

Cursed Is The Ground¹: Pesticide Regulation And Farmworkers

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Locked in such a terrible cycle of poverty and despair, it is a tribute to their strength and fortitude that they survive at all. But they do survive, and while they do not prosper, our economy prospers as a result of their commitment to their work and to the work ethic. The cost of our failure to meet their needs is measured not only by their suffering; it is measured by the unrealized human resources, the talent and the creativity they could bring to our national life if we opened channels for their participation.²

Introduction

From Malthus to the Club of Rome, doomsayers have regularly arisen and prophesied imminent world starvation. These scholars were among the many who underestimated the ability of the human race to manipulate its environment. Unforeseen, or perhaps unbelievably, was the genius of twentieth century men and women who created chemical and industrial marvels to revolutionize the agricultural industry. Freed from the limits of the land's natural bounty, and released from the bondage of labor intensive farming techniques of past generations, the new agrarians saw an end to humanity's ancient feud with the soil. Through the use of sophisticated chemicals and mechanical technology, a miracle of abundance unfolded within the agricultural industry.

While all countries were promised the benefits of new agricultural knowledge, no country contributed or benefited more from this chemical and technical revolution than the United

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1. [Cursed is the ground for thy sake;
in sorrow shalt thou eat of it all the days of thy life;
Thorns also and thistles shall it bring forth to thee;
and thou shalt eat the herb of the field;
In the sweat of thy face shalt thou eat bread,
till thou return unto the ground

Genesis 3:17-19 (King James) (The Lord to Adam).

2. President's Comm. on Mental Health, Report of the Task Panel on Migrant and Seasonal Farmworkers 1191, 1196 (1978).

States. Propelled by its vast resources and equipped with its innovative technology, United States farmworkers sculpted the landscape into a seasonal monument to the country's wealth and abundance. With astonishing rapidity, the agriculture industry irrevocably entrenched itself in a system which made use of chemical toxins to multiply the nation's harvests, feed its growing population and support its booming economy.

In the last two decades, however, society has started to question whether this newly found cornucopia was purchased at an untold price. Stung by such front-page tragedies as those experienced by the Vietnam veterans sprayed with Agent Orange and alarmed by such environmental tragedies as those produced by DDT, the nation began to sense a new conflict pitting an individual's rights to health and life against the society's needs for chemical husbandry of its Elysian fields.

This article concerns a group of people, rarely front-page candidates, who are casualties of our toxic arsenal. These are the people who plant and harvest our fields and who, unlike the vast majority of United States citizens, experience frontline contact with the pesticides ensuring our bounty. They are the migrant and seasonal workers employed across the country in United States agriculture. These workers suffer not only from poverty and illiteracy, but are mired in an occupation which presents alarming health hazards while refusing to offer needed protection.

The poisoning of United States farmworkers by the use and misuse of toxic chemicals is an enormous and immensely complicated problem. Both tangentially and directly, chemical use is bound up in conflicting problems of agricultural economics, environmental policy, and a myriad of global and national political concerns. Moreover, pesticide regulation is an especially sensitive topic, as it has become welded to another topic of even larger import: the availability of food for a hungry and swelling population. If reduced pesticide use is directly correlated to reduced food production, a decision to limit pesticide use may be politically impossible.

All of the above factors must be given adequate consideration in order to reach a realistic solution to the problem of farmworker poisoning. This article, however, focuses narrowly on the problem of pesticide regulation as it affects farmworkers. More specifically, it focuses on those individuals, both migrant and nonmigrant, who labor for wages by planting, tending, and harvesting the fields of our nation. In examining the problem, this article first reviews past and current remedies and then proposes alterations to the

current remedies designed to make them more effective. Four aspects of the problem are discussed: the need for stronger and more defined regulations, the inadequate enforcement of existing policies, the restrictions on judicial remedies, and finally the lack of administrative funding and coordination. Although this article confines itself to pesticide use as it affects farmworkers, its analysis and propositions may well apply to others in the agricultural community who are similarly exposed to toxic chemicals.

Background to the Crisis

The arguments for and against our chemical and genetic control of the environment are often debated.³ For better or worse, however, it would take nothing short of an agricultural and economic revolution for our culture to abandon its use of potent herbicides, pesticides, insecticides, and fungicides.⁴ Agriculture is currently the nation's biggest industry⁵ as well as its largest employer.⁶ To vote-conscious legislators, these two factors present powerful disincentives to tamper with the way the agriculture industry conducts business. Additionally, the status quo provides food at prices which are low in comparison with other countries.⁷

Currently, our nation relies on the annual use of some 2.7 billion pounds⁸ of pesticides.⁹ As stunning as that figure is, it is even

3. See, e.g., Kenneth Weinstein, *Amending FIFRA—An Industry View*, 15 *Env'tl. L. Rep. (Env'tl. L. Inst.)* No. 5 at 10,130 (1985); Jay Feldman, *Federal Pesticide Control Law: The Need for Reform*, 15 *Env'tl. L. Rep. (Env'tl. L. Inst.)* No. 5 at 10,132 (1985).

4. Agriculture currently strives to control an estimated 10,000 species of harmful insects, 1,800 different weeds that cause serious economic losses, 1,500 diseases caused by microorganisms, and some 1,500 kinds of nematodes that cause damage to crop plants. U.S. Dep't of Agric., 1986 Fact Book of U.S. Agriculture 46 (1986).

5. *Id.* at 1.

6. Agriculture employs approximately 21 million people in some phase. (The combined work forces of transportation, the steel industry, and the automobile industry equals only 2.7 million people). *Id.*

7. U.S. Dep't of Agric., *The U.S. Food System—From Production to Consumption*, Nat'l Food Rev. Y.B. 31 (1987).

One recent study conducted by the U.S.D.A. examined the potential economic impact of banning certain pesticides used in the production of corn and soybeans. Craig Osteen & Fred Kuchler, *Potential Bans of Corn and Soybean Pesticides: Economic Implications for Farmers and Consumers* (U.S. Dep't Agric. 1986). The report concluded that "society will bear a cost if any of the corn or soybean pesticides examined were removed from the market because of reduced production efficiency resulting from lower yields or higher production costs." *Id.* at 19.

8. Feldman, *supra* note 3, at 10,132. Differing sources will provide figures above and below the one quoted. The confusion may be attributed to the form in which pesticides are sold. Largely for reasons of economy, they are sold in concentrated amounts containing the active ingredient and some percentage of inert matter. They are then mixed by the grower with a medium such as water.

Perhaps a better indicator of pesticide usage is that more than 95% of the acre-

more alarming in light of the fact that many of these chemicals have not been tested for carcinogenic,¹⁰ mutagenic,¹¹ and teratogenic¹² effects. In 1982, a congressional subcommittee reported that seventy-nine to eighty-four percent of pesticides lacked adequate¹³ carcinogenicity testing, ninety to ninety-three percent lacked adequate mutagenicity testing, and sixty to seventy percent lacked adequate testing for their tendency to cause birth defects.¹⁴ The EPA has reviewed fewer than forty of the six hundred active ingredients represented in the United State's arsenal of pesticides, most of which have been in existence since the early 1970s.¹⁵

age in our nation devoted to field crops is treated annually with one or more herbicides. Charles Benbrook & Phyllis Moses, *Engineering Crops to Resist Herbicides*, 89 Tech. Rev. 54 (Nov.-Dec. 1986).

9. The Federal Environmental Pesticide Control Act (FEPCA) defines pesticides as "(1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant . . ." 7 U.S.C. § 136(u)(1982). The term "pesticide" as used in this article incorporates this definition.

10. For the relationship between occupational pesticide exposure and cancer, see generally Shelia Hoar, Aaron Blair, Frederick Holmes, Cathy Boysen, Robert Robel, Robert Hoover & Joseph Fraumeni, Jr., *Agricultural Herbicide Use and Risk of Lymphoma and Soft-Tissue Sarcoma*, 256 J. A.M.A. 1141 (1986); Aaron Blair, Dan Grauman, Jay Lubin & Joseph Fraumeni, Jr., *Lung Cancer and Other Causes of Death among Licensed Pesticide Applicators*, 71 J. Nat'l Cancer Inst. 31 (1983); International Agency for Research on Cancer, Vol. 30, IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans: Miscellaneous Pesticides (1983); Annette Stemhagen, John Slade, Ronald Altman, & Joanne Bill, *Occupational Risk Factors and Liver Cancer*, 117 Am. J. Epidemiology 443 (1983); and O. Wong, W. Brocker, H.V. Davis & G.S. Nagle, *Mortality of Workers Potentially Exposed to Organic and Inorganic Brominated Chemicals, DBCP, TRIS, PBB, and DDT*, 41 Brit. J. Indus. Med. 15 (1984).

11. "Mutagenic" as used in this paper refers to those chemicals which can cause heritable alterations of the genes or chromosomes of an organism.

12. For the relationship between occupational pesticide exposure and birth defects in children, see generally U.S. Dep't of Health Educ. & Welfare, Publ. No. 78-174, *Occupational Exposure During the Manufacture and Formulation of Pesticides—Criteria for a Recommended Standard* (July 1978); Andrew Braun & Peter Horowitz, *Lectin-Mediated Attachment Assay for Teratogens: Results with 32 Pesticides*, 11 J. Toxicology Envtl. Health 275 (1983); California Dep't of Food and Agric., *Selected Pesticides for Which There Have Been Some Concerns About a Teratogenic Potential*, HS 1091, Revised (DFA) (June 30, 1983).

13. The definition of "adequate testing" is somewhat elusive. Testing may be found inadequate because of some gap in the initial studies. Such gaps occur as scientific advances make the original studies obsolete or, as the product is put into use, toxic effects become apparent which were not originally tested for or perceived.

14. *EPA Regulatory Program Study, Hearings before the Subcommittee on Department Operations, Research, and Foreign Agriculture of the House Comm. on Agriculture*, 97th Cong., 2d Sess. 77 (1982).

15. 132 Cong. Rec. S15,293 (daily ed. Oct. 7, 1986) (citing Wash. Post, Sept. 25, 1986).

See also Feldman, *supra* note 3.

Incomplete pesticide health and safety reviews have plagued EPA

While these figures may represent a willingness on the part of our society to pay a certain environmental price for our prosperity, the price should not fall disparately on one segment of the population.

