

5-1-1992

## Pesticide Regulation: The Plight of Migrant Farmworkers v. The Politics of Agribusiness

Carlo V. DiFlorio

Matthew McLees

Follow this and additional works at: <https://elibrary.law.psu.edu/pselr>

---

### Recommended Citation

Carlo V. DiFlorio & Matthew McLees, *Pesticide Regulation: The Plight of Migrant Farmworkers v. The Politics of Agribusiness*, 1 *Penn St. Envtl. L. Rev.* 148 (1992).

This Article is brought to you for free and open access by the Law Reviews and Journals at Penn State Law eLibrary. It has been accepted for inclusion in Penn State Environmental Law Review by an authorized editor of Penn State Law eLibrary. For more information, please contact [ram6023@psu.edu](mailto:ram6023@psu.edu).

## **Pesticide Regulation: The Plight of Migrant Farmworkers v. The Politics of Agribusiness**

### **I. INTRODUCTION**

Like Einstein's theory of relativity, which holds that two individuals traveling at different velocities will observe the same event differently, the value of pesticides<sup>1</sup> boils down to a question of perception. On the one hand, pesticides are perceived by the fast paced world of biotechnology as bringing about the end of humanity's ancient struggle with the land and delivering forth an abundance of vitally important crops. However, for migrant farmworkers in the United States, who patiently follow the seasons from one crop to the next, pesticides are perceived as the primary source of disability and death in a land which they hoped would provide a promising future.

The agriculture industry embraced the advent of pesticides and quickly endorsed the use of pesticides to increase productivity, enhance quality and generate a booming economy.<sup>2</sup> Agriculture is currently America's biggest industry as well as its largest employer.<sup>3</sup> It is not surprising, then, that the lobbying efforts of agribusiness are incredibly powerful and influential. The importance of agribusiness to both international competitiveness and national employment opportunities provides sufficient disincentives for legislators to tamper with the way the agriculture industry conducts business. Furthermore, pesticides ensure the provision of food to Americans at prices which are low when compared with prices in other countries.<sup>4</sup> In the short run, pesticides secure bountiful crops, successful agribusiness and increased employment opportunities.

In the long-run, however, pesticide use raises several compelling issues. Society has begun to question whether this "newly found cornucopia" has been purchased at an untold and crudely exploitative price.<sup>5</sup> Studies indicate that agriculture is the third most dangerous industry nationally.<sup>6</sup> The primary reason for this ranking is due to the effects of pesticides on the health of migrant farm workers.<sup>7</sup> Furthermore, the Department of Health estimates that only one to two percent of all pesticide poisoning cases are even reported.

This is due primarily to the fact that the majority of migrant farmworkers are illegal aliens who fear that reporting illness or abuse of pesticide regulations would only result in their being deported or left unemployed.<sup>8</sup>

The poisoning of America's migrant farmworkers by the use and misuse of toxic pesticides has become a complicated issue essentially because it has become bound up with the even greater concern of global food supply.<sup>9</sup> It has been argued that if reduced pesticide use is directly correlated to a reduced food supply then a decision to limit pesticide use may be politically infeasible.<sup>10</sup> Therefore, it is fundamental to any argument against poorly regulated pesticide use that alternative solutions be identified and supported. Effectively researching viable alternatives would obviate the dilemma of pitting an individual's rights to health and safety against society's needs for chemical husbandry of its agricultural food supply.<sup>11</sup>

### *A. The Effects of Pesticides on Human Health*

America's agricultural bounty is sustained by 2.7 billion pounds of pesticides per year.<sup>12</sup> The devastating reality of this figure is exacerbated by the fact that the majority of the chemicals used to "enhance" our food supply are not "adequately tested"<sup>13</sup> for their causal relationship with cancer, gene mutation and birth defects.<sup>14</sup>

A congressional subcommittee found that as much as eighty-four percent of pesticides lacked adequate carcinogenicity testing, as much as ninety-three percent lacked adequate mutagenicity testing, and as much as seventy percent lacked adequate testing for their tendency to cause birth defects.<sup>15</sup> The Environmental Protection Agency, which regulates pesticides, has reviewed fewer than forty of the six hundred active ingredients found in America's pesticide arsenal.<sup>16</sup> The EPA's unwillingness to effectively research the ingredients that make up pesticides has perpetuated the public's incomplete understanding of the dangers presented by these compounds.

