is restricted
solely to a determination of whether the order was arbitrary, capricious,
or issued contrary to established procedures.

C. Use Control

Experience under FIFRA amply demonstrated that control through
registration alone cannot eradicate the harm created by misuse of other-
wise beneficial pesticides. The need to prevent such misuse was a
major impetus behind the enactment of FEPCA, and the amount of
real protection the statute can provide will be determined by the imple-
mentation of its provisions for use control.

113. Id. § 16(b).
114. Section 6(d), dealing with cancellation, states that the Administrator shall
evaluate the data from the hearing and issue an order either (1) revoking his notice of
his intent to cancel or (2) cancelling or reclassifying a registration, and that these
orders are to be final. Similarly, the Administrator must “render a final order on the
issue of suspension” after a regular hearing. FEPCA § 6(c)(2).
115. Public interest groups should face no difficulty in showing adverse effects
from an order continuing product use; nor will the requirement of party status to seek
judicial review create an undue burden, since both cancellation and suspension hearings
appear open to public input.
116. 435 F.2d 1151 (7th Cir. 1970). See text accompanying note 40 supra.
117. FEPCA § 6(c)(2).
118. Id. § 6(c)(4). Any order of the court will only stay the effectiveness of
the suspension order, while still subjecting the manufacturer to cancellation proceedings.
Id. Nonetheless the measure is a boon to manufacturers, who can suffer irreparable in-
jury through decreased sales and loss of goodwill if forced to await the outcome of the
1. **Statutory Context**

Use control begins with the requirement that a pesticide be registered for general or restricted use based on its potential “unreasonable adverse effects on the environment.”119 A product not having such effects when used in compliance with its label directions or with “a widespread and commonly recognized practice” will be registered for general use,120 while one which may generally cause such effects without additional regulatory restriction will be given a restricted use classification and is then to be applied only by or under the supervision of a certified applicator.121 The standards for certified applicators are to be prescribed by the Administrator and shall include as a minimum requirement that the individual to be certified must be found competent in the handling and use of the specific pesticides to which the certification will apply.122

The states may also submit to the Administrator plans for the regulation of certified applicators. To be approved the plan must designate a state agency to administer it and must contain assurances that the agency will have sufficient authority, funds, and personnel to make implementation of the plan practicable.123 State standards established for applicators must conform to federal standards set by the Administrator. A state may also regulate the sale or use of any pesticide within the state in so far as such regulation does not allow any sale or use forbidden by FEPCA.124 However, states may not impose or continue in effect any requirements for labeling and packaging in addition to or different from those required in FEPCA.125

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119. FEPCA § 3(d)(1).
120. Id. § 3(d)(1)(B).
121. Id. § 3(d)(1)(C). If the adverse effects anticipated are due to the product’s “acute dermal or inhalation toxicity” then its restrictions will be limited to use by a certified applicator. Id. § 3(d)(1)(C)(i). If avoidance of other “unreasonable adverse effects on the environment” is sought through restricted use, the product may only be used by a certified applicator and may be subject to further restrictions at the discretion of the Administrator.
122. Id. § 4(a)(1). There are two classes of certified applicators, private and commercial, and separate standards are to be established for each class. A private applicator is one applying pesticides to land owned or rented by him or his employer or on the property of another, if done without compensation and as a trading of personal services. A commercial applicator is one whose application of chemicals does not fall within those described in the private class. Id. §§ 2(e)(2) & (3). In setting the separate standards for each class of applicator, the Administrator is at no time to require any private applicator to maintain any records or file any reports or other documents. Id. § 11.
123. Id. § 4(a)(2).
124. Id. § 24(a).
125. Id. § 24(b). In addition to state regulations, through cooperative agree-
Finally, FEPCA makes expressly unlawful any use of a pesticide "in a manner inconsistent with its labeling," subjecting any person violating this provision to civil and criminal penalties. The new measure gives the Administrator the authority to move directly against misuse of a product, rather than taking the circuitous and possibly undeserved action of cancelling a product's registration altogether.

Starting from the premise that any federal action in this area must be an improvement over the previously existing vacuum, one may still question whether the new system provides enough control in public health and environmental protection areas and whether it is the best that could have been designed at this time.