A recent study has estimated the number of farmworker poisonings at more than 300,000 annually.¹⁶ In an analysis completed by the Occupational Safety and Health Administration (OSHA), Dr. Jesse Ortiz of the University of Massachusetts concluded that migrant farmworkers have a risk 24.76 times higher than that of the general population of developing a pesticide related illness.¹⁷ Another expert, Dr. Eugene J. Gangarosa of the Emory University School of Medicine, concluded that a thirteen-year study showed "beyond any reasonable doubt that there are substantial risks of harm to farmworkers in their workplaces. These risks are far in excess of those prevailing in other industrial workplaces."¹⁸ Similarly, investigators at the University of Iowa have shown that Iowa farmers face greater risks of six types of cancer than do city dwellers.¹⁹

According to the National Institute of Occupational Safety and Health (NIOSH), infant and maternal mortality rates among farmworkers are 125% higher than those found in the general population.²⁰ Death rates from influenza and pneumonia are two hundred percent higher.²¹ While farmworkers represent less than four percent of the American labor force, they account for nearly fifteen percent of the deaths and seven percent of the disabling injuries.²²

When a welter of statistics such as these appear, one expects some sort of public outcry. Yet little has been written and less has

since the 1972 amendments to [Federal Insecticide, Fungicide, and Rodenticide Act] FIFRA introduced requirements for a full battery of acute and chronic tests for product registration. At the time, a 1975 deadline was imposed on the reregistration or reevaluation of the safety of all pesticide products. The deadline was extended to 1977 and then repealed.

Id. at 10,133.

16. Robert Wasserstrom & Richard Wiles, *Field Duty: U.S. Farmworkers and Pesticide Safety* 3 (July 1985).

17. *Legal Rights of Migrants and Seasonal Workers in 1985*, 19 *Clearinghouse Rev.* 1108, 1110-11 (1986).

18. *Id.* at 1111.

19. Leon Burmeister, *Cancer Mortality in Iowa Farmers, 1971-78*, 66 *J. Nat'l Cancer Inst.* 461, 463 (1981).

20. Herbert Abrams, *Case Studies in Occupational Health Programs: U.S.- Mexico Border Industrialization Program*, *Occupational Safety & Health Symp.* 1978, at 42 (U.S. Dep't Health, Educ. & Welfare 1979).

21. *Id.*

22. Paolo Strigini, *On the Political Economy of Risk: Farmworkers, Pesticides, and Dollars*, 12 *Int'l J. Health Services* 263, 274 (1982) (Strigini notes that these figures are certainly underestimated).

been done. Part of the problem is that, although farmworkers develop immediate and obvious effects of "acute" toxicity,²³ the effects of "chronic" toxicity,²⁴ such as cancers and birth defects, have only recently received attention.²⁵

Without a large documented "body count" of farmworker poisoning incidents, it has been difficult for farmworker advocates to jar the proper authorities into action. There are numerous reasons why documentation has been so slow in accumulating. The first factor relates to the legal status of the majority of North American farmworkers. Since field work is traditionally seasonal, and since most farmworkers are therefore migrant workers, statistics characterizing them are not readily available.²⁶ One recent estimate, however, stated that sixty to eighty percent of the farm labor force is working in the U.S. illegally.²⁷ Indeed, one agricultural group, the Arizona Farm Workers (AFW) union, estimates that eighty-five percent of its twelve thousand members are migrant laborers who come illegally to Arizona from Mexico each year to harvest U.S. crops.²⁸

This illegal alien status may be one of the causes of the second factor, the fact that many farmworkers hesitate to report occurrences of poisonings to any sort of authority. It has been estimated that the number of officially reported cases of residue-related illness may be a very small fraction of the actual number, possibly no more than one or two percent.²⁹ In an example of mass poisoning startling enough to make local headlines, 175 field workers were sprayed with a pesticide.³⁰ Only sixty-four members of the group, or about one-third, reported for treatment and *all*

23. Acute toxicity refers to those effects which are immediate and obvious (e.g. scorched lungs, blindness, nausea).

24. Chronic toxicity refers to those effects which do not occur immediately, but may take a certain period of time or repeated exposure to develop. This would include cancers, certain lung diseases, or immune deficiencies.

25. For example, it was not until 1971 when the Bureau of Labor Statistics was ordered by OSHA to begin surveying farmworkers, that even the crudest of data became available. Strigini, *supra* note 22, at 273-74.

26. One group notes that "the United States does a better job of counting migratory birds than counting the millions of farmworkers who harvest and process its crops." Report of the Task Panel on Migrant and Seasonal Farmworkers, *supra* note 2, at 1202 (1978) (citing Truman Moore, *The Slaves We Rent* (1965)).

27. *Farm Workers Union Extends Its Reach Into Rural Mexico*, Wall St. J., Oct. 15, 1986, at 23, col. 3.

28. *Id.*

29. Ephraim Kahn, *Pesticide Related Illness in California Farm Workers*, 18 J. Occupational Med. 693, 694 (1976). Kahn makes the distinction between the category of pesticide workers who mix and apply the pesticides and the much larger group of farmworkers who are exposed to pesticide residues on the foliage, soil, and standing water of the fields. His article focuses on the latter group.

30. *Id.* at 695 (table 3).

were diagnosed as having been seriously poisoned. These results represent an anomaly in comparison to other cases of mass poisoning, as they lack any reports of mild, intermediary, or imaginary poisonings.³¹ This unusual pattern suggests that the number of reported pesticide poisonings is unrepresentative of the actual number of farmworkers suffering from the effects; that in fact large numbers of unreported and under-reported poisonings were taking place.

Two studies support this proposition. The first study compared a sample of farmworkers to a control group of people of the same economic, social, and ethnic background, "literally living next door," and found that the farmworkers suffered the specific poisoning symptoms fifteen times more often than the control group.³² Of those who responded positively to the questions regarding the symptoms, less than six percent stated they had sought treatment under the worker compensation laws, although they were all legally entitled to do so.³³ The second study provided some explanation for the discrepancy between actual and reported cases of poisoning. In a relatively large sample of migrant and nonmigrant farmworkers, it was found that approximately seventy percent of all farmworkers had never heard of worker compensation. Of the remaining thirty percent, only eight percent knew what it was.³⁴ There are several possible reasons for this lack of knowledge, including certain cultural factors that discourage reporting, and haphazard recruitment policies of field-workers.³⁵

There are at least two other possible explanations for the farmworkers' hesitancy to report. First, farmworkers seeking to report a poisoning incident would have difficulty finding a recep-

31. *Id.* at 694-95. Kahn comments:

What about the 111 fellow crew members who worked with the 64 seriously poisoned cases? No mild cases were reported; no cases of imaginary illness caused by mass suggestibility; no cases of anxious individuals who just wanted to be checked to make sure they weren't poisoned. In any comparable episode in other occupational fields one would expect all these other types of cases to occur.

Id. at 694.

32. *Id.* at 695 (citing California Community Studies on Pesticides: Morbidity and Mortality of Poisonings, Report to Office of Pesticides (Bureau of State Services EH USPHS Jan. 15, 1970)).

33. *Id.*

34. Kahn, *supra* note 29, at 696 (citing Richard Howitt, Pesticide Externality Policy: an Optimal Control Approach (1975) (Doctoral dissertation, University of California at Davis)).

35. For example, because of informal recruitment policies the farmworkers may have no idea who actually owns or is leasing the field in which they are working. Even the labor contractor recruiting them may not be aware of when the field was sprayed and with what substance. Kahn, *supra* note 29, at 696.

tive ear. The Environmental Protection Agency (EPA), the primary regulator of pesticides,³⁶ has no formal method of receiving complaints from farmworkers.³⁷ In the three states with the largest farmworker populations (Florida, Texas, and California), only California has a system which regularly reports occupational illness related to pesticides. Second, a report by the General Accounting Office (GAO) to Congress noted that in eight of the eleven states visited, the GAO found serious recordkeeping and reporting problems.³⁸ It found similar problems at five of the six regional EPA offices visited.³⁹ Undoubtedly, this record has not escaped the notice of those people who must bear the consequences of such ineffectiveness and inefficiency. The rare individual who feels compelled to report, and who finds a reporting mechanism available, must conclude that such efforts will be wasted.

Frightened both legally and culturally by their status as illegal aliens, farmworkers are prevented by a third factor from obtaining a representative voice to express their dilemma. The Arizona union mentioned earlier (the AFW) is somewhat unique among its contemporaries in that it has no qualms about representing alien migrant workers.⁴⁰ Until recently, both the United Farm Workers (UFW) and the AFL-CIO held fast to the traditional union stance that undocumented workers take jobs away from U.S. citizens. The UFW no longer holds this position.⁴¹ To the extreme, one AFW organizer stated, "[t]he AFL-CIO here is the enemy of the undocumented workers."⁴²

Unfortunately, alien migrant workers and organizers face even tougher times in the future since the passage of AFL-CIO-backed legislation which will fine employers who knowingly hire illegal aliens.⁴³ Indeed, despite a movement among some of the smaller unions to recruit alien workers into their ranks, such efforts are often destroyed by the timely rounding up of their mem-

36. Authority is granted to the EPA in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended (7 U.S.C. § 136 (1982)), and the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended (21 U.S.C. § 301 (1982)).

37. U.S. General Accounting Office, *Stronger Enforcement Needed Against Misuse of Pesticides* 20 (Oct. 15, 1981).

38. *Id.* at 20-21.

39. *Id.* at 21.

40. *Farm Workers Union Extends Its Reach Into Rural Mexico*, *supra* note 27, at 23, col. 3.

41. *Id.*

42. *Id.*

43. Immigration Reform and Control Act of 1986, Pub. L. No. 99-603, 100 Stat. 3365 (codified at 8 U.S.C. § 1324 (Supp. IV 1986)).

bers by the U.S. Immigration and Naturalization Service.⁴⁴ Organization is further hampered by a language barrier which separates many farmworkers culturally from a monolingual nation. For the farmworker, the cumulative effect of these factors makes the achievement of any organizational representation an almost impossible task.

All of the above factors add up to this: as illegal aliens, the majority of migrant farmworkers are without votes to represent themselves; faced with hostility by the most powerful unions, their voices lack the amplification many other holders of hazardous jobs enjoy; without the tool of a common language they cannot be effective in communicating their needs and concerns to the legal houses of our government; without any of these, the injuries and the deaths remain untold and unrestrained.

Background to Farmworker Legislation

FIFRA

Theoretically, both statutory and regulatory vehicles exist for the protection of workers involved with pesticide usage. In 1947, Congress enacted the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).⁴⁵ Originally, FIFRA was intended to ensure the effectiveness and safety of the pesticide product when used in compliance with regulated, labeled instructions.⁴⁶ Later, as public awareness of pesticide use increased, and as technical aptitude in the area of toxicology grew, FIFRA was extensively amended by the Federal Environmental Pesticide Control Act of 1972 (FEPCA).⁴⁷ Unlike the original FIFRA, FEPCA clearly established its purpose as the protection of man and the environment.⁴⁸ Additionally, FEPCA extended FIFRA coverage to include regis-

44. Diana Solis, *Rebuilding Drive: Their Ranks Eroded, Unions Try to Recruit Illegal Immigrants*, Wall St. J., Oct 15, 1986, at 1, col. 1.

45. Federal Insecticide, Fungicide, and Rodenticide Act of 1947, ch. 125, 61 Stat. 163 (codified as amended at 7 U.S.C. §§ 135-135k (1982)).

46. *Continental Chemiste Corp. v Ruckelshaus*, 461 F.2d 331, 335 (7th Cir. 1972).

47. Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, 86 Stat. 973 (codified as amended at 7 U.S.C. § 136 (1982)). FIFRA is widely used to refer to "FIFRA as amended by FEPCA" and will be so used within this article. FEPCA will be used when referring to the amendment specifically.

Six years after FEPCA, FIFRA was again amended under The Federal Pesticide Act of 1978, Pub. L. No. 95-396, 92 Stat. 842 (codified as amended at 7 U.S.C. § 136 (1982)). Dissatisfied with the lack of speed with which the EPA was fulfilling its mandates, the 1978 Pesticide Act expedited the registration process by providing for registration on the basis of the generic chemical, by allowing conditional use registration, by developing limited data requirements for minor use pesticides, and by providing a ten-year "exclusive use" of data period for developers of pesticides.

48. See 7 U.S.C. § 136a(c)(5)(D) (1982).

tration requirements for pesticides distributed in intrastate commerce⁴⁹ and, for the first time, pesticide use was regulated, making misuse both civilly and criminally punishable.⁵⁰

In spite of this legislative initiative, the adoption of FEPCA was followed by more than ten years of administrative confusion as to who was in charge of establishing and enforcing safety standards for farmworkers using pesticides.⁵¹

The EPA's Farmworker Protection Regulation

At the time of the FEPCA amendment, both OSHA and the EPA had created, or were beginning to promulgate, safety standards for field workers involved with pesticide use. For their part, farmworkers were pushing for OSHA to promulgate and enforce field sanitation regulations.⁵² In the final outcome, however, OSHA would decline to take part in any such regulations.

Judicially, it had been determined that the EPA had sole authority to create and enforce all pesticide regulations and to establish safety standards. The determination sought to resolve a conflict between the Department of Labor and the EPA over the

49. 7 U.S.C. § 136a(a) (1982).

50. 7 U.S.C. § 136j(a) (1982).

51. See *infra* note 52.

52. 50 Fed. Reg. 15,086 (1985). See 41 Fed. Reg. 17,576 (1976). The history of this proposal provides a prime example of administrative ball-dropping in the area of farm worker protection and pesticide control. A petition was initiated in 1972 by the Migrant Legal Action Program, Inc. (MLAP), on behalf of the National Congress of Hispanic American Citizens and several other organizations representing seasonal and migrant farmworkers, requesting that OSHA promulgate safety and inspection standards for farmworkers. Dissatisfied with OSHA's progress, the MLAP brought suit in 1973 in U.S. District Court to compel OSHA to issue a standard. See *National Congress of Hispanic American Citizens (El Congreso) v. Dunlop*, 425 F. Supp. 900 (D.D.C. 1975), *rev'd* 554 F.2d 1196 (D.C.Cir. 1977), *rev'd and remanded*, 626 F.2d 882 (D.C.Cir. 1979).

The proposal was subsequently issued in 1976. Work on the standard was then discontinued until 1982 when, in the face of pending litigation, OSHA resumed work on the standard. On March 1, 1983, OSHA published an Advance Notice of Proposed Rulemaking (ANPR) informing the public of OSHA's intention to develop a new field sanitation standard and soliciting comments. See 48 Fed. Reg. 8493 (1983). On March 1, 1984, OSHA published a Notice of Proposed Rulemaking (NPRM). See 49 Fed. Reg. 7589 (1984). The proposed field sanitation standard received support from health experts and representatives of major health associations, religious leaders, and employee organizations. It was opposed by the American Farm Bureau Federation, the National Council of Agricultural Employers, the forestry industry, and other individuals concerned with increased regulation on the farm. See 50 Fed. Reg. 15,086 (1985). Finally, on April 16, 1985, OSHA abandoned the field sanitation standard.

See also *Florida Peach Growers Ass'n v. U.S. Dept. of Labor*, 489 F.2d 120 (5th Cir. 1974).

regulation of farmworkers and their exposure to pesticides.⁵³ The appellants, Organized Migrants in Community Action, Inc., argued that the Department of Labor had authority to issue pesticide exposure regulations pursuant to the authority granted the Department under the Occupational Safety and Health Act (OSHA) of 1970.⁵⁴ The appellees, Secretary of Labor and the Administrator of the EPA, argued that the regulations issued by the EPA pursuant to FIFRA had eliminated the jurisdiction of the Department of Labor.⁵⁵ The court held that the statutory authority granted the EPA under FIFRA preempted the Secretary of Labor from acting.⁵⁶

While this battle over authority was being waged, the EPA, pursuant to its statutory authority,⁵⁷ issued the current Farmworker Protection Standards for Agricultural Pesticides.⁵⁸ Enacted in 1974, the present Farmworker Protection rule provides measures of safety through the use of three separate categories of regulation. These categories provide for: (1) a general standard regarding application of pesticides and reentry times⁵⁹ for field workers, (2) state pesticide standards, pesticide labeling and exemptions, and (3) worker warnings.⁶⁰ As the statistics and examples cited earlier indicate, this rule has been largely ineffectual.⁶¹

Under the first category, regulating application and reentry,

53. *Organized Migrants in Community Action, Inc. v. Brennan*, 520 F.2d 1161 (D.C. Cir. 1975).

54. *Id.* at 1163. Occupational Safety and Health Act of 1970, 29 U.S.C. § 651 (1982).

55. *Brennan*, 520 F.2d at 1163.

56. *Id.*

57. 7 U.S.C. § 136w (1982).

58. 40 C.F.R. § 170 (1987).

It should be emphasized at this point that the "key control mechanism" in pesticide regulation is the pesticide label itself. FIFRA provides that it is unlawful to misbrand a product or to use it in any manner inconsistent with its label. Sarah Redfield, *Chemical Trespass? An Overview of Statutory and Regulatory Efforts to Control Pesticide Drift*, 73 Ky. L.J. 855, 864-65 (1985).

59. 40 C.F.R. § 170.2(a) (1987). "Reentry time" is defined under the regulation as "the period of time immediately following the application of a pesticide to a field when unprotected workers should not enter as provided for in § 170.3(b)."

60. 40 C.F.R. §§ 170.3-170.5 (1987). The restrictions set forth in this part do not apply, however, to public pest control programs generally or to greenhouse treatments, animal treatments, and treatments of golf courses or similar non-agricultural areas, provided the treatments are applied to accordance with labeling directions and restrictions. 40 C.F.R. § 170.4(c)(1)-(4) (1987).

61. In a recent legislative attempt to amend FIFRA, one senator commented that "[a]gricultural labor is now the single most hazardous occupation in the United States. Yet in the last two decades the sum total of EPA's actions to protect agricultural workers amounts to the adoption of one-half of a page of now antiquated and meaningless regulations." 132 Cong. Rec. S15,290 (daily ed. Oct. 7, 1986)(statement of Sen. Proxmire).

no owner or lessee can permit the application of a pesticide which will expose unknowing workers to the pesticide. When spraying is to take place, the area being treated must be vacated by unprotected persons.⁶² This category also sets up generalized standards for reentry times, allowing a worker to reenter a field only after the "sprays have dried or the dust has settled," unless the worker is wearing protective clothing.⁶³ This section of the regulation further provides definite times for reentry by workers when a group of twelve specified active ingredients are present in the pesticide.⁶⁴ Finally, the section provides that, notwithstanding the other requirements, a worker "should not be permitted to enter treated fields if special circumstances exist which would lead a reasonable man to conclude that such entry would be unsafe."⁶⁵

One of the most glaring deficiencies of the first category described above relates to the reentry time limits.⁶⁶ For example, pesticides containing the chemical parathion have a reentry time of forty-eight hours under the Farmworker Protection rule (the highest federal reentry time imposed).⁶⁷ Researchers have found that as parathion degrades it releases paraoxon, a compound which, when absorbed through the skin, is fifty-five times more toxic than the parent compound.⁶⁸ Thus, the danger from exposure to parathion increases for a period of time after spraying, making a longer reentry time vital. Unlike the EPA, California has set the reentry time for chemicals containing parathion at a minimum of fourteen days, and up to sixty days if used on citrus crops.⁶⁹ This disparity between the federal and state reentry time standards is not uncommon.⁷⁰

The second category set up by the Farmworker Protection rule to improve pesticide regulation and safety grants authority to the states to establish and enforce more restrictive field standards

62. 40 C.F.R. § 170.3(a) (1987). "No owner or lessee shall permit the application of a pesticide in such a manner as to directly or through drift expose workers or other persons except those knowingly involved in the application. The area being treated must be vacated by unprotected persons."

63. 40 C.F.R. § 170.3(b)(1) (1987).

64. 40 C.F.R. § 170.3(b)(2) (1987). For the pesticides containing ethyl parathion, methyl parathion, demeton, azodrin, carbophenothion, metasystox-r, bidrin, and endrin, the reentry time is set at 48 hours. For the pesticides containing guthion, phosalone, EPN, and ethion, the reentry time is set at 24 hours.

65. 40 C.F.R. § 170.3(b)(3) (1987).

66. For a more in-depth examination of the background and deficiencies of EPA reentry levels, see generally Wasserstrom & Wiles, *supra* note 16.

67. 40 C.F.R. § 170.3(b)(2) (1987).

68. Wasserstrom & Wiles, *supra* note 16, at 1.

69. 3 Cal. Admin. Code § 6772 (1986).

70. For a comparison of other Federal and California reentry intervals, see Wasserstrom & Wiles, *supra* note 16, at 4.

for laborers than those set forth by the EPA. The regulation also stipulates that if the pesticide label bears more stringent field standards than those promulgated by the state, the label restrictions will apply.⁷¹ In short, the states are allowed to supersede federal standards when the state standards are more restrictive.⁷²

The third category of the Farmworker Protection rule requires warnings to laborers working in pesticide-treated fields. Although on the surface this section appears well-drafted, in practice it has several faults. To its credit, it does provide for both English and non-English warnings.⁷³ Since the warning may be in oral and/or written form, however, it is nearly impossible for authorities surveying a field of workers to determine who has been appropriately warned. Farmworker organizations would, in most circumstances, advocate only written or posted warnings *in the field* which has been or will be sprayed. This would provide the

71. 40 C.F.R. § 170.4(a)-(b) (1987).

72. The limitation of such state authority has been the subject of recent congressional debate. 132 Cong. Rec. H7266-76 (daily ed. Sept. 19, 1986). An amendment to FIFRA as proposed in Congress would have allowed the federal government, through the EPA, to supersede state tolerance levels. Proponents of this amendment argued that the current provision allows states to interfere with interstate commerce through the use of pesticide tariffs on competitive commodities such as fruits and vegetables. 132 Cong. Rec. H7266-75 (daily ed. Sept. 19, 1986) (debate). Other arguments given by proponents include the contention that only the federal government possesses the expertise necessary to set pragmatic and well-reasoned restrictions. *Id.* Also argued is the idea that varying state restrictions may handicap the marketing of pesticides and make the creation of uniform label restrictions nearly impossible. *Id.* Finally, it is proposed that the federal government could achieve a less parochial viewpoint on pesticide use, and thus, to the advantage of the farmworker, set more restrictive standards. *Id.*

These arguments have also been used by those who would have uniform reentry times established by the EPA superseding state reentry times. Somewhat surprisingly, those representing farmworker interests are not in favor of such an amendment. These groups point to a comparison of state versus federal reentry times and food tolerances. The states have consistently been far more restrictive. Further, farmworker groups generally point out that it is much more difficult for a proponent of a pesticide to lobby 50 state legislatures than one federal government.