Pesticides are composed of active and inert ingredients.<sup>17</sup> The active ingredients are those that attack the pest or produce another desired result.<sup>18</sup> The remaining ingredients are classified as inert. These inert ingredients may be harmless to the pest but toxic to humans.<sup>19</sup> The majority of pesticide related illnesses are due to the pesticide's interference with the human nervous system.<sup>20</sup> The

toxicity of a given pesticide is further complicated by the fact that it varies according to the surrounding environment.<sup>21</sup> Factors such as soil composition, moisture in the air and wind velocity may alter a chemical compound and its effects.<sup>22</sup>

Pesticides are capable of causing immediate death in extreme circumstances.<sup>23</sup> More commonly, however, pesticide exposure results in muscle fibrillation, dimmed vision, headaches and slowed reaction time.<sup>24</sup> There is also evidence establishing a link between pesticide exposure and longterm or latent diseases. These include reproductive disorders, birth defects, cancer, liver and kidney tumors, and leukemia.<sup>25</sup> Not surprisingly, the brunt of these effects are suffered by America's migrant farmworkers. Their sacrifice, so that our crops may be bountiful, is undeniably disproportionate. The meager wages they receive planting, tending and harvesting the fields of our nation, can hardly compensate them for the tragic sacrifices they often suffer in the end.

#### B. *Migrant Farmworkers: Their Problem and Their Plight*

The data concerning the effects of pesticides on migrant workers is not fully inclusive. As was previously stated, many migrant farmworkers do not report cases of illness and injury. However, of those that are reported, the data is staggering. Studies reveal that migrant farmworkers face alarming health hazards. It is estimated that 300,000 farmworkers are poisoned annually.<sup>26</sup> These workers face a risk 24.76 times higher than that of the general population of developing pesticide related illnesses.<sup>27</sup>

Other studies disturbingly reveal that infant and maternal mortality rates among farmworkers are 125% higher than those found in the general population.<sup>28</sup> Mortality rates from influenza and pneumonia are 200% higher.<sup>29</sup> 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.<sup>30</sup>

The plight of the migrant farmworker is personified in Felipe Franco who was born with no legs and no arms.<sup>31</sup> His mother, Ramona Franco, had been working in pesticide treated farms during the early stages of her pregnancy.<sup>32</sup> Their plight is also personified in Esmaralda Sanchez who developed a

brain tumor when she was five.<sup>33</sup> She spends her days strapped to a wheel chair, barely able to move and unable to remember. She is beginning to open and shut her mouth, but still she can not cry.<sup>34</sup>

Migrant workers often share these risks with others who live in areas surrounding "treated" crops. The cancer cases among children in two California counties has sparked the biggest outcry to date.<sup>35</sup> In three townships, twenty-one children have been diagnosed with cancer, (four times the expected rate), and four children have been diagnosed with leukemia (thirty-five times the expected rate).<sup>36</sup> There is, however, a striking difference between the avenues of recourse available to American citizens and those avenues available to migrant farmworkers. Because migrant workers are less likely to report cases of injury or illness, they are less likely to receive compensation for their unjust suffering.<sup>37</sup>

As illegal aliens, the majority of migrant farm workers are without voting power. Faced with hostility by the powerful agribusiness unions, they lack the power to demand reforms. Because migrant workers often lack educational skills they cannot be effective in communicating their needs to any available legal or political agency. As a result, the injuries and the deaths remain untold and unrestrained.<sup>38</sup>

Finally, for those individuals that manage to overcome all these formidable barriers, the system perpetuates one more major obstacle -- the problem of proving causation in pesticide cases.