2. Potential Impact on Public Safety

It is clear that FEPCA's potential to prevent accidental injury will be largely determined by the stringency of the standards for the restricted use category and for qualification as a certified applicator. The two sets of standards are interrelated, and both must be substantial if injury is to be prevented. The crucial criterion for placing a pesticide under restricted use is its potential "unreasonable adverse effects on the environment." The additional question of applicator qualifications will become increasingly important as the most persistent pesticides are removed from the market and replaced by chemicals having a shorter and less serious environmental impact but a greatly increased initial toxicity. Because this will make the handling of many pesticide products even more hazardous, it is likely that no amount of instruction, and certainly not the minimal amount contemplated in FEPCA, can make use of these products entirely safe for the applicators with the Administrator state personnel and facilities may be used to enforce existing FEPCA regulations [id. § 23(a)(1)] and to assist in the development of training and certification programs for pesticide applicators. Id. § 23(a)(2).

126. Id. § 12(2)(G).

127. While this is the same standard applied in cancellation determinations [see Part II B(2) supra], the threshold level of adversity needed to place a pesticide in the restricted use category may prove to be lower than that required for a products cancellation, since product use would only be curtailed rather than discontinued altogether. But the pesticide industry can be expected to push for the broadest possible use of all products, thus ensuring a relatively higher threshold for a finding of adverseness. William Ruckelshaus has indicated the standard EPA may use:

Pesticides designated for restricted use will generally be products which, because of their immediate and high toxicity to persons, fish and wildlife, and beneficial plants, should be used only by an individual who understands the hazards and the proper use of the products.

Senate Hearings, supra note 46, at 293.

128. Primary among these new pesticides are the parathions, a group of organophosphate chemicals. 1972 ENVIRONMENTAL QUALITY REPORT, supra note 1, at 17.

129. The level of competence that might be required of a certified applicator was suggested at the Senate hearings:

Among the qualifications for obtaining a license as a trained applicator-
cator or those in the immediate vicinity.\textsuperscript{130}

It will therefore be essential to restrict use of such highly toxic pesticides to situations where the need for the chemical is so imperative that it justifies the risk it creates, and where the persons making that decision will be both well-informed and impartial. FEPCA does not provide such control. Senate bill 745, a progenitor of FEPCA, included a third use classification, use by permit only, which attempted to provide this outside judgment by requiring that such pesticides could be used only with the written approval of a licensed pest management consultant approved by the Administrator.\textsuperscript{131} It is unfortunate that the House committee considering the bill deleted this category,\textsuperscript{132} since it might have encouraged safer use of extremely toxic chemicals by further restricting their availability.

Assuming that the standards for the restricted use category and for certified applicators are sufficiently strict to prevent accidental injury from the use of most chemicals, their beneficial effect may still be dissipated if the applicator is not in a position to exercise immediate control over the actual use of the pesticide. Restricted use pesticides may only be used “under the direct supervision” of the certified applicator. In previous versions of FEPCA, “under the direct supervision” was interpreted to mean that the certified applicator could allow others to handle and apply the pesticide as long as he was on the site of operations and close enough to insure both that his instructions were being followed and that he would be immediately available in case of accident or emergency.\textsuperscript{133}

However, the final form of FEPCA defines “under the direct supervision of a certified applicator” to permit application by a “competent” person acting under the instruction and control of a certified applicator who is available if and when needed, but who is not required

\textsuperscript{130} would be knowledge on the part of the individual of the proper use of a pesticide, its toxicity and its antidotes. These are fairly simple bits of information, but he would have to demonstrate his knowledge of this before he could be licensed as an applicator. In many cases these applicators would doubtless be the farmers themselves. . . . The amount of training . . . a farmer would have to undergo to be licensed would be very minimal. We are not talking about complex entomological education here at all, but rather a very practical understanding of the dangers of the use of certain pesticides and how to deal with those.

\textit{Senate Hearings, supra} note 46, at 188.

\textsuperscript{131} In \textit{Griffin v. Planters Chemical Co.}, 302 F. Supp. 937 (D.S.C. 1969) an agricultural supply store owner who had attended “pesticide schools” at North Carolina State College on various occasions died when a bag of parathion dust in his storeroom burst and he was briefly exposed to its contents. Death occurred despite the taking of all known safety precautions.

\textsuperscript{132} \textit{Senate Hearings, supra} note 46, at 84.

