

THE U.S. FEDERAL PESTICIDE LAW: WHY IT IS NOT PROTECTING USERS AND THE PUBLIC, AND THE NEED FOR LEGISLATIVE ACTION¹

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Abstract. While pesticides have been credited with enhancing the nation's general quality of life, the dramatically rising use of toxic chemicals also irreversibly tampers with the delicate ecological balance, often threatening society's human and environmental health. The existing statutory and regulatory program governing pesticide registration and use does not assure the public, users and consumers alike, that marketed products are indeed safe. A review of the U.S. Environmental Protection Agency's pesticide program and its authorizing legislation, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), reveals numerous problems such as: faulty product safety test data; inadequate health and environmental effects test data; back door product registration allowing the continual and expanded marketing of untested or poorly tested pesticides, and; poor enforcement of the law. Legislation has been introduced in the U.S. Congress, entitled the Federal Insecticide, Fungicide and Rodenticide Reform Act (H.R. 3818 and S. 1774), which would put in place a system of controls that by their very nature would provide the assurances of safety that the public wants and deserves.

Because of problems associated with its implementation since it was overhauled in 1972, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) is the focus of intense debate. At issue is the question of whether the public, both applicators and consumers alike, are adequately protected from the dangers of toxic pesticides.

A movement exists in this country that seeks to improve protections from pesticides. A range of people are aligned with efforts to improve the federal pesticide law — through the Federal Insecticide, Fungicide and Rodenticide Reform Act (H.R. 3818 and S. 1774). The range is characterized by all age groups backgrounds and political persuasions. There are those who consider themselves victims of pesticide misuse, hav-

ing been exposed through pesticide drift or contamination of their home by a structural pesticide application. These people are joined by others such as farmers, genetic toxicologists, cancer researchers, former chemical company scientists, former regulators with state and federal agencies (some currently employed as well), physicians and attorneys.

Because of these people's experiences and knowledge, they have joined together to improve the control of pesticides through improved laws and they have sought to promote alternative pest management strategies, such as Integrated Pest Management (IPM) and nonchemical approaches, which reduce or eliminate pesticide use while improving protection against pests.

What are these people concerned about? Why do they wince when they hear a pesticide applicator say, "The pesticides are safe the way we use them."?

The Myth of Safety

At the heart of any discussion of pesticide safety is the status of what we know and do not know about the pesticide products in question. Central to the discussion, of course, is the registration status of the product and all that it means. For it is, in fact, that registration process carried out by the U.S. Environmental Protection Agency (EPA) that is intended to provide assurances that the public was protected against "unreasonable adverse effects," as the U.S. national pesticide control law says it. It was, in fact, the registration process that was intended to provide the basis for determining other measures of safety related to ingestion of

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pesticide residues or exposure by whatever means, be it from handling the material or from involuntary exposure to drift or simply from eating food with pesticide residues.

It is no secret, in fact, the registration process and thus the government's seal of approval quickly becomes meaningless to those who are familiar with the status of pesticide products' health and safety data packages. First and foremost, the requirements of registration and testing were upgraded with the adoption of the 1972 amendments to the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). New requirements for review imposed a re-registration process that has been plagued by fits and starts from day one. However, once the program got underway and even before, it became obvious that pesticides in widespread use were registered with inadequate data (based on faulty protocols and testing methods), missing data and faulty and fraudulent data. And yet, the EPA's pesticide program moved along, attempting to deal with its overwhelming task, while the users and the public assume that the EPA-approved product label and registration number were their assurance of safety.

In the mid to late '70s and early '80s, after EPA grappled with Congressional intent to establish a revamped national pesticide control program, it became clear that the program was not operating effectively or as many had originally intended. While this may have been or still is not known to pesticide users or the general public, it is known to EPA officials and the U.S. Congress that there exist thousands of hours of Congressional and Agency hearings, numerous U.S. General Accounting Office reports, many comprehensive Congressional reports, a National Academy of Sciences study and dozens of confirmed contamination and poisoning cases that tell the tale loud and clear.

The U.S. General Accounting Office in 1975 randomly selected 36 pesticides with established tolerances and in their report, *Federal Pesticide Registration Program: Is it Protecting the Public and the Environment Adequately from Pesticide Hazards?*, (1) found that: seven lacked cancer and reproduction studies; fourteen lacked birth defect studies, and; twenty-three lacked mutation

studies. EPA responded by saying, "GAO's criticisms are well-founded, and we are very much concerned about tolerance-setting problems."

The question of health and safety data validity was first brought to light in 1976 by the staff of the Subcommittee on Administrative Practice and Procedure of the U.S. Senate Judiciary Committee. Senator Kennedy introduced the report, entitled, *The Environmental Protection Agency and the Regulation of Pesticides* (2) saying, "Apparently EPA made a conscious policy decision sometime in 1973 not to evaluate the safety testing data submitted by pesticide manufacturers. The record behind this decision is not entirely clear. What is clear, however, is that EPA had no sound basis upon which to assume that data 15-20 or 25 years old was generally good and reliable."

A U.S. Food and Drug Administration audit in 1976 revealed that a major independent lab testing firm, the Industrial Bio-Test (IBT) Laboratories, Inc., was falsifying safety test data being submitted to EPA as part of pesticide product registration. IBT had performed thousands of scientific safety tests used to register hundreds of pesticides. The findings confirmed a situation that was even worse than the Kennedy report revealed.

A U.S. House of Representative Subcommittee Staff Report in 1982 entitled the *EPA Pesticide Regulatory Program Study* (3) concludes, "Except for the IBT case (which occurred before the audit program began), there is no solid indication however, that any decisive regulatory or enforcement actions have been taken as a result of the laboratory audit program."