#### C. *The Causation Problem*

Proving causation has always been the largest hurdle in pesticide cases. Much of the pesticide testing was done in the 1950's and 1960's, during which time researchers were concentrating on immediate, rather than latent effects of pesticides.<sup>39</sup> For those farmworkers who develop serious latent diseases, such as cancer or leukemia, it is virtually impossible to obtain damages under existing evidentiary requirements.<sup>40</sup> Scientists are reluctant to say for certain that exposure to a toxic pesticide will result in "specific" injuries or illnesses.<sup>41</sup> Isolating and identifying the various factors potentially responsible for the specific illness contributes to the state of uncertainty. These factors are further complicated by problems of synergistic effects and multiple causation.<sup>42</sup>

Benzene provides a good case in point. Exposure to benzene at "certain levels" is known to cause acute myeloid leukemia. At lower levels of exposure, however, benzene cannot be linked, with scientific certainty, to the disease.<sup>43</sup> In the end the issue boils down to the question of research. Whether a pesticide creates specific health hazards is always a scientific question. However, whether that question will be answered and whether the answer will be used to prevent pesticide related illnesses is a question and challenge for the government agencies responsible for regulating the contents and use of these toxic pesticides.

## II. GOVERNMENTAL REGULATION

Each year 800 to 1000 people die and 80,000 to 300,000 people are injured as the direct result of occupational exposure to agricultural pesticides in the United States.<sup>44</sup> These staggering figures should have resulted in governmental agency action designed to ameliorate the problem. Unfortunately, an appropriate remedy has not been forthcoming. Both the Environmental Protection Agency and the Occupational Safety and Health Administration have developed regulations to protect farmworkers from the hazards of contact with dangerous pesticides. The corresponding action taken by the two agencies led to jurisdictional conflict which left migrant farmworkers with regulations that are confusing at best, and ineffective at worst.

### A. FIFRA and The EPA

In 1947 Congress enacted the Federal Insecticide, Rodenticide and Fungicide Act (FIFRA) in response to the proliferation of chemical pesticides following World War II.<sup>45</sup> FIFRA was originally intended to ensure the effectiveness and safety of the pesticide product when used in compliance with regulated, labeled instructions.<sup>46</sup> The Act simply required manufacturers to register new products and to promise that the product was both safe for use and effective as claimed.<sup>47</sup> In the 1960's, public awareness of pesticide dangers grew following the publication of Rachel Carson's *Silent Spring* which focused on the environmental and public health problems posed by pesticides.<sup>48</sup>

Consequently, Congress amended FIFRA by enacting the Federal Environmental Pesticide Control Act of 1972 (FEPCA).<sup>49</sup> It established FIFRA's purpose as the protection of "man and the environment."<sup>50</sup> The Environ-

mental Protection Agency (EPA), created in 1970, was designated to carry out the FIFRA provisions with proper regulations.<sup>51</sup>

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.<sup>52</sup> The 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."<sup>53</sup> This statutory directive forces the EPA to consider not only the risks to migrant farmworkers, but also the powerful economic forces of the agricultural industry which advocate the registration of dangerous pesticides. This statutory mandate creates a conflict of interest within the decision making process of the EPA which, unfortunately, is resolved predominately in favor of agribusiness.<sup>54</sup>

Despite the EPA's authority to regulate pesticides in order to protect "man and the environment," most of its regulatory efforts have been directed towards deciding which pesticides may be registered and who may apply them, rather than at protecting the migrant farmworkers who are exposed in the fields.<sup>55</sup> This slanted regulatory structure that favors the interests of agribusiness over those of the migrant farmworkers is evidenced by the fact that the Administrator of the EPA is required to consult with the Secretary of Agriculture before considering any new regulation.<sup>56</sup> Also, before 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."<sup>57</sup> As a result, there has essentially been inaction on the part of the EPA to effectively advocate on behalf of the migrant farmworkers.<sup>58</sup> Neither the EPA's mandate nor its statutory powers permit it to place itself in opposition to the powerful economic interests of the agricultural industry.<sup>59</sup>

