



**House
Legislative
Analysis
Section**

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COMMERCIAL PESTICIDE APPLICATORS

House Bill 4674 as passed by the House
First Analysis (7-29-87)

Sponsor: Rep. Debbie Stabenow
Committee: Agriculture and Forestry

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THE APPARENT PROBLEM:

In 1984, as a result of growing public concern about pesticide use, Governor Blanchard asked the Cabinet Council on Environmental Protection to review pesticide regulations and to develop a strategy for improving the management and regulation of pesticides within the state. The Cabinet Council selected a pesticide subcommittee consisting of the directors of the Departments of Agriculture, Natural Resources, Public Health, and Transportation, and charged it with preparing a strategy for improved pesticide management in a report to the full council. The subcommittee assembled a pesticide work group to examine a series of questions regarding pesticide management issues and to make recommendations for improvements in pesticide management and regulation. In December 1985, the Pesticide Subcommittee submitted a report, "A Strategy for Improved Pesticide Management in Michigan", to the full council. The report addressed eleven major pesticide control issues, and offered recommendations for improving the management, use, and regulation of pesticides in Michigan. In the fall of 1986, a work group was formed by Representative Debbie Stabenow to work on amendments to the Pesticide Control Act that would implement some of the report's recommendations. The work group, which began meeting in October 1986, included representatives from governmental agencies, the chemical industry, environmental groups, and farm worker organizations. In April of 1987 the group produced a bill which would amend the Pesticide Control Act in accordance with some of the recommendations in the governor's report.

THE CONTENT OF THE BILL:

The bill would amend the Pesticide Control Act in a number of ways, most of which would apply primarily to commercial pesticide applicators. The bill would:

- require the registration of certain commercial pesticide applicators and establish their training and other qualifications;
- expand the powers of the director of the Department of Agriculture (MDA) to restrict certain pesticides and to take other administrative action;
- add or increase penalties for violations;
- increase fees;
- create a pesticide control fund in the Department of Agriculture;
- require the MDA to submit certain administrative rules to the legislature within a year of the bill's enactment; and
- restructure the Pesticide Advisory Committee.

Pesticide applicator categories: Add "registered applicator". The Pesticide Control Act requires that anyone using or supervising the use of a "restricted use" pesticide be certified by the state. (The one exception to this requirement concerns farm workers supervised by a farmer certified to use or supervise the use of restricted use pesticides.)

The law recognizes two kinds of certified applicators: commercial and private. Basically, a private applicator (which the bill would rename "private agricultural applicator") must be a farmer who applies pesticides to his or her own land for agricultural purposes, while a commercial applicator is anyone else who applies restricted use pesticides and who is not a food producer. Commercial applicators thus include both those who apply pesticides for hire (and who also must be licensed by the state, such as professional pest exterminators) and those who apply restricted use pesticides to their own property for non-agricultural purposes. Thus, for example, a homeowner applying restricted use pesticides in the home technically is a commercial, not private, applicator, since the pesticide application is not for the purpose of producing an agricultural commodity (though that homeowner still could not offer his or her services to others for a fee without first also becoming licensed by the state).

In addition to these two kinds of certified applicators, the bill would add a third kind of applicator, the "registered applicator", which basically would apply to employees of certified commercial applicators.

Registered applicators would be registered for three years, during which time they would be allowed to apply general use pesticides under the supervision (whether on or off-site) of a certified commercial applicator. However, in order to apply a restricted use pesticide, the registered applicator would have to be under the direct supervision (that is, in the physical presence of) a certified applicator. During the initial three years of registration, a registered applicator eventually could apply specific restricted use pesticides without direct supervision, provided that he or she had been directly supervised by a certified applicator for a certain number of hours (to be specified by administrative rule) while applying that pesticide. If a registered applicator decided to apply for re-registration after the initial three years, he or she could apply only general use pesticides. In order to apply restricted use pesticides, the re-registered applicator would once again have to be directly supervised in the application of that pesticide for the required number of hours. Registered applicators could be employees either of non-agricultural pesticide businesses or of commercial applicators who specialize in agriculture (so-called "custom farm applicators"). Registered applicators would have to complete a training program approved by the Department of Agriculture, pass an exam administered by the department, and pay a registration fee.

Note: Farm employees could apply restricted use pesticides without being either certified or registered provided that (1) the farmer they worked for was certified to apply restricted use pesticides, and either (2) the farmer was in the same field at the time the worker applied the pesticide or (3) the farmer supervised the worker "at all times" and "directly" supervised "representative aspects" of the pesticide application process (including the calibration,

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mixing, and application of the restricted use pesticide, as well as the operator safety and disposal aspects of the process). The bill would further specify that certified applicators would be required to provide training to noncertified and nonregistered agricultural employees who apply pesticides.

Administrative powers of the director of the MDA. The director of the MDA would be authorized to classify a pesticide as a restricted use pesticide (RUP) by administrative order if certain criteria are met. The director would be able, after notice and an opportunity for a hearing, to impose administrative fines of up to \$1,000 for violations of the act or could issue a warning in lieu of a fine. The director also would be authorized to refuse to register a pesticide or to cancel or suspend a pesticide registration if substantial scientific evidence indicated that the product caused (or was likely to cause) an "unreasonable" adverse effect or a serious, chronic hazard to humans or to the environment.