73. 40 C.F.R. § 170.5(a) (1987). The text of this section provides that:

When workers are expected to be working in a field treated or to be treated with a pesticide, appropriate and timely warning to such workers shall be given. The warning may be given orally and/or by posting warning signs at the usual points of entrance to the field, and/or on bulletin boards at points where the workers usually assemble for instructions. Where any person has reason to believe that a farm worker is unable to read, he shall give the farm worker oral warning and make reasonable effort to ensure understanding of such warning. When required, warnings shall be given in appropriate languages other than the English language. Oral warnings should be given in such a manner as to inform workers of areas or fields which should not be entered without protective clothing, the period of time the area or field should be vacated and actions to take in case of accidental exposure.

inspector with a quick method of determining which fields should be watched and perhaps more importantly, a method of proving violations of the regulation.

A second and perhaps larger problem with the "warnings" category of the regulation is that although the farmworker must be warned, the rule does not provide the substance of what the warning must contain. To be useful to the farmworker, the warning should contain both the name of the pesticide and its known level of toxicity.⁷⁴

In addition to the federal warnings regulation, several states concerned with the issue of worker knowledge have enacted worker "right to know" laws.⁷⁵ Of the twenty states with such statutes, only ten of them appear to grant some measure of protection that applies to agricultural workers.⁷⁶ For example, a pertinent part of the the Florida right to know statute states: "Employers shall furnish employees with instruction on the nature and effects of each toxic substance that is present in the workplace."⁷⁷ Closer examination reveals two problems with this statute and its protection of farmworkers. First, the term "employer" does not include "bona fide farmers" employing twelve or fewer regular farmworkers or twenty-four or fewer seasonal farmworkers.⁷⁸ Second, "toxic substance" is defined as any chemical substance or mixture listed in the Florida Substance List.⁷⁹ Unfortunately, the Florida Substance List specifies that the provisions of the Occupational Health and Safety Statute do not apply to "[s]ubstances or mixtures which may be toxic but which are labeled pursuant to [FIFRA]."⁸⁰

To its credit, the Florida statute does recognize "that an em-

74. Telephone interview with Marion Moses, Medical Director of the National Farmworkers Health Group Regarding Farmworker Health and Safety (Nov. 28, 1986).

75. Donald Pederson, *Regulation of Agricultural Employment*, in 2 *Agricultural Law* § 6.58A (John Davidson ed. Supp. 1987). Among these states are: Alaska, California, Connecticut, Delaware, Florida, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Washington, West Virginia, and Wisconsin. Louisiana has a more limited statute.

76. *Id.* at § 6.59. These states are: Alaska, California, Kentucky, Massachusetts, Michigan, Minnesota, Pennsylvania, Rhode Island, Washington, and Wisconsin.

77. Fla. Stat. Ann. § 442.115(1) (West Supp. 1987).

78. Fla. Stat. Ann. § 442.102(8)(c) (West Supp. 1987). The statute does, however, apply to farms employing 24 or fewer seasonal farmworkers if work lasts 30 or more continuous days or more than 60 days in the same calendar year.

79. Fla. Stat. Ann. § 442.102(21) (West Supp. 1987).

80. Fla. Stat. Ann. § 442.103(4)(e) (West Supp. 1987). See also Fla. Stat. Ann. § 442.103(6) (the Occupational Health and Safety Statute is not applicable to substances not present on the Florida Substance List).

ployee has an inherent right to know about the toxic substances at his workplace" and "that the workplace often provides an early warning mechanism for the rest of the environment."⁸¹ It also points out that "the tragic results of this exposure may not be realized for years or even for generations."⁸² Unfortunately, the state of Florida does not recognize that farmworkers are also experiencing the "tragic results" of exposure to toxic chemicals in the workplace.⁸³

While apparently recognizing the dangers presented by pesticides the Farmworker Protection rule fails to provide farmworkers with a safe working environment. State "right to know" laws have generally evaded the issue by simply drafting the statutes or regulations around the farmworkers. Therefore, it is necessary that both the EPA and individual states redraft their regulations and statutes to provide a clear and comprehensive set of rules which may then be effectively enforced.

FIFRA's Mission

A common criticism of FIFRA is that the Act, in its establishment of the EPA's express mission or goals, simply does not place the EPA in a position where it can be an adversary to market influences and vigorously advocate the interests of farmworkers.⁸⁴ As authorized by FIFRA, the EPA may register a pesticide when the Administrator finds that, when used in accordance with widespread and commonly recognized practice, the pesticide will not "cause unreasonable adverse effects on the environment."⁸⁵ The

81. Fla. Stat. Ann. § 442.101 (West Supp. 1987).

82. *Id.*

83. A second example of this conspicuous absence is provided by Donald Pederson in his essay. See generally Pederson, *supra* note 75. The New Jersey Worker and Community Right to Know Act, N.J. Stat. Ann. §§ 34:5A-1 to 34:5A-31 (West Supp. 1987), regulates only those persons engaged in business within certain limited classifications provided by the Standard Industrial Classification Codes. These classifications cover: 20-39 (manufacturing); 46-49 (pipelines, transportation services, communications, and electric, gas, and sanitary services); 51 (wholesale trade, nondurable goods); 75 (automotive repairs, services, and garages); 76 (miscellaneous repair services); 80 (health services); 82 (educational services); and 84 (museums, art galleries, botanical and zoological gardens).

Absent are 01 (agricultural production—crops), 02 (agricultural production—livestock), and 07 (agricultural services). Pederson, *supra* note 75, at § 6.59.

84. See, e.g., Ellen Greenstone, *Farmworkers in Jeopardy*, 5 Ecology L.Q. 69, 110-20 (1975); see also Report of the Task Panel on Migrant and Seasonal Farmworkers, *supra* note 2, at 1245-47.

85. 7 U.S.C. § 136a(c)5 (1982). Under FIFRA, a pesticide can be registered with the EPA once the Administrator finds that:

- (A) its composition is such as to warrant the proposed claims for it;
- (B) its labeling and other material required to be submitted comply with the requirements of [the Act];

Act defines "unreasonable adverse effects on the environment" as "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."⁸⁶ This statutory mandate requires the EPA to consider not only the risks to people, but also the powerful economic factors which advocate for the registration of the pesticide. What is troublesome is not that such factors are considered, but the conflict of interest created when one agency is weighing the concerns of both.⁸⁷

The EPA's representation of both people and agribusiness concerns has produced a remarkable record of EPA lenience toward suspect chemicals in the United States. For example, in 1984 the EPA removed the grain fumigant ethylene dibromide (EDB) from the market.⁸⁸ This took place a decade after the National Cancer Institute determined that EDB was a probable human carcinogen.⁸⁹

Another example of the EPA's tendency to bend regulations rather than ban the pesticide is their handling of the fungicide Captan.⁹⁰ Because Captan is not "acutely" toxic,⁹¹ it has been con-

(C) it will perform its intended function without unreasonable adverse effects on the environment; and

(D) when used in accordance with widespread and commonly recognized practice it will not generally cause unreasonable adverse effects on the environment.

86. 7 U.S.C. § 136(bb) (1982). If the pesticide is restricted because of potential unreasonable adverse effects on the environment, a certified applicator must apply or supervise the pesticide's application, and the Administrator may impose additional restrictions by regulation. 7 U.S.C. § 136a(d)(1)(C)(ii) (1982).

87. The EPA itself was created in 1970, in part, because of congressional dissatisfaction with the USDA's lack of enforcement and its conflicting roles. Prior to the creation of the agency, the USDA regulated pesticides and the FDA granted tolerances.

88. 132 Cong. Rec. S15,289 (daily ed. Oct. 7, 1986)(statement of Sen. Proxmire).

89. In regard to this 10 year delay it was stated: "The process [the] EPA employs to reach such decisions known as special review or RPAR has simply failed, plagued by bureaucratic footdragging, political interference, and unchecked influence by pesticide manufacturers." *Id.*

RPAR is an acronym for "Rebuttable Presumption against Registration." If data becomes available that a pesticide presents a significant hazard, such evidence is considered a RPAR. For example, EDB was a RPAR pesticide once it was shown that it caused cancer in animals. Therefore, as an RPAR product EDB was not to be registered unless the data was shown to be invalid or unreliable, or the estimated benefits of continued use outweighed the estimated risks. The EPA now terms this heightened scrutiny a "Special Review." James Aidala, Pesticide Issues: Reauthorization of P.L. 92-516, CRS Issue Brief 6 (June 8, 1987).

90. Captan is one of five pesticides that farmworker organizers are attempting to ban. The other four are methyl bromide, parathion, Phosdrin, and Dinoseb. Marion Moses, Medical Director of the National Farm Workers Health Group, Statement to the Maryland State Legislature Regarding Farmworker Health and Safety (Feb. 26, 1986).

91. See *supra* note 23 and accompanying text.

sidered a safe fungicide. It is structurally similar, however, to Thalidomide, a drug which caused thousands of infants in Europe to be born without arms or legs.⁹² Even after an EPA determination that all use of the fungicide in food should be suspended, the agency later recanted and allowed its continued use at the original tolerance levels.⁹³

The history of the EPA's highly lauded toll-free hotline is a third example of how conflicts of interest within the EPA are often resolved in favor of agribusiness interests. The EPA established the hotline in the mid-70s to permit workers to report pesticide poisoning incidents.⁹⁴ Since the EPA had no mandatory mechanism for receiving complaints of pesticide poisonings, and since few states have any reporting systems, this hotline was to be a federal clearinghouse for farmworker complaints. Under agribusiness pressure, however, all funds for the hotline were cut off.⁹⁵

It is not surprising that EPA regulations tend to favor agribusiness, given that the Administrator of the EPA is required to consult with the Secretary of Agriculture before considering any new regulation.⁹⁶ Further, in taking any final action on a regulation the EPA must consider "the effect of the regulation on production and prices of agricultural commodities, retail food prices, and otherwise on the agricultural economy . . ."⁹⁷ Communication between the EPA and the Department of Agriculture is commendable, but the EPA's current "mission" as set forth in FIFRA does not place it in a position where it can effectively advocate for the welfare of a minority population. As an under-represented minority, farmworkers are in need of an advocate who can operate as an adversary to competing economic interests.