In 1974, pursuant to its statutory authority, the EPA enacted the current Farmworkers Protection Standards of Agricultural Pesticides (FPSAP).<sup>60</sup> These standards currently govern the pesticide-related occupational safety and health of workers performing hard labor operations in fields during and after the application of

pesticides. FPSAP contains five basic requirements: (1) a prohibition against applying pesticides in a manner which directly or through drift expose workers; (2) specific reentry intervals for twelve pesticides and a general reentry interval for all agricultural pesticides which prohibits reentry until the sprays have dried and dusts have settled; (3) a requirement for protective clothing for any worker entering treated fields before the expiration of the specified reentry period; (4) workers are not permitted to enter fields if special circumstances exist which would lead a reasonable man to conclude that such entry would be unsafe; and (5) a requirement for appropriate and timely warnings.<sup>61</sup>

Although these regulations were a positive step toward farmworker protection, they have been predominantly ineffective.<sup>62</sup> The thrust of the standards pertain to application, reentry times and worker warnings.<sup>63</sup> The application standards require appropriate labeling of containers. Migrant farmworkers are not handlers of pesticides and, consequently, lack access to labeled containers. That information source is, therefore, unavailable to them.<sup>64</sup> The specific reentry time limits proscribed by FPSAP are deficient. An example is found in pesticides containing the chemical parathion which has a reentry time of forty-eight hours under FPSAP.<sup>65</sup> As parathion degrades it releases paraoxon, a compound which is fifty-five times more toxic than the parent compound when absorbed through the skin.<sup>66</sup> Thus, the danger from exposure to parathion increases over time after spraying, making a longer reentry time necessary.

The warnings are designed to inform the farmworkers when they are working in a field treated or about to be treated with a pesticide, so that they may take precautionary measures.<sup>67</sup> Although the warning requirement is a positive and appropriate measure, it is faulted in that warnings may be given in written or oral form. Thus, enforcement becomes impossible because there is no way for authorities surveying a field of farmworkers to determine who has been warned.<sup>68</sup> Another fault of the worker warning scheme is that the regulation does not provide the substance of what the warning must contain. The actual warning may be so vague that the workers cannot become cognizant of any possible detrimental health effects resulting from pesticides to which they will be exposed.<sup>69</sup>

The EPA, in exercising its statutory

authority to regulate the application and use of pesticides, has been unresponsive to the dangers faced by the migrant farmworkers. More than fifteen years have passed since the promulgation of FPSAP and agricultural workers today suffer the highest rate of chemical-illness of any occupational group in the United States.<sup>70</sup> Quite possibly the EPA is not well suited to ensure the safety of migrant laborers given the conflict of interest presented in its statutory mandate. A feasible alternative may be to place the responsibility for migrant farmworker safety in the hands of the Occupational Safety and Health Administration (OSHA).

That alternative was realized when the Third Circuit Court of Appeals held in *United Steelworkers of America, AFL-CIO-CLC v. Aucther*<sup>71</sup> (*Steelworkers*) that OSHA must either apply its Federal Health Communication Standards (HCS) to non-manufacturing employers or explain why the coverage is not extended to those workers. In accordance with the court order, OSHA expanded HCS to cover "all employers with employees exposed to hazardous chemicals in their workplace."<sup>72</sup>

#### B. OSHA's Part in Protecting Migrant Farmworkers

The Occupational Safety and Health Act of 1970 established OSHA "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."<sup>73</sup> This mission, if applied to migrant farmworkers, would concern itself solely with their interests and not take into consideration the conflicting interests of agribusiness. OSHA began by directing its attention to industries where the need for protection was deemed the most compelling.<sup>74</sup> This system of prioritizing its regulation of the workplace did not include the agriculture industry or agricultural chemicals. OSHA decided to forego the regulation of the agricultural industry until some type of enforcement standards were developed.<sup>75</sup>

