Pesticide Application

REGULATORY PRACTICES

GOVERNMENT at any level—federal, state, county, municipal—will continue to affect the use of chemicals for weed, insect, and disease control. All chemical users—ground and aerial applicators, city and park departments, golf course operators, and others who do either noncrop or crop pest control—are subject to control regulations.

No user will quarrel with the need for regulation. Practically every pesticide applicator, however, is concerned with the type of law and the enforcement which regulates his operation.

Companies who manufacture and formulate pesticides and operators who use them agree that the public good must be served. This concern is reflected by them at conferences and various meetings and conventions. They also rightfully contend that effective legislation must effect a balance between public safety on the one hand and bans plus policing on the other.

The balance today is fluid in nature. Licensing laws vary from

state to state, as do regulations. Overriding these are various federal regulatory laws and practices. Varying state use and application laws create problems for pesticide applicators who must cross state lines in their businesses. Added to this present state of affairs is continued pressure from many sources for further legislation, some of which may be helpful and other proposals which may prove unnecessarily restrictive.

Influence On Legislation

New laws are inevitable. They can be helpful to the industry and at the same time protect public concerns relating to potential injury to humans and wildlife. An important facet of any proposed legislation is the source or goals of the many proponents. No single voice exists which reflects the collective thinking of manufacturers, users, government, and the public.

Government itself offers a good example of conflicting goals. The U.S. Department of Agriculture, with almost 100 sep-

Table I. Pestici de Use Law Chart Laws And Regulations Relating To The Use Of Pesticides Generally July 1967

	Products Covered					Users Covered		Licenses or Permits Required		
	INSECTICIDES	FUNGICIDES	HERBICIDES	RODENTICIDES	OTHERS	AERIAL APPLICATORS*	GROUND APPLICATORS	AERIAL APPLICATORS	GROUND APPLICATORS	OTHERS
Alabama	X	X	V 1	X	3	Cu	Cu	Cu	Cu	
Arizona	X	X	X	X	1	All	Cu	All	Cu	10
Arkansas	X	X	X	X		Cu	Cu	Cu	Cu	
California	X	X	X	X		All	All	All	All	5
Colorado	X	X	X		1,6	Cu	Cu	Cu	Cu	Department of the last
Connecticut	X	X	X	X	2,3	All	Cu	All	Cu	7
Florida	X	X	X	X	SHIP TO SERVE		Cu	lettern on	Cu	
Hawaii		OF SALE	X	Telminar.	STREET, S	All	All	All	All	4,5
Idaho	X	X	X		1	Cu	Cu	Cu	Cu	
Illinois	X	X	X	A MARKET	THE SHALL	Cu	Cu	Cu	Cu	8
Indiana	X	X	X	X	2	All		All		THE STATE OF
Iowa	X	X	X	X		Cu	Cu	Cu	Cu	
Kansas	X	X	X	X		All	Cu	All	Cu	
Kentucky	X	X		X			Cu	1	Cu	SECTION AND ADDRESS OF THE PARTY OF THE PART
Louisiana	X	X	X	X	1	Cu	Cu	Cu	Cu	8
Maine	X	X	X	X		All	Cu	All	Cu	-
Massachusetts	X	X	X	X	9	All	All	All	Cu	9
Michigan	X	X	X	X		Cu	Cu	Cu	Cu	
Minnesota	X	X	X	X		All	Cu	All	Cu	
Mississippi	X	X	X	X	3	All	Cu	All	Cu	
Nevada	X	X	X	X	2	Cu	Cu	Cu	Cu	2
New Hampshire	X	X	24	A		Cu	Cu	Cu	Cu	4
New Mexico	X	X	X	X	1	Cu	Cu	Cu	Cu	
New York		Λ	X	Λ	8,9	Cu	Cu	Cu	Cu	8.9
North Carolina	X	X	X	X	0,9	A 11		All		0,9
North Dakota	X	X	X	X	2	All		All	N. Carroller	
Ohio	Λ	Λ	X	Α	2	8	0		0	0
Oklahoma	X	X	X	X			8	8	8	8
	X	Λ	X	Λ	1	Cu	Cu	Cu	Cu	8
Oregon Rhode Island	X	X	X	V		All	All	All	All	5
				X	RESTABLISHED	Cu	Cu	Cu	Cu	
South Dakota	X	X	X	X		All	Cu	All	Cu	
Tennessee	X	X	-	X	St28	Cu	Cu	Cu	Cu	edi tak
Texas	77	**	X			All	All	All	All	4,5
Utah	X	X	X			All	Cu	All	Cu	
Vermont	X	X	X	X		All		All		
Washington	X	X	X	X	1,6	All	All	Cu	Cu	96 July 1
Wisconsin	X	and the				9	9	9	9	9
Puerto Rico	THE STATE		X			8	8	8	8	8