OSHA and Farmworker Regulation

Given the EPA's position in the struggle between agribusi-

92. Marion Moses, *Captan*, Food & Just. 13, 13 (Jan. 1986). Dr. Moses cites a case of a child born without arms or legs where it was known that the mother worked picking grapes that had been sprayed with pesticides during the first three months of her pregnancy. *Id.*

93. Dr. Moses reports that in 1977 it was found that fraudulent data had been submitted to the EPA concerning Captan. Subsequently, Canada lowered its tolerance level on grapes to five parts per million (ppm). The U.S. tolerance level of Captan on grapes remained at 50 ppm, 10 times that of Canada's. *Id.*

94. Report of the Task Panel on Migrant and Seasonal Farmworkers, *supra* note 2, at 1245.

95. *Id.*

96. 7 U.S.C. § 136w(a)(2) (1982).

97. 7 U.S.C. § 136w(a)(2)(B) (1982).

ness and farmworker health, many farmworker advocates would prefer that OSHA take over the regulation of field and farmworker safety. Unlike the EPA, OSHA's current mission would not conflict with farmworker interests as do the EPA's economic and environmental concerns.⁹⁸ Unfortunately, OSHA has not been willing to assume such responsibility. In a recent final determination OSHA provided three reasons for its abandonment of the area of field sanitation.⁹⁹ First, in allocating its "scarce resources," the agency performs a risk balancing process whereby the risks faced by fieldworkers are compared to the health risks associated with the other industries under its auspices.¹⁰⁰ Because of OSHA's other health concerns (e.g. asbestos, lead, various chemical carcinogens), the agency stated that a federal field sanitation standard would be given "very low priority" in enforcement.¹⁰¹ Second, because some states have already moved to regulate the area of pesticide safety, OSHA determined it was appropriate that the states continue to do so, "in accordance with each state's specific concerns for public health and particular conditions in agriculture."¹⁰² A third argument articulated by OSHA for not assuming the task of field sanitation regulation relates to the problem of the agency's scope of authority. Since some courts have held that OSHA regulations preempt state regulations,¹⁰³ and since OSHA is prohibited by law from taking any actions toward regulating farms with fewer than eleven employees, OSHA concluded that it would be inefficient to promulgate regulations when the states could provide both broader coverage of farmworkers and broader enforcement of safety regulations.¹⁰⁴ Given OSHA's stance, a remedy for the farmworker dilemma does not seem forthcoming from this agency despite farmworker efforts to persuade them otherwise.

OSHA has overlooked several points in advocating state responsibility for pesticide safety. First, unlike the EPA, most state agencies are unable to administratively fine those who misuse pes-

98. OSHA's mission states: "The Congress declares it to be its purpose and policy . . . to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources." 29 U.S.C.A. § 651(b) (West 1985).

99. 50 Fed. Reg. 15,086, 15,088 (1985). For a short history of OSHA's attempt to draft fieldworker sanitation regulations, see *supra* note 52 and accompanying text.

100. *Id.*

101. *Id.*

102. *Id.*

103. See, e.g., *New Jersey State Chamber of Commerce v. Hughey*, 600 F. Supp. 606 (D. N.J. 1985), *aff'd in part, rev'd in part*, 774 F.2d 587 (3rd Cir. 1985).

104. See 50 Fed. Reg. 15,086, 15,088 (1985).

ticides.¹⁰⁵ Obviously, this seriously hinders any state enforcement actions. Second, enforcement actions by states are often questionable and inconsistent.¹⁰⁶ Many cases are poorly investigated by both the EPA and state agencies.¹⁰⁷ For example, in one EPA region, the EPA conducted an inspection to determine whether a pesticide had been used properly. Unfortunately, the inspection occurred two months after the pesticide was applied in spite of EPA policy requiring that pesticide use inspections be made during or immediately following the actual application.¹⁰⁸ Policy and regulation are of no value to the farmworkers without commensurate enforcement.

Farmworkers, the EPA, and the Courts

Judicial Review of the EPA

One might question why the EPA's actions in the establishment of farmworker protection standards have not been subject to judicial review under sources of law such as the Administrative Procedures Act (APA).¹⁰⁹ There are two primary reasons for the dearth of lawsuits. First, as a matter of policy, farmworker advocates are hesitant to entrust the very agency they were trying to strip of authority with the responsibility to create new regulations. Second, in its present form, FIFRA does not require the EPA to promulgate such rules. FIFRA's mission requires the EPA to "protect man and his environment"¹¹⁰ from unreasonable risk. FIFRA does not *require* the EPA to promulgate any specific rules or standards regarding farmworkers. Therefore, if a suit were brought, the litigants would be seeking judicial review of administrative inaction. Generally, courts are reluctant to challenge administra-

105. Stronger Enforcement Needed Against Misuse of Pesticides, *supra* note 37, at 15.

106. *See id.* at 9-12. "Our analysis of 2,855 randomly selected cases showed that EPA and State officials took questionable enforcement actions in 491, or 17 percent, of the cases reviewed for the period 1975 to 1980." *Id.* at 9.

107. *Id.* at 12.

108. *Id.* at 13.

109. 5 U.S.C. § 551 (1982). "A person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute, is entitled to judicial review thereof." *Id.* at § 702. Whether judicial review may be procured under the APA where the statute itself provides no private cause of action is not settled. William Timbers & David Wirth, *Private Rights of Action and Judicial Review in Federal Environmental Law*, 70 Cornell L. Rev. 403, 411-12 (1985). *But see* Sierra Club v. Peterson, 705 F.2d 1475, 1479 (9th Cir. 1983), where the Ninth Circuit held that FIFRA does not preclude judicial review of agency action through other sources of law such as the APA.

110. Merrell v. Thomas, 608 F. Supp. 644, 647 (D.C. Or. 1985), *aff'd*, 807 F.2d 776 (9th Cir. 1986), *cert. denied*, 108 S.Ct. 145 (1987).

tive inaction, considering it an area not suitable for judicial oversight.¹¹¹

Given the lack of Congressional guidance as to specific farmworker protection, it would be difficult for an advocate to prove, or for a court to determine, that Congress desired a more stringent program than that which currently exists. Should review of EPA inaction be sought, the EPA could simply point to its existing farmworker protection regulation and labeling restrictions as evidence that the EPA has fulfilled its statutory duties.¹¹²

To remedy the latter problem, a bill to amend FIFRA was recently introduced in the House of Representatives which would make promulgating rules regarding farmworker protection a mandatory duty of the Administrator of the EPA.¹¹³ The bill also established specific areas for rules to address and mandated that they be promulgated within a certain time limit.¹¹⁴ If this amendment had passed, and the EPA subsequently failed to take adequate action, the judiciary would have a clear statement of Congressional intent to guide them, thus reducing much of the confusion which now exists.

Another impediment to judicial review is "the inability of the courts to analyze the problem."¹¹⁵ Analysis of any chemical problem requires a great deal of expertise on a purely scientific level. The problem of pesticide regulation is further compounded by the evolving state of scientific knowledge in the area of toxicology and the influence of powerful socio-economic forces. While acknowledging the difficulty of scrutinizing the area of pesticides and pesticide regulations, however, review by the judicial branch remains necessary for impartial evaluation of administrative decision making.¹¹⁶ It should be noted that a court order to hold a rulemaking hearing would not substitute the court's expertise for that of the

111. See Peter Lehner, *Judicial Review of Administrative Inaction*, 83 Colum. L. Rev. 627 (1983). "Courts decline to act for four reasons: the lack of a particular person harmed by a particular agency action, the lack of clear congressional intent regarding proper agency conduct, the inability of courts to analyze the problem, and the presumed availability of political controls over general nonimplementation." *Id.* at 627.

112. Lehner uses OSHA's failure to promulgate pesticide standards as an example of judicial review of administrative inaction. See *id.* at 680-89. Many of the arguments contained therein could be used to advocate for judicial review of the existing Farmworker Protection rule and corresponding agency inaction.

113. H.R. 2580, 99th Cong., 1st Sess. § 39 (1985).

114. *Id.*

115. See *supra* note 111.

116. As noted earlier in this article, farmworker groups are rarely powerful or popular enough to have political sway in either the congressional or executive branches. See *supra* notes 40-44 and accompanying text.

EPA, but would only direct the agency to exercise *its* expertise.¹¹⁷

Attaining judicial review alone will not solve the farmworker dilemma. Unless there are procedures for adequate implementation of the regulations and statute, the farmworkers would need to procure a private method of enforcement.

Private Right of Action

Congress enacted FIFRA to establish, regulate and monitor the United States' toxic arsenal. FIFRA's subsequent enforcement raised two important questions. First, who, besides the EPA, has the legal authority to enforce FIFRA's provisions when the proper agency or official has failed to perform a nondiscretionary duty? Second, who may enforce the act when that agency or official has failed to investigate and prosecute a violation? Although the language of FIFRA does not expressly preclude a citizen or group of citizens from bringing suit, several recent court cases have concluded that no private right of action exists for enforcement of FIFRA regulations.¹¹⁸ Only the Administrator of the EPA or the Attorney General for the United States may bring suit.¹¹⁹ Given the fact that both EPA¹²⁰ and state enforcement efforts are inadequate, the lack of a private remedy is cause for concern and needs to be explored further.¹²¹

117. See Lehner, *supra* note 111, at 688.

118. *Eli Lilly & Co. v. EPA*, 615 F.Supp. 811 (D.C. Ind. 1985). "Congress considered and explicitly rejected amendments which would have provided for classic 'citizen suits,' including suits by private citizens against the EPA Administrator for failure to perform nondiscretionary duties or for failure to investigate and prosecute violations." *Id.* at 815. See also *In re "Agent Orange" Prod. Liab. Litig.*, 635 F.2d 987 (2d Cir. 1980), *cert. denied*, 454 U.S. 1128 (1981); *Fiedler v. Clark*, 714 F.2d 77 (9th Cir. 1983); *Safe Alternatives for Fruit Fly Eradication v. Berryhill*, 22 Env't Rep. Cas. (BNA) 1036 (C.D. Cal. 1984); *People for Envtl. Progress v. Leisz*, 373 F. Supp. 589 (C.D. Cal. 1974); *Almond Hill School v. U.S.D.A.*, 768 F.2d 1030 (9th Cir. 1985).

119. See, e.g., *Leisz*, 373 F. Supp. at 592 ("[T]he Congressional intent to us at least is clear enough: Enforcement of FIFRA is reserved by Congress to the Environmental Protection Agency and to the Office of the Attorney General, and violations thereof are not the proper subject of civil actions by citizens"). Statutory authority to enforce FIFRA is found at 7 U.S.C. § 136g(c)(1-3) (enforcement) and § 136i (penalties) (1982).

120. See generally *Stronger Enforcement Needed against Misuse of Pesticides*, *supra* note 37.

See also 132 Cong. Rec. H7267-71 (daily ed. Sept. 19, 1986); Report of the Task Panel on Migrant and Seasonal Farmworkers, *supra* note 2, at 1242-49 (1978); Strigini, *supra* note 22, at 284-85.