\textsuperscript{133} \textit{See generally} H.R. REP. No. 92-511, 92d Cong., 1st Sess. (1971).
to be physically present at the time and place the pesticide is applied. The difference between the two versions is significant. "Direct supervision" is not the same as merely being "on call" in a situation where any mistakes not immediately corrected could cause irreparable harm. The final definition lessens the applicator's responsibility while increasing the potential for injury. The apparent congressional intention to relax the requirements in this area could well preclude the stringent EPA enforcement necessary to provide optimum protection under the present standard.

The other major avenue of attack on misuse, civil and criminal penalties for use contrary to label specifications, is also unlikely to provide consistent and firm deterrence. Under the Act, such sanctions seem to be enforceable only by the Administrator or, at his request, by the Attorney General. Despite the potential for agreements with the states for cooperation in enforcing FEPCA provisions, it is doubtful on the federal level that the Administrator will become aware of and capable of prosecuting any but the grossest of offenses. Provision for citizen suits similar to that contained in the 1970 Clean Air Amendments to enjoin individual violations would have been a valuable enforcement mechanism. Unfortunately such a provision, though proposed for FEPCA, was rejected. Congress apparently considered it unnecessary and conducive to multiple suits.

In spite of these potential weaknesses in the design of FEPCA use control, the system will probably provide increased public health protection in most basic use situations. The effects of a pesticide on human beings are fairly uniform, so preventive measures and antidotes reasonably sufficient to cover any situation likely to arise can be explained on a product label. Techniques for safe handling are also standard and simple to teach, and once learned require little independent judgment on the part of the user. FEPCA will encourage the user to read the manufacturers' labels and to be aware of the most im-

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134. FEPCA § 2(e)(4).
135. Id. § 14.
136. Id.
137. Id. § 23(a)(1). Indeed the prognosis for effective enforcement on the state level is more encouraging, as state officials may be expected to be more cognizant of local pesticide use, personnel and potentially dangerous conditions.
139. The Senate Committee on Agriculture and Forestry has indicated that it considers that provision for suit based on agency inaction will adequately protect citizen interests. S. REP. No. 838 (pt. II), 92d Cong., 2d Sess. 39 (1972), 1972 U.S. CODE CONG. & AD. NEWS 4060. The conclusion is unjustifiable, since the seeking of judicial review of agency inaction is designed to be the first step toward removing the entire stock of an inherently dangerous product from the market. The cumbersome procedure is not equipped to handle suits to enjoin the continued misuse of an otherwise acceptable product by a specific individual.
mediate effects of his actions, things that FIFRA could not do. Thus, while the new provisions are not as extensive as might be desired, and new use control problems may arise as stronger, more toxic chemicals are introduced, it appears that a workable foundation for injury prevention has been laid.

3. Environmental Protection Aspects

Making a pesticide application environmentally safe is a far more complex problem, requiring consideration of constantly changing variables and the exercise of extensive discretion on the part of the user. Weather, wind patterns, nearby water sources, neighboring wildlife, and other agricultural activity in the area must be considered in choosing the proper pesticide and the time and place of application. Only a person well-informed about the possible effects of an application under varying conditions and able to weigh impartially all relevant factors can be expected to make a reasonable, objective decision.

It is not clear whether the regulatory system of FEPCA will assure this kind of decision making. Explicit, stringent standards are even more important here than in purely safety regulations, since it is likely that people will require greater incentives to safeguard the environment than to protect their own health. Furthermore, it is very difficult to insure full and proper consideration of potential environmental effects if those making the application decision have a vested interest in using a pesticide. Yet it is precisely these persons whom FEPCA places in charge of that decision. Farmers, whose primary concern is the protection of their crops, and commercial applicators making their living through the use of pesticides, will not always possess the impartiality necessary to produce environmentally safe decisions without further regulation.

140. However, EPA's plan to implement FEPCA raises a serious question about the adequacy of the restricted use category as a means of environmental protection. It states that where registration of a product has been cancelled or refused in the past two years the manufacturer may, prior to the general implementation of § 3 (registration), apply for a restricted use registration if it can be shown that restrictions, other than limiting use to certified applicators, can be placed on its use and can be enforced so as to insure that there will not be unreasonable adverse effects on the environment. 38 Fed. Reg. 1142, 1143 (1973), 3 ENV. RPTR.—CRR. DEV. 1091, 1092-93 (1973). If this statement evidences an intention by EPA to allow the return to the market of DDT and other chlorinated hydrocarbons recently brought under attack, it could negate much of the potential effectiveness of the restricted use category.