The EPA, under FIFRA, developed standards for the registration and labeling of pesticides.<sup>76</sup> Therefore, the absence of enforceable standards was no longer a viable justification for inaction on the part of OSHA. However, OSHA ceded authority to formulate pesticide safety and health standards for farmworkers to the EPA.<sup>77</sup> Migrant farmworker advocates did not feel that the EPA could adequately protect migrant farmworkers from the hazards posed by pesticide use. In *Orga-*

nized Migrant in Community Action, Inc. v. Brennan<sup>78</sup> (OMICA), a coalition of farmworker advocates asked for a mandatory injunction compelling OSHA to promulgate permanent standards for agricultural employee pesticide exposure. While OMICA was being litigated, the EPA issued the previously mentioned Farmworkers Protection Standards of Agricultural Pesticides.<sup>79</sup> The court decided that the case should be dismissed on the ground that EPA's previous exercise of authority preempted any further OSHA action pursuant to the OSH Act's Section 4(b)(1) preemptive requirement.<sup>80</sup> Thus, it appeared that since the EPA moved first in the farmworker safety arena, it preempted OSHA. Any jurisdictional conflict between the two agencies seemed to be resolved in the EPA's favor. However, as mentioned earlier, the Third Circuit reinstated this conflict when it required OSHA to apply its Federal Health Communication Standards to non-manufacturing employers in *Steelworkers*.<sup>81</sup> Unlike the EPA's standards, OSHA's Federal Health Communication Standards (HCS) inform both handlers and non-handlers of possible pesticide exposure in their work environment.<sup>82</sup>

#### C. The Jurisdictional Conflict

Although OSHA's HCS would be acceptable and welcomed among migrant farmworker advocates, a court may rule that the EPA's FPSAP, no matter how ineffective, preempts OSHA from regulating to protect farmworkers. Section 4(b)(1) of the OSH Act which usurps OSHA's regulatory authority when another federal agency regulates occupational safety states:

Nothing in this [Act] shall apply to working conditions of employees with respect to which other Federal agencies....exercise statutory authority to prescribe or enforce standards or regulations effecting occupational safety or health.<sup>83</sup>

Determining the meaning of "working condition" should resolve the jurisdictional conflict.<sup>84</sup> The term "working condition" could be construed broadly so that applicators of pesticides and farmworkers would be considered to toil in the same working environment. Thus, the EPA's regulations would preempt action by OSHA. However, "working condition" may be interpreted more narrowly. In this case, since handling and applying pesticides is a different job than harvesting produce, different "working conditions" may be construed. The EPA has previously regulated handlers and applicators of pesticides so OSHA is preempted from that "working condition"; but, since the "working condition" of migrant farmworkers is essentially unregulated by the EPA, OSHA would be free to act.

#### D. Conclusion

Ideally, the EPA and OSHA will cooperate in order to comprehensively regulate the use of pesticides.<sup>85</sup> The very salvation of the migrant workers rests upon sound regulation and enforcement which in turn rests significantly upon vigorous EPA and OSHA participation.<sup>86</sup> The EPA can fulfill its statutory mandate established in FIFRA by regulating the registration, handling and application of pesticides.<sup>87</sup> OSHA can fulfill its mission of assuring every working person in this country safe and healthful working conditions by applying its health standards to the agricultural industry and following up this application with proper enforcement. The combined statutory abilities of both agencies could greatly improve the protection provided to migrant farmworkers. Furthermore, since migrant farmworker safety would be in the hands of OSHA instead of the EPA and its covert agenda, the health of the workers would no longer be weighed against the needs and desires of the agriculture industry.

Carlo V. Di Florio & Matthew McLees

#### ENDNOTES

1. The Federal Environmental Pesticide Control Act (FEPCA) defines pesticides as "(1) any substance or mixture of substances intended for preventing, destroying, repelling, mitigating any pest, and (2) any substance or mixture of substances intended for use as a plant regulator, defoliant, or dessicant." 7 U.S.C. § 136(u) (1982).
2. Dennis R. Dullinger, *Cursed Is The Ground: Pesticide Regulation and Farmworkers*, 5 LAW & INEQ. J. 454 (1987). Mr. Dullinger's article takes its title from an appropriate Biblical excerpt:

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 shall thou eat bread, till thou return unto the ground. . . Genesis 3:17-19 (King James) (The Lord to Adam).