121. A provision establishing private citizen suits allowing individuals to sue for damages or equitable relief was part of a recent Congressional attempt to amend FIFRA. See 131 Cong. Rec. S7-86-95 (daily ed. Jan. 29, 1985). See also H.R. 2580, 99th Cong., 1st Sess. § 33 (1985).

In *Fiedler v. Clark*,¹²² the Ninth Circuit concluded that although the express language of FIFRA vested the district courts "with jurisdiction specifically to enforce, and to prevent and restrain violations" of the Act,¹²³ FIFRA did not expressly grant nor preclude a private right of action by a private citizen.¹²⁴ Since private rights of action may be either express or implied,¹²⁵ the court went on to examine the language of FIFRA and its legislative history to determine whether Congress intended to create an implied private right of action.¹²⁶ In making its determination, the court made use of the test set forth by the Supreme Court in *Cort v. Ash*.¹²⁷

In *Cort*, the Supreme Court used four factors to determine whether Congress intended to create an implied private right of action: (1) whether the plaintiff is "one of the class for whose especial benefit the statute was enacted"; (2) whether there is explicit or implicit indication of legislative intent to create or deny a remedy; (3) whether such a remedy is consistent with the underlying purposes of the act; and (4) whether the cause of action is one traditionally given to state law, "so that it would be inappropriate to infer a cause of action based solely on federal law."¹²⁸

The *Fiedler* court concluded that the first two factors given in *Cort* were not present in the legislative history of FIFRA and, therefore, no private right of action was created.¹²⁹ The court held that FIFRA did not, in accordance with the *Cort* test, "unmistakably focus on any particular class of beneficiaries whose welfare Congress intended to further."¹³⁰ Apparently, the Ninth Circuit in *Fiedler* found no conflict with historical interpretations of the D.C. Circuit in *Organized Migrants in Community Action, Inc. v. Bren-*

122. 714 F.2d 77 (9th Cir. 1983). In *Fiedler*, appellant brought suit against Hawaii's pineapple growers, dairy farmers, dairy processors, the State of Hawaii and the United States for declaratory and injunctive relief against contamination of dairy products with the pesticide heptachlor. *Id.* at 79.

123. 7 U.S.C. § 136n(c) (1982).

124. *Fiedler*, 714 F.2d at 79.

125. William Timbers & David Wirth, *Private Rights of Action and Judicial Review in Federal Environmental Law*, 70 Cornell L. Rev. 403, 405 (1985).

126. *Fiedler*, 714 F.2d at 79. *Texas Indus. v. Radcliff Materials*, 451 U.S. 630, 639 (1981) ("[The] focus . . . in any case involving the implication of a right of action . . . is on the intent of Congress"); *Universities Research Ass'n v. Coutu*, 450 U.S. 754, 770 n.20 (1981) ("whether a statute creates a private right of action is ultimately [a question] 'of congressional intent'").

127. 422 U.S. 66 (1975). See also *California v. Sierra Club*, 451 U.S. 287 (1981).

128. *Cort*, 422 U.S. at 78.

129. *Fiedler*, 714 F.2d at 79. *Accord, In re "Agent Orange" Prod. Liab. Litig.*, 635 F.2d 987, 991-92 n.9 (2d Cir. 1980), *cert. denied*, 454 U.S. 1128 (1981).

130. *Fiedler*, 714 F.2d at 79 (citing *Sierra Club*, 451 U.S. at 294).

nan.¹³¹ In *Brennan*, the D.C. Circuit cited the Senate Committee on Agriculture and Forestry to emphasize FIFRA's specific protection of farmworkers. The Committee stated: "[t]he committee believes there can be no question about the matter, but takes this occasion to emphasize that the bill requires . . . the labeling and classification of pesticides be such as to protect farmers, farmworkers, and others coming in contact with pesticides or pesticide residues."¹³² While this latter language and decision indicate that FIFRA was focused toward at least one "particular class of beneficiaries," the Ninth Circuit in *Fiedler* did not so find, holding that the language of the statute did not indicate an intent to provide for private rights of action¹³³ and that the legislative history of the Act confirmed this.¹³⁴

In addition to finding no right to bring private suits under FIFRA itself, courts have denied a cause of action brought through 42 U.S.C. § 1983.¹³⁵ Section 1983 provides a federal cause of action for either damages from or equitable relief against state officials who deprive individuals of their federal rights, even though no such action may be provided for under the Act itself.¹³⁶ The availa-

131. 520 F.2d 1161 (D.C. Cir. 1975). "The farmer and the farmworker are the persons most likely to be adversely and immediately affected by pesticides and they are the most obvious object of the bill's protection." *Id.* at 1169 (citing 1972 U.S. Code Cong. & Admin. News 4063).

132. S. Rep. No. 838, 92d Cong., 2d Sess., pt. 2, at 43-44, reprinted in 1972 U.S. Code Cong. & Admin. News 4063.

133. "FIFRA does not 'unmistakably focus on any particular class of beneficiaries whose welfare Congress intended to further.' Rather, the Act states 'no more than general proscription of certain activities.' Such language does not indicate an intent to provide for private rights of action." *Fiedler*, 714 F.2d at 79 (quoting *Sierra Club*, 451 U.S. at 294).

134. "Congress considered and explicitly rejected amendments that would have authorized citizen suits, including suits against the EPA Administrator for failure to perform nondiscretionary duties or for failure to investigate and prosecute violations." *Fiedler*, 714 F.2d at 79 (citing S. Rep. No. 970, 92d Cong., 2d Sess., reprinted in 1972 U.S. Code Cong. & Admin. News 4092, 4106, 4125; S. Rep. No. 838, 92d Cong., 2d Sess., reprinted in 1972 U.S. Code Cong. & Admin. News 3993, 4060-61, 4090; Conf. Rep. No. 1540, 92d Cong., 2d Sess., reprinted in 1972 U.S. Code Cong. & Admin. News 4130, 4134).

At least part of the reasoning for Congress' opposition is stated in *People for Env'tl. Progress v. Leisz*, 373 F. Supp. 589 (C.D. Cal. 1974) (citing S. Rep. 838, 92d Cong., 2d Sess., reprinted in 1972 U.S. Code Cong. & Admin. News 4025, 4060).

[The Senate Agriculture and Forestry Committee] position was based on its opinion that the executive branch should have the sole responsibility for administering and enforcing the new statute, its concern for placing further burdens on already overburdened federal courts, and the possibility that the amendment might . . . interfere with the orderly administration of law.

Id. at 592.

135. 42 U.S.C. § 1983 (1982). See *Almond Hill School v. United States Dep't of Agric.*, 768 F.2d 1030 (9th Cir. 1985).

136. 42 U.S.C. § 1983 provides:

bility of section 1983 to enforce a particular statute depends on two factors. "First, Congress must not have foreclosed private enforcement of the statute in the statute itself. Second, the statute must create 'enforceable rights.'"¹³⁷

In *Almond Hill School v. United States Department of Agriculture*,¹³⁸ the Ninth Circuit held that Congress had foreclosed private remedies under section 1983 because the enforcement schemes expressed in FIFRA were sufficiently comprehensive to suggest exclusivity of remedial devices.¹³⁹ The court also noted that enforcement of FIFRA through section 1983 would "undermine the 'balance, completeness and structural integrity' of the Act's express enforcement scheme."¹⁴⁰ As in *Fiedler*, the court cited the legislative history of FIFRA, indicating that the Act's remedial exclusivity was a deliberate effort by Congress to insert and maintain flexibility in dealing with violations of the Act.¹⁴¹ As an example of this flexibility, the court cites section 136d(a)(1) of FIFRA which provides for the continued use of a cancelled pesticide, even if the pesticide has been cancelled for noncompliance with the Act if such use is not inconsistent with the "purposes" of the Act.¹⁴² Ironically, this very example illustrates why FIFRA is *not* balanced, complete, or structurally sound as far as the farmworker is concerned. This "flexibility" allows the EPA to work against the interests of the farmworkers and, combined with the remedial exclusivity, for the interests of agribusiness.

The court also attached importance to the Act's express delegation of primary enforcement responsibility to the states.¹⁴³ The court stated that "[p]rivate actions under section 1983 to enforce FIFRA would be inconsistent with the policy of state and federal

Every person who, under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory, . . . subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws, shall be liable to the party injured in an action at law, suit in equity, or other proper proceeding for redress.

137. *Almond Hill School*, 768 F.2d at 1035 (citing *Middlesex County Sewerage Authority v. National Sea Clammers Ass'n*, 453 U.S. 1, 18-19 (1981)). Although both factors were listed in the above case, *Almond Hill School* was decided on the first factor, and therefore no discussion of whether the Act creates "enforceable rights" is present.

138. 768 F.2d 1030 (9th Cir. 1985).

139. *Id.* at 1036.

140. *Id.* at 1037.

141. *Id.* (citing S. Rep. No. 92-838, *reprinted in* 1972 U.S. Code Cong. & Admin. News 3993, 4012-13).

142. *Almond Hill School*, 768 F.2d at 1037-38.

143. *Id.* at 1038 (citing 7 U.S.C. § 136w-1).

cooperation encouraged in the Act's express enforcement scheme."¹⁴⁴ For those farmworkers suffering from increased rates of cancer and birth defects, it is difficult to understand how FIFRA's express enforcement scheme could be "undermined" when federal enforcement of FIFRA has been so ineffectual.

Other Farmworker Legislation

Protection of Child Farmworkers

There is one area of farmworker regulation which has received more severe scrutiny and judicial inspection than has generally been accorded other matters of pesticide regulation. This area concerns children aged twelve and under, who are protected under the Fair Labor Standards Act Amendments of 1977.¹⁴⁵ Normally, under the Fair Labor Standards Act (FLSA) the minimum age for persons working in hazardous areas of agriculture is sixteen. Twelve-year-olds may work in non-hazardous agriculture during non-school hours with written parental permission.¹⁴⁶ In addition, children under twelve may work only on small farms not covered by the FLSA, and only with parental permission. Section 13(c)(4)(A) of the FLSA, however, permits the Secretary of Labor to waive restrictions on employment of ten and eleven year olds in short season agricultural harvesting, where eight enumerated conditions are fulfilled as demonstrated by "objective data".¹⁴⁷

In *National Association of Farmworkers Organizations v. Marshall*,¹⁴⁸ the petitioner sought to prevent the employment of some 3900 children under the age of eleven as harvesters of Washington's strawberry crop. The petitioners in *Marshall* challenged the Secretary's waiver, arguing that he had failed to base his waiver on objective data submitted by the applicant. The court

144. *Almond Hill School*, 768 F.2d at 1038.

145. Fair Labor Standards Act of 1938 § 13(c)(4)(A), 5 U.S.C.A. § 553 (1977), as amended by 29 U.S.C.A. § 213(c)(4)(A) (West Supp. 1987).