Penalty provisions. In addition to allowing the director to impose administrative fines, the bill would increase the penalty provisions in the act to the levels that exist in current federal law.

Currently, anyone who violates the act is guilty of a misdemeanor and subject to a fine of \$500. The bill would specify that a registrant, commercial applicator, registered applicator, restricted use pesticide dealer, or a distributor who knowingly violated the act or a rule promulgated under the act would be guilty of a misdemeanor and subject to a fine of up to \$5,000. If the violation were with malicious intent, the fine could be up to \$25,000. Private agricultural applicators and anyone else violating the act or rules promulgated under the act also would be guilty of a misdemeanor and could be fined up to \$1,000. In addition to criminal fines, the courts also would be authorized to impose civil fines of up to \$5,000 per violation.

Fees. The annual registration fee for pesticides would be raised from \$10 to \$20, while the fee per pesticide product after the first ten products registered would be raised from \$6 to \$10. The certification fee for all but private agricultural applicators would be raised from \$10 to \$50, and the license fee also would be raised to \$50 from the present \$20. A registered applicator's fee would be set at \$25.

Pesticide Control Fund. A pesticide control fund would be established in the Department of Agriculture to receive all fees collected under the act. Revenues could be used only for processing applications and for developing and improving pesticide application training programs.

Rule-making. Within one year of the effective date of the bill, the Department of Agriculture would be required to submit to the legislature administrative rules regarding:

- the protection of agricultural workers from agricultural pesticides;
- the use of integrated pest management systems in schools, public buildings, and health care facilities;
- the duty of commercial applicators to inform customers of risks and benefits associated with pesticide applications;
- minimum standards of competency and experience for trainers of registered applicators;
- developing a training program for applicators; and
- setting the number of directly supervised application hours required before a registered applicator may apply restricted use pesticides without direct supervision.

The Pesticide Advisory Committee. The membership of the Pesticide Advisory Committee would be expanded from

eleven to 15 members. The director of the Bureau of Aeronautics and the executive secretary of the Water Resources Commission would be dropped from the committee, while the director of the Department of Agriculture would be added, along with a representative of the Department of Natural Resources who had expertise in water quality programs, two additional appointees by the director of the MDA (a representative of licensed outdoor commercial applicators and of licensed aerial applicators), and two public members appointed by the governor.

The present committee is charged with consulting with and advising the director of the MDA in the administration of the act. Under the bill, the committee also would be required to collect and analyze data on pesticide misuse, to determine if pesticide training programs are effective in curtailing such misuse, to review pesticide applicator training requirements, and to publish an annual report (to be submitted to the governor, the legislature, and the director of the MDA) which summarizes annual enforcement actions taken under the act, reviews the committee's recommendations, and offers recommendations for amending the act and regarding resources necessary to implement the act.

Miscellaneous provisions. Certified applicators would be legally responsible both for their own applications of pesticides and for applications by their employees, and an apprenticeship would be required for both licensed commercial applicators and aerial applicators. Commercial applicators, who now have to keep records of restricted use applications for two years, would be required to keep these records for three years.

BACKGROUND INFORMATION:

During the past forty years, conventional pest control has been chemically based, the result of the emergence since World War II of inexpensive chemical pesticides that are highly effective on a short-term basis. These chemicals are applied to the environment to destroy pests, plants or animals that threaten human health, comfort, or welfare by competing with people for food, fiber, or shelter. Pesticides are available in various types according to the biological classification of the pest to be controlled: herbicides for weeds, insecticides for insects, fungicides for fungi, nematocides for nematodes (eel-worms), and rodenticides for rodents. Lesser but important categories include acaricides for mites and ticks (Acarina), piscicides for noxious fish (Pisces), molluscicides for mollusks, and avicides for noxious birds (Aves).

Today there are about 600 active ingredient chemicals registered by the federal Environmental Protection Agency (EPA) for use in pest control. Production of the active ingredients for these pesticides increased steadily after World War II, when use was about 200 million pounds in 1950, reached a peak of 1.4 billion pounds in 1980, and has declined to about 1.2 billion pounds today. In Michigan, in 1985, 1,000 companies registered approximately 10,000 pesticide products for sale. These products ranged from airplane fuel fungicides, toilet bowl sanitizers, oil field additives, and cooling tower fungicides to agricultural pesticides.

Herbicides account for about 43 percent of production, fungicides for 24 percent, and fumigants for 10 percent. The United States uses about 45 percent of the total world production of pesticides, with 68 percent of that agricultural, 17 percent industrial, eight percent home and garden, and seven percent governmental. Although there are a large number of registered pesticides, about 30 chemicals, each used in quantities greater than one million

pounds annually, comprise about 43 percent of the total farm use. The area affected by pesticide contamination is enormous. For example, in agriculture alone, in 1976 farmers applied 394 million pounds of herbicides to about 207 million acres of cropland and 162 million pounds of insecticides to about 75 million acres. In total, more than 293 million acres, or about 86 percent, of all cropland received one or more applications of pesticides. In Michigan, a 1984 survey of aerial pesticide applicators in the state showed that 650,000 acres of cropland were aerially treated with either insecticides or fungicides and 80,200 acres with herbicides (these figures do not include non-aerial applications, which would increase the acreage treated).