*Id.* at 454 n.1.

3. *Id.* at 455. Agriculture employs approximately 21 million people. The combined work forces of transportation, the steel industry, and the automobile industry equals only 2.7 million people. *Id.* at 455 n.6.

4. See generally U.S. Dep't of Agric., *The U.S. Food System-From Production to Consumption*, NAT'L FOOD REV. Y.B. 31 (1987).

5. Dullinger, *supra* note 2, at 454.

6. Lisa Peck Lindelef, *California Farmworkers: Legal Remedies for Pesticide Exposure*, 7 STAN. ENVTL. L.J. 72, 73 (1987-88).

7. Lindelef, *supra* note 6, at 73.

8. L. A. DAILY J., Apr. 4, 1985, at 20, col. 2. Reported statistics on pesticide exposure may be misleading due to lack of adequate data, failure to report cases, and problems of establishing a causal link between the pesticide and the illness or injury.

9. Dullinger, *supra* note 2, at 454.

10. *Id.* See also Jay Feldman, *Federal Pesticide Control Law: The Need For Reform*, 15 ENVTL. L. REP. (Envtl. L. Inst.) No. 5 at 10, 132 (1985).

11. Dullinger, *supra* note 2, at 455.

12. *Id.* Differing sources will provide figures above and below the one quoted. The confusion may be attributed to the form in which pesticides are sold. A better indicator of pesticide usage may be the fact that more than 95% of the acreage in the U.S. which is devoted to field crops, is treated annually with one or more herbicides. *Id.* at 455 n.8.

13. *Id.* The definition of "adequate testing" is somewhat elusive since gaps in the initial studies become evident as scientific advances make the original studies obsolete. Similarly, as the product is put to use, toxic effects become apparent which were not originally tested for or perceived. *Id.* at 456 n.13.

14. See generally O. Wong et al., *Mortality of workers Potentially Exposed to Organic and Inorganic Brominated Chemicals*, 41 BRIT. J. INDUS. MED. 15 (1984) (discussing the relationship between occupational pesticide exposure and cancer).

15. Dullinger, *supra* note 2, at 456.

16. *Id.*

17. Lindelef, *supra* note 6, at 78.

18. *Id.*

19. *Id.* The chemical components may eventually break down into harmless compounds, but they may become more toxic in the interim as they interact with other elements such as the atmosphere and the soil. *Id.*

20. Ralph Lightstone and William W. Monning, *How to Handle a Pesticide Case*, in 2 A GUIDE TO TOXIC TORTS §23.02(2), at 24 (Searcy 1987).

21. Lindelef, *supra* note 6, at 80. The type of soil and the irrigation schedules may affect where and what kind of chemicals should be applied. *Id.*

22. *Id.*

23. *Id.* at 81.

24. Lightstone and Monning, *supra* note 20, §23.03-[4], at 31-32. This problem is complicated by the fact that poor workers may fail to seek medical attention because they are unable to pay for doctor's visits or tests.
25. *Id.* at 37-40. One study has even linked pesticide exposure to Parkinsons disease.
26. ROBERT WASSERSTROM & RICHARD WILES, *FIELD DUTY: U.S. FARMWORKERS AND PESTICIDE SAFETY* 3 (July 1985).
27. *Legal Rights of Migrant and Seasonal Workers*, 19 CLEARINGHOUSE REV. 1108, 1110-11 (1986).
28. Dullinger, *supra* note 2, at 457.
29. *Id.*
30. *Id.* See also Paolo Stringini, *On the Political Economy of Risk: Farmworkers, Pesticides and Dollars*, 12 INT'L J. HEALTH SERVICE 263, 274 (1982).
31. William Fulton, *Fruit of the Poisonous Vine*, 7 CALIF. LAW. 2, 26 (July 1987).
32. *Id.*
33. *Id.*
34. *Id.*
35. *Id.* at 66.
36. *Id.*
37. Lightstone and Monning, *supra* note 19, §23.05[2], at 63-65.
38. Dullinger, *supra* note 2, at 461.
39. Lindilef, *supra* note 6, at 82.
40. Christine M. Grant, *Establishing Causation in Chemical Exposure Cases: The Precursor Systems Theory*, 35 RUTGERS L. REV. 164 (1982).
41. Robert E. Shields, *Proof of Causation*, in 1 A GUIDE TO TOXIC TORTS § 10.01[2], at 7-8 (Searcy 1987).
42. *Id.*
43. Grant, *supra* note 40, at 164:

The victim who develops leukemia as a result of exposure to such low levels of the chemical can therefore produce no direct evidence that his disease was casually related to that exposure. Because the chemicals toxicity can not be established, such a plaintiff is unable to produce sufficient evidence of causation to withstand a motion to dismiss. *Id.*
44. Elise M. Burton, *Interagency Race to Regulate Pesticide Exposure Leaves Farmworkers in the Dust*, 8 VIR. ENVTL. L. J. 293 (Spring 1989).

Farmworkers and commercial pesticide applicators face the highest rate of occupational injuries as a result of pesticide exposure according to the Labor Department. Pamela A. Finegan, *FIFRA Lite: A Regulatory Solution or Part of the Pesticide Problem?* 6 PACE ENVTL. L. R. 615, 624 (1988-89).
45. Federal Insecticide, Fungicide, and Rodenticide Act of 1947, ch. 125, 61 Stat. 163.

"Wartime research into pesticides was spurred on by the need to increase the food supply and prevent the spread of malaria and typhus to soldiers by disease-carrying pests. Additionally, chemical warfare research resulted in the discovery of chemicals found to be lethal to insects." Finegan, *supra* note 44, at 619.
46. Dullinger, *supra* note 2, at 461.
47. CHRISTOPHER J. BOSSO, *PESTICIDES AND POLITICS* 58 (1987).
48. RACHEL CARSON, *SILENT SPRING* (1962).



"Carson presented a frightening picture of massive fish kills, residue-saturated milk from cows grazing on treated pastures, a poisoned wildlife population and a human population plagued by a host of new pesticide-induced diseases." Finegan, *supra* note 44, at 620.

49. Federal Environmental Pesticide Control Act of 1972, Pub. L. No. 92-516, 86 Stat. (1972).
50. 7 U.S.C. § 136(c) (5) (D) (1988).
51. Unfortunately, most of the pesticides used today are registered under previous versions of FIFRA utilizing far less stringent requirements. Finegan, *supra* note 43, at 616.
52. 7 U.S.C. § 136a (c) (5) (1988).
53. 7 U.S.C. § 136(bb) (1988).
54. For example, in 1984, a decade after The National Cancer Institute determined that grain fumigant ethylene dibromide (EDB) was a possible human carcinogen, the EPA removed EDB from the market. Dullinger, *supra* note 2, at 468.
55. Burton, *supra* note 44, at 303.
56. 7 U.S.C. § 136w (a) (2) (1988).
57. 7 U.S.C. § 136w (a) (B) (1988).
58. Another example of how the bulk of pesticide issues are resolved in favor of the agricultural industry is the history of the EPA hotline. The EPA implemented the hotline to permit workers to report pesticide poisoning incidents. It would have been the only mandatory mechanism enabling the federal government to receive such complaints. Under agribusiness pressure all funds for the hotline were cut off. Dullinger, *supra* note 2, at 469.
59. Dullinger, *supra* note 2, at 480.
60. See 40 C.F.R. § 170 (1991).
61. *Id.*
62. In a legislative attempt to amend FIFRA, one senator commented that "in the last two decades the sum total of EPA's actions to protect agricultural workers amounts of the adoption of one-half a page of now antiquated and meaningless regulations." 132 Cong. Rec. S 15286, Vol. 132 No. 136 Federal Insecticide, Fungicide, and Rodenticide Act Amendments (statement of Sen. Proxmire).
63. Burton, *supra* note 44, at 304.
64. These standards do not provide migrant workers with information about the health effects of the pesticides to which they are exposed. Burton, *supra* note 44, at 305.
65. 40 C.F.R. § 170.3 (b) (2) (1991).
66. Dullinger, *supra* note 2, 464.
67. 40 C.F.R. § 170.5 (1991).
68. Farmworker organizations would encourage utilizing only written or posted warnings in a field which has been or will be sprayed. This would provide an inspector with an efficient method of determining which fields should be watched and, more importantly, a method of substantiating regulation violations. Dullinger, *supra* note 2, at 465-66.
69. The warning should contain both the name of the pesticide and its known toxicity to be of any use to migrant workers. *Id.* at 466.
70. Burton, *supra* note 44, at 293. Bureau of Labor statistics data show a rate of 5.5 illnesses per 1,000 workers. *Id.*
71. United Steelworkers of America, AFL-CIO-CLC v. Aucter, 763 F.2d 728 (3rd Cir. 1985).