Children are at a higher risk of harm from exposure to pesticides than are adults. One court noted that children exposed to such chemicals suffer from "greater uptake of [pesticides] in the developing tissue and organ systems of younger aged children," 'increased susceptibility to asthma,' 'increased susceptibility to agents that interfere with calcium metabolism,' 'increased susceptibility to agents that interfere with protein utilization,' and 'increased sensitivity to hormonal imbalances.'" *National Ass'n of Farmworkers Org. v. Marshall*, 628 F.2d 604, 614 n.42 (D.C. Cir. 1980)(citing Memorandum from Peter Infante, Director, Office of Carcinogen Identification and Classification, OSHA to Grover Wrenn, Director, Health Standards Program, OSHA (June 16, 1978)).

146. 29 U.S.C.A. § 213(c)(1) (West Supp. 1987).

147. 29 U.S.C.A. § 213(c)(4)(A) (West Supp. 1987).

148. 628 F.2d 604 (D.C. Cir. 1980).

held that since the waiver provision specified "objective data,"¹⁴⁹ and since no such data establishing pesticide or other chemical tolerance limits for children was available, the Secretary's use of the "best available evidence"¹⁵⁰ test instead of "objective data" would violate Congressional intent. The court enjoined the Secretary from issuing waivers as to ten and eleven year olds until objective data on pesticide and chemical tolerance limits for children are produced.¹⁵¹

In deciding *Marshall*, the court balanced the economic burden to growers denied waivers (a burden the court noted would ultimately shift to consumers) against the irreparable harm to children exposed to pesticides and chemicals through such employment waivers.¹⁵² The court concluded that "any possible reduction in the price of produce that might result from denying preliminary relief would be only short-term, and would never approach the value of the children's health to the nation."¹⁵³ Hence, through the FLSA and "in the interests of justice"¹⁵⁴ children have protection

149. *Id.* at 606. The court relied upon the following statutory authority. Waivers may be granted only if:

- (ii) the employment of the individuals to whom the waiver would apply would not be deleterious to their health or well-being;
- (iii) the level and type of pesticides and other chemicals used would not have an adverse effect on the health or well-being of the individuals to whom the waiver would apply.

Id. at 607 (quoting 29 U.S.C.A. § 213(c)(4)(A) (1979)).

The court also noted the following conditions which must be met:

Other conditions necessary for waiver include proof that individuals older than 11 are not available; that the industry has traditionally and substantially used employees under age 12 "without displacing substantial job opportunities for individuals over sixteen years of age"; 29 U.S.C. § 213(c)(4)(A)(v) (1976); and the crop to be harvested is short season and dependent on child labor.

Once granted, waivers must require that employment only be during non-school hours; that the children commute daily between work and permanent residence; that the employment extend only during 8 weeks per calendar year; and that any other conditions set by the Secretary will be followed.

Marshall, 628 F.2d at 607 n.5 (citing 29 U.S.C. § 213(c)(4)(B) (1976)).

150. *Marshall*, 628 F.2d at 619. The Secretary's best available evidence consisted of secondary reviews of existing research literature which revealed that "most critical information required for evaluating potential hazards to children is lacking." *Id.* at 618 (citing Clement Final Report, J.A. Vol. B at 5). The Labor Department did not seek any new studies; "it merely asked [a professional consulting firm] to review existing literature, none of which dealt with children's exposure to pesticides." *Marshall*, 628 F.2d at 619.

151. *Marshall*, 628 F.2d at 623.

152. *Id.* at 616.

153. *Id.* See also *Washington State Farm Bureau v. Marshall*, 625 F.2d 296 (9th Cir. 1980) (holding that in refusing to grant waivers for strawberry growers using the pesticides Captan and Benomyl, the Secretary of Labor was acting neither arbitrarily nor capriciously).

154. *Marshall*, 628 F.2d at 623.

unavailable to their elders.¹⁵⁵

Creation of a Private Right of Action

Ours is an adversarial system, and it works quite well to enforce laws and regulations when there are adversaries to contend in the judicial arena. If governmental agencies cannot, or will not, advocate either administratively or judicially for the rights of a minority in the area of pesticide regulation, then the search for a private judicial remedy must resume.

A group of private citizens was allowed to bring suit to enforce FIFRA in one early case. The court in *Kelley v. Butz*¹⁵⁶ distinguished between a group of private citizens and a state attorney general acting on behalf of the people of Michigan. Although *Kelley* recognized the statutory bar to private law suits, the court found no similar expressions of legislative intent to bar "suits by a sovereign state acting in furtherance of its legitimate interests and on behalf of its entire citizenry."¹⁵⁷ Citing the Supreme Court case of *Hardin v. Kentucky Utilities*,¹⁵⁸ as well as Section 10 of the Administrative Procedures Act,¹⁵⁹ the court found "standing" under FIFRA for the Michigan Attorney General to petition the court to restrain the Forest Service from violating the statute.¹⁶⁰

Kelley has been cited for its sovereign state/private citizen

155. In addition to the Fair Labor Standards Act, farmworkers have also been placed under the umbrella of several other pieces of legislation. These include the Federal Equal Pay Act of 1963, the National Labor Relations Act, the Federal Unemployment Tax Act, the Wagner-Peyser Act, the Migrant and Seasonal Agricultural Worker Protection Act, and various state Worker Compensation laws. For an explanation of how these acts and laws affect farmworkers, see John Davidson, 2 *Agricultural Law* § 6 (1981). None of these acts or laws has greatly impacted the issue of pesticide poisoning.

Such extensive coverage by legislation with so little effect has led at least one group to conclude that:

[T]he failure of Federal programing to meet the needs of migrant and seasonal farmworkers is the result of the lack of coordination and the fragmentation of programs designed to serve them. [Still others] hold that the failure to enforce existing laws intended to protect them is a major cause of their continuing plight.

Report of the Task Panel on Migrant and Seasonal Farmworkers, *supra* note 2, at 1197.

156. 404 F. Supp. 925 (W.D. Mich. 1975). In *Kelley*, the plaintiff sought injunctive relief to prevent the United States Forest Service from spraying a national forest with chemical defoliant.

157. *Id.* at 940.

158. 390 U.S. 1 (1967) (conferring standing, despite the lack of specific statutory provision for such, to the class of persons which the statute in issue was designed to protect).

159. 5 U.S.C. § 551 (1982).

160. *Kelley*, 404 F. Supp. at 941. The court also cited the tests for standing enumerated in *Sierra Club v. Morton*, 405 U.S. 727 (1971).

"distinction", but its reasoning and result have not been repeated.¹⁶¹ The reason may be that, in *Kelley*, the court appears to have combined the separate issues of standing and cause of action to achieve its unique result.¹⁶² The court in *Kelley* found standing, despite acknowledging the fact that Congress had provided no express or implied private right of action.¹⁶³ This finding is legally inappropriate. The proper approach for determining the issues of cause of action and standing is to determine first, whether there is a private cause of action and second, if there is one, who in this class of litigants has standing to sue. Where the matter to be litigated is constitutional, the court may create a private cause of action.¹⁶⁴ Where the matter to be litigated is statutorily created and controlled, as in the case of FIFRA, Congress may limit the class of litigants who may enforce the rights which they have created.¹⁶⁵ The courts are then left to determine who in a potential class of litigants has standing to bring suit.¹⁶⁶ Therefore, since no court has held that FIFRA provides either an implied or express private right of action, the court in *Kelley* should not have granted standing and may have extended its jurisdiction where legally it had none.

It may be, however, that the substance of the *Kelley* decision can provide a basis for a judicial remedy to the farmworkers' quandary. Currently, because of both societal and legal obstacles, farmworkers are unable to advocate effectively for themselves. Nor can farmworkers rely on an impartial governmental agency to advocate for them. Therefore, the farmworker is left without a representative sufficiently adversary to industry and business interests to vigorously advocate the farmworker dilemma.¹⁶⁷ Neither the EPA's "mission" nor its statutory powers allow it to place itself in opposition to powerful economic interests. OSHA apparently does not feel it is capable administratively or statuto-

161. See *Eli Lilly & Co. v. Environmental Protection Agency*, 615 F. Supp. 811, 815 (D.C. Ind. 1985). The court in *Eli Lilly* cited *Kelley* "[w]ithout necessarily accepting [its] distinction . . ." *Id.*

162. The Supreme Court recognized this distinction in *National R.R. Passenger Corp. v. National Ass'n of R.R. Passengers*, 414 U.S. 453 (1974) "Since we hold that no right of action exists, questions of standing and jurisdiction become immaterial." *Id.* at 465 n.13.

163. *Kelley*, 404 F. Supp. at 941.

164. See *Davis v. Passman*, 442 U.S. 228, 241-42 (1978).

165. See *id.*

166. To have standing, a plaintiff must be sufficiently adversary to the defendant to qualify as an Article III case or controversy, or to overcome prudential limitations on federal court jurisdiction. See *Warth v. Seldin*, 422 U.S. 490, 498 (1975).

167. See, e.g., Greenstone, *supra* note 84. This article advocates ceding authority to regulate pesticides as they relate to farmworker safety to OSHA. It was written prior to OSHA's final determination declining such responsibility.

rily of providing adequate protection to the farmworkers. As private citizens, farmworkers are unable to enforce the statute that was written to protect them.

Congress' hesitancy in this area may be due to a fear of drowning the United States' largest industry in a sea of litigation. Given the existing importance of pesticides in our country, the lack of understanding of their biological consequences, and the knowledge that the agricultural seasons are often precarious and do not adapt themselves to judicial timetables, Congress is justifiably hesitant to throw the area of pesticide regulation open to judicial remedies.

Perhaps, however, in the manner of *Kelley v. Butz*, a judicial remedy could be crafted so that groups of farmworkers or their representatives could be their own advocates. In *Kelley*, the court allowed the attorney general to bring suit on behalf of the citizens of the state. If FIFRA were amended by Congress to allow the attorneys general of each state to bring enforcement suits, as the court allowed in *Kelley*, then farmworkers would have acquired fifty advocates with the authority to bring suit to have FIFRA's provisions enforced. Such an amendment would serve two purposes. For the farmworker it would provide an additional source of advocates to hear their complaints and to obtain remedies. For the marketplace, concerned about paralyzing the industry with lawsuits, it would limit the number of litigants who could bring suit and help ensure that the lawsuits brought are meritorious.

An alternative method of providing private enforcement of FIFRA would be to grant a private cause of action but to limit the language of such an amendment to include only those individuals demonstrating actual work-related injury. Under this approach, only those individuals who had been injured as a result of direct contact with the pesticide, e.g. those suffering acute or chronic symptoms of poisoning, would be allowed to bring suit. Although these injuries might prove difficult to establish, this approach would allow farmworkers to present their own cases and to concentrate their resources as they see fit.