141. As Senator Nelson said during the Senate hearings,

The whole field of pesticides, from development right through to the use, is controlled almost exclusively [by] the pesticide industry. The objective of this industry is to promote and sell chemicals to a wide variety of buyers who are given little choice between using and not using chemicals.

Senate Hearings, supra note 46, at 141. See also Dunning, supra note 81, at 684-86.
FEPCA does not possess the potential to provide this further regulation. Impartiality cannot be injected into the decisionmaking by means of the sanctions against product use in violation of label instructions. A detailed discussion of the environmental weighing process is impossible on a product label. Therefore any label directions mentioning environmental considerations must necessarily be so general that finding a true violation of them would be extremely difficult. In addition, after-the-fact investigation of allegedly improper applications may prove useless in the case of private applicators, for environmental effects of pesticides often are not immediately apparent. Attaching responsibility at a later date could be impossible, since private applicators cannot be required to keep records or file documents on their use of pesticides.\(^{142}\)

The best solution to the problem of impartiality, at least for the most hazardous pesticides, would be a system of use by permit of the type previously proposed for FEPCA and required by some state pesticide laws.\(^{143}\) A particular pesticide use decision would thereby be reviewed by an outside party well versed in the subject, who is informed about local conditions, and who has as well an overview of the environmental sensitivities of the surrounding area rather than the single-field perspective of an individual farmer or commercial applicator. Such a review could also provide an opportunity for enforced consideration of nonchemical means of control.\(^{144}\)

However, the rejection of a section providing a category of pesticides for use by permit only\(^{145}\) indicates strong congressional sentiment against requiring any such outside review. Although the Administrator is allowed to place additional restrictions on certified applicators using pesticides with potentially harmful environmental effects, Congress has indicated that his discretion is limited.\(^{146}\) While in some situations he may require licenses, permits, or other forms of approval, he may not impose any restriction similar to the "permit only" classifi-

\(^{142}\) FEPCA § 11(a). See note 122 supra.

\(^{143}\) See, e.g., N.C. GEN. STAT. § 143-440(b) (Supp. 1971); N.H. REV. STAT. ANN., § 149-D:7 (1971).

\(^{144}\) See Dunning, supra note 81, at 683-86.

\(^{145}\) See note 132 supra. Such a provision would have classified pesticides whose "... persistence and mobility in the environment, accumulation and magnification in the food chain, and accumulation in human tissues, have a long-term adverse effect upon the environment and a potential threat to man," and would have restricted their use to situations of demonstrable need, thus minimizing inadvertent overuse. Such chemicals could then only be used with the written consent of an approved pest management consultant. Senate Hearings, supra note 46, at 293.

\(^{146}\) The Committee wishes to emphasize, however, the language contained in this paragraph authorizing the Administrator to impose alternative restrictions does not constitute open-ended authorization for the Administrator. S. REP. NO. 838, 92d Cong., 2d Sess. 21 (1972), 1972 U.S. CODE CONG. & AD. NEWS 4103.
cation rejected in the final version of FEPCA.\textsuperscript{147} Thus, no precise control over individual use decisions will be possible on a federal level.

The bulk of responsibility for environmentally sound use control can therefore be expected to rest with the states. Although the states may not regulate labeling and packaging of pesticides, they apparently will be permitted to control local sales and use.\textsuperscript{148} This authority to control use has several potential advantages. Through their agricultural or other agents, states will have a much more detailed knowledge of local agricultural and environmental conditions than that which could realistically be accumulated on a federal level, as more intensive and continuous exposure to characteristics local problems should create greater flexibility in responding to emergency situations and in implementing new technology.