72. OSHA Final Rule, 52 Fed. Reg. 31,852 (1987). Interestingly, OSHA received "considerable criticism from agricultural representatives expressing surprise and concern over the 'regulatory burden' that they will be expected to bear." Burton, *supra* note 44, at 302.

73. 29 U.S.C.A. § 651(b) (1985).

74. 29 U.S.C.A. § 655(g).

75. Burton, *supra* note 44, at 298. See also Lindelef, *supra* note 6, at 86.

76. 7 U.S.C. § 136.

77. In *Florida Peach Growers Association, Inc. v. United States Department of Labor*, 489 F.2d 120, 132 (5th Cir. 1974), the court found that OSHA had failed to demonstrate "by substantial evidence that agricultural workers are exposed to grave dangers from exposure to organophosphorus pesticide residues on treated plants that must necessarily be protected by an emergency temporary standard."

78. 520 F.2d 1161 (D.C. Cir. 1975).

79. Worker Protection Standards for Agricultural Pesticides; Proposed Rule, 39 Fed. Reg. 9,457 (1974).

80. 520 F.2d at 1166.

81. See note 70 and accompanying text.

82. The HCS requires non-manufacturing employers using hazardous chemicals to:

- 1) develop a written hazard communication program, that includes a list of all hazardous chemicals in the workplace;
- 2) maintain material safety data sheets (MSDS) on each hazardous chemical in the work area and make them available to employees or their representative upon request;
- 3) maintain labels on containers of hazardous chemicals other than pesticides that state the name of the product and appropriate hazard warning; and
- 4) provide employees with information and training regarding hazardous chemicals in their work area.

Burton, *supra* note 44, at 306-07.

83. 29 U.S.C. § 653 (b) (1) (1982).

84. The Fourth Circuit held that "working condition" as used in Section 4 (b) (1) of the OSH Act means "the environmental area in which an employee customarily goes about his daily tasks." *Southern Railway Co. v. Occupational Safety & Health Review Commission*, 539 F.2d 335, 339 (4th Cir. 1976).

85. The EPA stated a desire to "continue to have discussions with other Agencies involved to more clearly delineate the scope of the respective regulatory requirements in these areas [pesticides]." Burton, *supra* note 44, at 315.

86. If a court decides that OSHA is preempted by the EPA, then FIFRA should be amended to guarantee migrant farmworker safety. The amendment should include the establishment of strict training requirements, minimum protective clothing requirements, safe reentry periods and medical surveillance measures. Also, workers should be granted whistleblower protection to protect them from retaliatory discharge if they inform officials of employers' FIFRA violations. Finegan, *supra* note 44, at 639.

87. The EPA, under FIFRA, should encourage the use of integrated pest management techniques and require the use of nonchemical methods of pest control. These methods would consist of the utilization of: natural enemies, crop rotation, disease-resistant crop varieties, and mechanical tillage. Finegan, *supra* note 44, at 639-40.