A 1980 U.S. General Accounting Office report, entitled *Delays and Unresolved Issues Plague New Pesticide Protection Programs* (4) indicates that the deficiencies outlined in the earlier 1975 report had not improved. The report states, "Our 1975 report to Congress stated that the public is exposed daily to many pesticides which are not supported by animal and environmental safety studies. The situation has not improved." The report continues, "According to EPA officials, key tests required under current EPA regulations have not been performed for many of the 514 registration standards. Included are long-term (up to 3

years) animal feeding studies which show whether a pesticide causes chronic effects, such as cancer or birth defects, in animals. An official told us that EPA needs the results of these tests to make even preliminary decisions concerning a pesticide's safety and whether it should be re-registered."

Finally, two recent reports indicate how little we know about pesticides' health effects. The 1982 staff report cited above reveals discomfiting figures indicating: (i) between 79 and 84 percent of the pesticide products on the market have not been adequately tested for the capacity to cause cancer; (ii) between 90 and 93 percent of the same products have not been adequately tested for their ability to cause genetic damage; (iii) between 60 and 70 percent have not been fully tested for their ability to cause birth defects (5). In 1984 the National Research Council of the National Academy of Sciences released a 382-page report, entitled *Toxicity Testing: Strategies to Determine Needs and Priorities* (6) which says complete health hazard assessments for pesticides and inert ingredients of pesticide formulations are possible for only 10 percent of pesticides.

In conclusion, claims that products are safe can be rarely justified with complete health and safety test information that is in compliance with modern safety standards.

This, then, serves as background for concern about pesticide exposure. The concern is not abstract. A January, 1981 report issued by the Council on Environmental Quality, *Chemical Hazards to Human Reproduction* (7) cites various studies of male and female workers exposed to pesticides. These studies report impotence, chromosome aberrations, infertility, miscarriages and other adverse effects on reproduction. A University of Iowa study (8) in 1982 found that Iowa farmers faced greater risks of six types of cancer than city dwellers. According to the researchers, the cancer rate is an occupational hazard of farming not related to smoking.

Contributing to the Myth

Other issues take on more importance with this background. It is essential that pesticide products be handled with the utmost of care. Untrained or

inadequately trained pesticide applicators give the industry a bad name. More than 1.5 million individuals have been certified since the certification program's inception in 1978. The General Accounting Office's 1983 review of the joint federal-state program for certifying and training these individuals to apply pesticides (9) indicates the "certification examinations do not fully conform to the federal requirements and as a result do not provide assurance of an individual's competency. Given underlying problems with the safety of products, the training program becomes more important when we consider the problems associated with over application, lack of safety precautions, and improper mixing, loading and storage of chemicals.

Responding to the Myth

Failing an adequate response from EPA over the last 12 years since the federal pesticide control law took its current form, various efforts have been ongoing to improve the situation. Many local, statewide and community groups have taken the question of adequate public health and environmental protections from pesticides to the courts, city councils, state legislatures and the U.S. Congress.

Legislation pending before the U.S. Congress, the Federal Insecticide, Fungicide and Rodenticide Reform Act (H.R. 3818 and S. 1774) seeks to:

- Ensure that pesticides are in compliance with the most modern testing requirements for cancer, birth defects, gene mutation, as well as other health effects;
- Assure that data gaps (missing safety information on products already in use) are filled;
- Control "backdoor" registrations, such as "emergency exemptions" and "special local need permits," which allow untested products to be marketed and their uses expanded;
- Permit EPA to act on pesticides that have been registered with false, misleading or inaccurate information;
- Strengthen ground water protection, improve protection for those handling pesticides, establish improved standards for farmworker safety, and enable the development of standards for indoor pesticide residues;

- Establish improved research and monitoring through a national monitoring plan for the collection and dissemination of data on pesticides used by crop and geographical area, on human exposure, and on pesticide residues in the environment;

- Increase public input in pesticide decisions;
- Improve enforcement of pesticide law through a citizen suit (or private right of action) provision; and,

- Establish a fee system for registrants using EPA's pesticide registration program.

While pushing for improvements in the law, many are responding to the problem by promoting pest management strategies which reduce pesticide use and, at the same time, save money. For example, a program carried out by William and Helga Olkowski in 1970, while in the Division of Biological Control at the University of California-Berkeley, effectively reduced the City of Berkeley's reliance on pesticides. The year the project began the city applied pesticides to 11,500 trees. After the first year of integrated pest management, only 350 trees were sprayed and the city saved \$22,500. The Olkowski's say they have encountered no pest problem that does not have an IPM response.

Conclusion

There is no doubt that the state of the pesticide registration program at the U.S. Environmental Protection Agency is most disturbing to the public and those concerned about the future health of our nation. In fact, people are angry to learn that they have been misled about a product's safety, whether they are farmers, pesticide applicators or consumers.

The days are over for considering chemicals innocent (safe) simply because they made it onto the market either before the 1972 FIFRA amendments were implemented or by virtue of faulty or inadequate data or because of existing legal loopholes such as conditional registration, special local need permits or emergency exemptions. No

longer will the courts or state governments accept the statement that "there is not sufficient evidence to indicate that the use of this product in accordance with label directions would pose the risk of unreasonable adverse effects."

The task ahead to re-register hundreds of pesticides is formidable. A coalition of health, environmental, labor, consumer, farm and farm worker groups have proposed a number of tightening amendments to FIFRA and support H.R. 3818 and S. 1774. However, regardless of the path to re-registration that you advocate, we seek a process that along the way strives for openness and the ultimate restoration of trust in the U.S. Environmental Protection Agency, which was established to protect public health and the environment.

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