Any benefits state control can offer—detailed local knowledge, increased capacity for enforcement—could be provided in even greater depth by control on the local level. This would be particularly true in the larger agricultural states in which several different climatic and geographic zones may exist, each with a separate matrix of crop, pest, and environmental problems. Congress, however, has blocked this extension of benefits by refusing to authorize pesticide control below the state level.\textsuperscript{149} This action may prove detrimental to environmental protection; although states may fulfill the regulatory potential of counties or regional districts, it is doubtful that their coverage will be as thorough or their response to local conditions as precise as might have been possible had smaller geographic units been allowed to participate.\textsuperscript{150}

D. Indemnities

As proposed to Congress FEPCA was of necessity a compromise between the interests of environmentalists and the powerful agricul-

\textsuperscript{147} The flexibility of these provisions will allow the Administrator \ldots to establish restrictions which are suited to the degree of hazard and adverse environmental effects that could be caused by the misuse of the pesticide. \ldots In other cases general or seasonal licenses, permits, or other forms of approval may be required; but it is not intended that anything similar to the "permit only" type of restriction proposed in S. 745 is to be required. \textit{Id.}

\textsuperscript{148} FEPCA § 24. These state-imposed regulations do not appear to need the approval of EPA, except in the case of standards for certified applicators. \textit{Id.} § 4(a)(2).

\textsuperscript{149} S. \textsc{Rep. No.} 838 (pt. II), 92d Cong., 2d Sess. 47 (1972), 1972 \textsc{U.S. Code Cong. \\ & Ad. News} 4066. This report cites the extreme burden on interstate commerce and the lack of financial resources of most local units as the reasons for denying local control.

\textsuperscript{150} Of course, any attempt to grant local bodies major regulatory authority must be tempered by the realization that such bodies are often subject to intense pressure from local agricultural and pesticide interests. A modification of the present limitation
tural industry. By giving an explicit environmental orientation to the registration requirements and use regulations, and by tightening the entire regulatory system to lessen the opportunity for dangerous practices to develop, it was hoped that FEPCA could provide an acceptable level of environmental protection while subjecting agriculturalists to as few administrative inconveniences as possible. During congressional consideration of the Act, it became apparent that the amount of inconvenience and supervision the agricultural industry would accept was minimal. Despite substantial modifications in the required records provision and in the extent of responsibility of applicators, FEPCA remained highly unattractive to the industry.

As a result the House Committee on Agriculture added an indemnities provision to the Act. Proponents insisted that since the government must originally certify a pesticide product to be safe for use, it should also compensate manufacturers and users who had relied in good faith on the initial finding of safety for any monetary loss resulting from a subsequent cancellation. They contended that environmental protection is an expensive proposition and that the public which benefits from it should bear the costs. Committee members also voiced fears that without an indemnities provision, manufacturers would be hesitant to enter the pesticide field and unwilling to make the investment in research necessary to develop new, safer pest controls. In an effort to show there was no likelihood of indemnity payments costing the government millions of dollars, they noted that few product cancellations had occurred in the past and expressed optimism that future cancellations under the new, more stringent registration provisions would continue to be infrequent.

Opponents of indemnities focused their attack on the danger of setting such a unique precedent, which could eventually force the government to become the absolute insurer of a vast number of products.

would have to retain strong federal standards on all use control and insure both federal and state oversight of local regulatory activities.

152. Id. at 2.
154. Id. at H10,757 (remarks of Rep. Poage).
155. Id. at H10,755 (remarks of Rep. Kyl).
157. Negative reaction to the indemnities concept ranged from the terse comment of an EPA official, "The administration bill had no such provision. We believe that this is a bad precedent and the provision particularly as worded in the House bill is unwise," [David Domenick of EPA as quoted by Senator Nelson, 118 Cong. Rec. § 16, 979 (daily ed. Oct. 5, 1972)] to more emotional statements by Congressmen. See, e.g., id. at H10,756 & at H10,743 (daily ed. Nov. 9, 1972) (remarks of Rep. Dickinson & Rep. Abzug, respectively); id. at H9,797 (daily ed. Oct. 12, 1972) (remarks of Rep. Yates).
The Senate initially opposed the provision and removed it from its version of the bill. But after considerable conference committee discussion, in which indemnities played a major part, it became evident that some type of "insurance" would be necessary to make FEPCA's increased regulation acceptable in many powerful sectors. Accordingly, the conference committee bill, the final version of FEPCA, contained a compromise indemnities provision.