All—All users (those treating their own land and custom applicators)

Cu—Custom applicators only
1—Plant growth regulators and defoliants
2—Fertilizers and/or seeds
3—Sprays or methods used to improve the condition of trees
4—Manufacturers and dealers
5—Owner of land to be treated
6—Nematocides
7—Tree experts
8—Special statute relating to herbicides
9—Pertinent only to application of chemicals to water and to non-crop areas. See Statute
10—Growers and sellers

^{*} The federal government exercises some control over use of pesticides by requiring agricultural aircraft operators to obtain certificates when engaged in spraying economic poisons. Certification is awarded by the FAA only when certain standards are met by the pilot. No pilot may, under these regulations, dispense an economic poison that is registered under FIRA (1) for a use other than that for which it is registered, (2) contrary to any safety instructions or use limitations on its label or (3) in violation of any federal law or regulation. These rules do not exempt the aerial applicator from more stringent state laws which may be in effect.

arate divisions, seeks varying controls and moneys for programs. Then there is the Department of Interior with further regulatory program goals. The Federal Aviation Agency (FAA) controls aerial applicators with special regulations regarding the spraying of economic poisons. Finally the Department of Health, Education and Welfare probably exerts more influence on regulation than any major area of government. State governments along with counties and municipalities also come in for a stake in control programs. The Council of State Governments as an association represents many facets of local government. Public educational and research groups exert further influence.

Outside government are the many associations representing segments of industry. In addition to these are organized citizen groups and individuals; Rachel Carson, prior to her death, was among the best known of the latter. All influence government, and all are influenced by government.

In brief, society represented by each group or individual will judge any risk involved and the degree or type of future pesticide control will be determined. Far more research and information is needed than is available if these decisions are to be made intelligently.

Legal control today can be tabbed as indirect and direct. Indirect control is made up of federal and state registration or labeling laws. Added to these are regulations concerning residue tolerances. Direct control is maintained by applicator licensing laws and specific rules regarding particular pesticides.

Federal Pesticide Laws

One major federal law with amendments almost sums up federal control in the non-crop horticultural field. This is the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) which was passed in 1947. It supersedes the previous Federal Insecticide act of 1910.

In short, the FIFRA requires registration by the USDA for any "economic poison" which can be classed as an insecticide, fungicide or rodenticide. Popular definition as used to regulate chemicals is that "economic poison" means "pesticides" and the law treats it as such. The law defines an "economic poison" as:

"(1) any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, weeds, and other forms of plant or animal life or viruses, except viruses on or in living man or other animals, which the Secretary shall declare to be a pest, and (2) any substance or mixture of substances intended for use as a plant regulator, defoliant or desiccant."

In 1959, an amendment to the FIFRA was added. This was the Nematocide, Plant Regulator, Defoliant and Desiccant Amendment. It covers those materials named in the amendment and requires registration.

Another 1964 amendment further changed the original FIFRA. It was Public Law 80-305 and eliminated the controversial "registration under protest" rule which allowed sale of an unregistrable product when a protest was duly filed. It also required manufacturers to remove unwarranted safety claims from package labels.

A number of other bills and amendments have been passed prior to this major Act and since regarding pesticide tolerances in food. None, however, have any specific bearing except in the crop segments of pesticide use.

State Pesticide Legislation

Two types of state pesticide

laws exist. First are the registration laws which control distribution and sale of pesticides in intrastate commerce. Some states also have specific tolerance controls regarding chemicals used in agriculture. Most such state laws are modeled after the FIFRA federal act and follow the "Uniform State Pesticide Act" recommended by the Council of State Governments. Some 47 of the 50 states have adopted this or a similar law. Only Indiana, Delaware, and Alaska do not have state labeling regulations.

Most states, now about 35, have licensing provisions and specific regulations as to use of pesticides, inspection of equipment, and application practices. These are termed Custom Applicators Acts, Pest Control Operators Laws, and Aerial Application Regulations. (See Table I)

Conclusions

Improved administration of present laws and regulations is needed. In some instances, further regulation is necessary as a practical means of minimizing pesticide accidents and thereby protecting the industry against almost certain restrictive legislation should a major calamity occur. Best statement on the subject recently is that by Douglass F. Rohrman, J.D. National Communicable Disease Center, U.S. Department of Health, Education and Welfare, Atlanta, Ga. Rohrman states in the new Pesticides Program Training Guide* that "Statutory control should not only regulate, restrict and likewise even make lawful certain acts and procedures, but also, pesticide laws should serve as educational tools to inform and delineate proper activities of users, sellers and applicators. . . . Statutory language, while not necessarily explanatory per se. should be detailed enough to point out the proper means of compliance."

^{*}Available by writing Rohrman of NCDC at Atlanta.