As noted earlier, the court in *Organized Migrants in Community Action, Inc. v. Brennan*¹⁶⁸ concluded that OSHA could not be compelled to establish pesticide safety standards over EPA's authority. The court assured the petitioner in *Brennan*, however, that, "[i]f, in the future, the enforcement provisions of FEPCA are found to be inadequate, we are confident that Congress stands

168. 520 F.2d 1161 (D.C. Cir. 1975).

ready to rectify the situation."¹⁶⁹ It is now more than ten years since *Brennan*, and the enforcement provisions of FEPCA have been found "inadequate." By providing a limited private right of action to concerned groups of farmworkers, Congress could create an enforcement mechanism which would grant aggrieved farmworkers access to a greatly increased number of advocates who will be more responsive to farmworker complaints.

Admittedly, cases may be made where the general population is suffering from such residual effects of pesticide use as groundwater and food contamination. Where such cases are found, however, there exists the political and social force to effect a change.¹⁷⁰ Such has not generally been the case regarding farmworkers.

Other Considerations and Perspectives

Perhaps the largest obstacle to improved knowledge regarding toxicity is the sheer expense of obtaining that knowledge. The development of an effective pesticide is incredibly expensive and time-consuming. It is estimated that for every agrichemical that reaches the market for commercial use, ten thousand or more "candidate" chemicals must be screened and evaluated.¹⁷¹ Once the candidate is selected, the manufacturer may spend \$30 to \$40 million or more to develop and commercialize the product.¹⁷² The creation or modification of a manufacturing plant adds another \$100 million or more to the final price tag.¹⁷³ This entire process may take from seven to ten years. Assuming that a patent, which lasts seventeen years, was placed on the chemical early in this process, a manufacturer is left with perhaps ten years in which to recoup this investment. These time and money concerns discourage pesticide developers from spending long periods of time and more money on extensive toxicity testing.¹⁷⁴

Recently, Congress debated legislation which would lengthen the seventeen year patent period so that if a company is required to spend more money and time testing the toxic nature of a compound, then it will have a greater length of time in which to

169. *Id.* at 1169-70.

170. Witness California's recent passage of Proposition 65 enacting the Safe Drinking Water and Toxic Enforcement Act of 1986, Cal. Health & Safety Code §§ 25249.5 -13 (West 1988).

171. National Agricultural Chemicals Ass'n, *Agricultural Chemicals: From Laboratory to Commercial Label* 7 (1984).

172. *Id.* at 8.

173. *Id.*

174. Charles Gilbert, *The Increasing Riskiness of the Pesticide Business*, *Farm Chemicals* 20, 26 (April, 1978).

recoup that expense.¹⁷⁵ The intent of such legislation would be to provide an economic incentive for agricultural companies to develop more sophisticated and less toxic chemicals. The obvious argument against the latter line of reasoning is that by guaranteeing a monopoly to the producer the price of the product will be kept artificially high for a period of time.¹⁷⁶ But given the expenses encountered in this process, and the fact that the price of a pesticide is constrained by the limited resources of its agricultural consumers, such legislation would appear to be a reasonable means to achieve a desirable goal.

Registration and reregistration with the EPA is an equally arduous task given the fact that the EPA's ability to examine data supplied by the chemical company is limited. Both industry and environmentalists agree that the EPA has insufficient resources to accumulate and interpret the data already available.¹⁷⁷

While patent extension may induce pesticide research in large acreage crops, such as corn and soybeans, such legislation would do little to spur industry research in specialty or minor crops, e.g. most fruits and vegetables. These latter crops, while economically important collectively, do not have large enough markets individually to support the high investment costs necessary to develop an effective range of pesticides.¹⁷⁸ Therefore, these growers may have to choose between using a pesticide of dubious safety or allowing their livelihood to be destroyed by adverse environmental elements. The problem is compounded for U.S. growers of specialty or minor crops who face international competition that does not recognize U.S. pesticide limitations.¹⁷⁹ Ignoring the

175. 132 Cong. Rec. S15,334-40 (daily ed. Oct. 7, 1986).

176. The average price *decrease* for three major pesticides after the generic producer entered the market was 18.1%. The average price *increase* over the same period for three major pesticides for which there are no generic producers was 9.9%. 132 Cong. Rec. S15,333-34 (daily ed. Oct. 7, 1986) (citing Farmland Industries, Inc., detailed sales information).

177. 132 Cong. Rec. 515,333-34 (daily ed. Oct. 7, 1986). See also Feldman, *supra* note 3, at 10,134.

178. Currently, registration of chemicals for minor or special use crops is expedited through the IR-4 Project. The IR-4 Project aids in the development and assembly of necessary registration data and in the preparation and submission of petitions for pesticide clearances on food, feed, fiber and ornamental commodities. Since 1963, the Project has obtained 2,479 clearances. Project Statement, A National Agricultural Program: Clearances of Chemicals and Biologics for Minor or Special Uses (Oct. 1, 1982-Sept. 30, 1987).

Additionally, a grower may obtain an "experimental use permit" under 7 U.S.C. § 136c(a)(1982), an emergency exemption under § 136w(b), or a state registration for special local need under § 136c(f).

179. Six percent of all vegetables, 25 % of all fruit, and 98% of all coffee beans are imported into the United States. Of the 94 pesticides used on coffee beans in foreign countries, 76 have no allowable U.S. tolerance. Yet, the beans are allowed

alarming health implications of such usage, it is apparent that foreign growers have a production advantage of inexpensive pesticides that allow them to bring their produce to the market at a lower price.

Insufficient financial resources can also account for the EPA's poor performance in the area of monitoring pesticide effects. In addition to monitoring these effects, the Administrator has been given the responsibility for formulating and periodically revising, in cooperation with other Federal, State, or local agencies, a national plan for monitoring pesticides.¹⁸⁰ A clearly-defined and well-executed monitoring plan would go far toward obviating the perennial complaint of any toxicity study: that the subject is hopelessly mired in a quagmire of the unknown.¹⁸¹

As the Florida statute cited earlier notes, the workplace can provide an "early warning mechanism."¹⁸² Currently, "chronic risks" are determined almost solely through translated animal data.¹⁸³ As sophisticated as these experiments might be, they cannot fully account for the complex differences between the subject animals and the human species. An adequate monitoring system would provide the human data needed to create regulations and would provide additional protection to the exposed farmworkers.

A final consideration is the addition of an economic burden to growers who may already be facing a financial crisis. Although to date individual states have been far more responsive to the farmworkers' dilemma than the federal government, eventually

to be imported. See 132 Cong. Rec. S15,336 (daily ed. Oct. 7, 1986) (statement of Sen. Harkin citing a GAO report).

180. 7 U.S.C. § 136r(a-c) (1982). Subsection (c) describes this monitoring in detail. It states:

The Administrator shall undertake such monitoring activities, including, but not limited to monitoring in air, soil, water, man, plants, and animals, as may be necessary for the implementation of this subchapter and of the national pesticide monitoring plan. The Administrator shall establish procedures for the monitoring of man and animals and their environment for incidental pesticide exposure, including, but not limited to, the quantification of incidental human and environmental pesticide pollution and the secular trends thereof, and identification of the sources of contamination and their relationship to human and environmental effects. Such activities shall be carried out in cooperation with other Federal, State, and local agencies.

181. See generally Toxic Substances Strategy Committee, Toxic Chemicals and Public Protection (May, 1980); Environmental Quality, 15th Annual Report of The Council on Environmental Quality (1984).

182. Fla. Stat. Ann. § 442.101 (West Supp. 1986). See *supra* notes 77-82 and accompanying text.

183. Strigini, *supra* note 22, at 277. "Translated animal data" refers to data gathered from animal studies and then extrapolated to fit human biology. From this process conclusions are drawn concerning the effects of pesticides on humans.

states may be reluctant to burden their farmers when their neighboring states have no obligation or inclination to do so. Therefore a national, and eventually international, pesticide regulation policy must be formulated so that there is no economic disincentive for promoting environmental and human health.

Conclusion

The argument most commonly made in favor of maintaining FIFRA in its present form is that when used properly, pesticides have not caused any human tragedies.¹⁸⁴ This argument is somewhat insensible. First, a pesticide can only be "properly used" when there is enough known about its effects to state what is proper and what is not. Secondly, "proper use" depends upon who is doing the defining. California decided that it is only proper for a worker to enter a field twenty-three days after it has been sprayed with parathion. The EPA decided that forty-eight hours is sufficient. If two growers each choose a different reentry standard, which grower is "properly using" the pesticide? Finally, experience has proven that a pesticide, like most everything else in society, will only be "properly used" if someone is around to insure that it is so used.

Those who would retain FIFRA in its present form are apparently satisfied with its enforcement; farmworkers are not. Even if parts of FIFRA were rewritten as has been discussed, any revision would be effectively nullified without enforcement procedures and mechanisms. To argue by analogy, properly driven, a car has never been responsible for a pedestrian accident. But even though everyone knows how to drive properly, pedestrian accidents happen all the time for a variety of reasons. Therefore we create laws to protect pedestrians and most importantly, we enforce them.¹⁸⁵

Three reforms are needed to provide adequate protection for farmworkers. First, a reporting system must be created so that the

184. Weinstein, *supra* note 3, at 10,130.

185. As one author notes:

While workers may learn from experience how to deal with, or avoid, certain hazards, this can hardly apply to chronic and certainly not to long-term ones. In any case, not only is such a learning process unfair to workers, on whose bodies it takes place, but it is also slow and inefficient, particularly with those who have lesser experience with the hazards, including workers' families and the general public. Furthermore, the "body count" is bound to start anew, as soon as a new formula or procedure is introduced by the chemical or the agricultural industry.

Strigini, *supra* note 22, at 281.

true scope of the pesticide problem as it affects farmworkers can be shown. To gather the necessary information, the EPA must establish mechanisms and procedures to both contact and be contacted by farmworkers. Without such a system, researchers cannot identify problem chemicals and uses, and the poisoning of farmworkers will continue.

Second, existing pesticide laws and regulations need to be created, refined and enforced. With the appropriate amendment of FIFRA, the courts could oversee promulgation of these needed regulations and enforce those that exist. The courts could also provide impartial guidance in this area as well as affording protection to an unrepresented minority. Enforcement would be achieved most effectively through the creation of a limited private right of action which would allow farmworkers to be their own advocates but in a manner cognizant of the needs of society.

Third, administrative funding must be adequate for the assignment given the agency. Increased regulation will benefit no one if the scientific issues remain undefined and obscured, conflicting with themselves and with political caprice. Increased funding could come from increased government allocations or from the developers of the pesticides as a requirement for registration. If the developers are required to provide the additional research, then legislators must work to retain needed economic incentives for the development of more sophisticated and less toxic chemicals.

It may be that in the future the problem of pesticide poisoning will be resolved not because we suddenly become concerned with a non-taxpaying, non-voting, non-English speaking minority, but because as evidence filters in that our chemical gardening tools are winding their way into our food, water, and air, we will finally decide that we would like to learn their effect as they wind their way into us. For the present we may choose to remain blissfully ignorant of our fellow human beings who are delivering our bounty at an untold expense. Eventually, however, it will be in our economic and social interest to expend our resources and examine the basis of our cornucopia.

Nevertheless, those who are suffering now should not have to wait.