Section 15 of FEPCA provides that, after notice of final cancellation of a product's registration is made to the manufacturer, any person who owned any quantity of the pesticide before the notice was given and who will thereby suffer a loss because of its cancellation may receive an indemnity payment from the Administrator of the cost of the pesticide at the time notice was given. In a clear attempt to reduce potential payments, Congress also allowed the Administrator, notwithstanding any other provision of the Act, to provide a reasonable time period for use of any pesticide which would qualify its owner for an indemnity payment.

Payments are restricted to persons who did not continue to produce a pesticide with knowledge of its failure to meet registration requirements. However, this restriction will deny indemnities to very few. It is unlikely that a manufacturer will take the time and money to produce a product of sufficient quality to permit its registration and then knowingly alter the product label or degrade its contents so that it no longer meets statutory standards, since all competing manufacturers must operate under the same standards and higher costs related to quality control can be passed on to the consumer. The only real possibility of exclusion from indemnity benefits under this provision will be under the registration requirement that the pesticide not cause unreasonable adverse effects on the environment. Even under that requirement, it is unlikely that indemnity payments would be restricted since the product must be determined to be non-adverse before it can be registered, and a manufacturer can be expected to claim to have had no knowledge that his product had developed "adverse effects" until he was so informed by the notice of cancellation. Under any plausible interpretation of this section, therefore, presentation of an indemnity claim will likely entitle the manufacturer to receive payments.

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159. FEPCA § 15.
160. Cost is not to exceed fair market value. Id.
161. Id. § 15(b)(1).
162. Id. § 15(b)(2).
163. Id. § 15(a).
164. Under the EPA plan for carrying out FEPCA [38 Fed. Reg. 1142, 1144 (1973), 3 ENV. RPRTR.—CURR. DEV. 1091, 1093 (1973)], an application for an in-
Apart from the moral question of whether a manufacturer of a product found to be harmful should be reimbursed by the public he has endangered, is the consideration of the practical effect of potential indemnity payments on the enforcement of FEPCA. FEPCA was proposed because FIFRA was inadequate to prevent harm from pesticides and its revised regulatory system was designed with the hope that the administrative inaction under FIFRA would not be repeated. Yet the indemnity provision of FEPCA may keep enforcement action at the all-but-non-existent level of the past. Only actual experience with FEPCA will show how greatly EPA aversion to expensive cancellation decisions will override demands for product removal. Given the history of reluctant enforcement of pesticide regulations, the inclusion of an indemnity provision may destroy any hope for improved regulation engendered in other FEPCA provisions.

**CONCLUSION**

The story of pesticide control follows a now familiar pattern in the history of environmental regulation. Great advances in pesticides had been made in the post-war technological boom, and FIFRA was well designed to suit the production needs and political climate of the time. It was constructed to promote productivity in agriculture and kept safety regulations at a minimum to reduce interference with farmers.

By the late 1960's, the situation had changed. Many second thoughts were being voiced about the results of putting production and growth first. A more careful balancing of interests was thought to be needed. The FIFRA case history indicates the difficulties encountered in working with a statute not constructed to allow for such a balancing. Allowance for public participation and provision for more adequate administrative standards were examples of issues needing effective solutions.

The pressure for a more satisfactory treatment of competing interests and values turned naturally toward legislative resolution. The new measures have brought about new political conflicts and have raised serious questions involving relocation of production and other

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denmity must include a verified statement of facts

showing the claimant had no knowledge or could not have been aware of facts which would put a reasonable man on notice that a substantial question existed as to whether or not the product satisfied the requirements for registration.

Copies of all tests on the product, if not submitted previously, must also be included, as well as specific information for the computation of the product's cost to the applicant. These additional regulations do not appear to impair the ability of the manufacturer, once his product has been registered as safe, to claim lack of knowledge of the product's dangerousness prior to the incident triggering cancellation.
economic goals. The legislative history of FEPCA demonstrates that the pesticide issue has been a subject of intense lobbying and political debate, since it regulates chemicals which pose a threat to the health and environment of the American public and affects the important and vehemently defended agricultural industry. Unfortunately, the solution adopted seems to have fallen short of that deemed suitable. While a solid basic framework for enforcement has been erected, ambiguous standards and an astoundingly far-reaching indemnities provision may mean that this framework will never be fully utilized. The balance Congress has seen fit to strike in this area with the passage of FEPCA is regrettably almost certain to prove inadequate in the near future so as to bring the entire question of pesticide use into sharp conflict again.

Mary Jane Large