Chemical pesticides are unique in that they are the only poisons deliberately added to the natural environment specifically because of, rather than despite, their toxic properties. In the past, chemical pesticides were called "economic poisons", a name which graphically illustrates their dual ability to benefit society economically while introducing health and environmental risks. Producers and consumers benefit from the substantial reductions in costs that pesticides make possible by increasing agricultural production and reducing storage losses. But the toxic nature of pesticides also make them hazardous to humans and the environment, including non-target insects, plants, and animals.

Initially, these toxic chemicals were used without a good understanding of the potential extent of their environmental and human health costs. Since the publication in 1962 of Rachel Carson's *Silent Spring*, however, there has been a growing public awareness of the costs as well as the benefits of chemical pesticides. By the end of the 1960s, heavy metals and organochlorine products began to be found in water and milk samples, and environmentalists and consumer health activists began raising questions about the relatively indiscriminate use of toxic chemicals that more directly benefited some segments of society (primarily pesticide users and manufacturers) while imposing unanticipated or unheeded costs on all of society and the natural environment.

Michigan has been in the forefront of governmental efforts to responsibly manage pesticides, literally leading the nation in banning the organochlorine pesticide DDT in 1969. In the late 1960s, Dr. Ralph MacMullan, director of the Department of Natural Resources (DNR), testified before the state Agriculture Commission, urging the commission to "completely outlaw certain highly destructive pesticides, such as DDT, dieldrin, aldrin, heptachlor, endrin, lindane, chlordane, and other 'hard' or persistent chemical compounds used to kill insects." In particular, the DNR was concerned about the growing scientific evidence of the adverse effects of DDT on Great Lakes fish and predatory bird populations. In 1969, primarily because of the adverse economic threat to the dairy industry posed by the documented contamination of milk by DDT but also because of the environmental concerns raised by the DNR, the commission did ban DDT. This action set the stage for the federal government, through the Environmental Protection Agency, to cancel all but emergency uses of this insecticide nationwide two years later. (Over a period ranging from the mid-1970s to the mid-1980s, all the other pesticides mentioned in Dr. MacMullan's testimony also have since been suspended or canceled by the EPA.)

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The dual nature of chemical pesticides is reflected in the two principal goals of the Federal Insecticide, Fungicide, and Rodenticide Act, the statute used by the EPA and other federal agencies in regulating the

production, marketing and use of pesticides in the United States. The two principal objectives of FIFRA are to provide applicators with adequate supplies of needed pesticides while at the same time protecting the environment and human health and safety. FIFRA operates under the assumption that knowledgeable, competent, trained applicators can handle pesticides in a way that will not harm the environment (including human health), and this assumption is based on the prior condition that the EPA will not permit the registration and use of pesticide compounds that present an unreasonable risk to the environment even when applied in a careful and prescribed manner. FIFRA provides two basic mechanisms to ensure the knowledgeable and competent use of pesticides. The first is a provision that makes it unlawful to use a pesticide in any manner inconsistent with the label. The second is the classification of pesticides into two classes based on a determination that the benefits of using the pesticide outweigh the inevitable associated risks. A "general use" pesticide is one which, under ordinary conditions of use, is judged not to create risks that outweigh its benefits. Anyone is allowed to buy and use these general use pesticides, providing that they follow label directions. A "restricted use" pesticide (RUP) is one which, when used under normal conditions, has risks that exceed any benefits. The use of these latter pesticides is restricted to trained, certified applicators, whose knowledge, training, and expertise of application presumably reduce the risk of these more dangerous pesticides to an acceptable level. Anyone wishing to buy, use, or supervise the use of restricted use pesticides must be certified, either as a "private" applicator (farmers applying such pesticides to their own property for agricultural purposes) or as a "commercial" applicator (basically everyone else).

The banning of DDT by the newly-organized Environmental Protection Agency on July 7, 1972, was opposed by pesticide users (including agricultural users) and manufacturers as unwarranted governmental intrusion and was seen by them as a potential threat to the future of the entire post-war chemically-based approach to pest control. Environmental and public health activists, however, saw the banning of DDT as a major step toward curbing unjustifiable chemical contamination of the environment. Realizing that future battles over the use of pesticides would be fought in court unless some of the existing federal rules governing the use of pesticides were modified, the U.S. Congress in 1972 amended FIFRA. Prior to 1972, FIFRA primarily regulated interstate commerce of pesticides and truth-in-labeling. It did not regulate the labeling of products manufactured and used within state boundaries. The 1972 amendments changed the law to include intrastate products and required the pesticide manufacturing industry to conduct significantly more testing of chemical pesticides before they could be registered for pesticide use.

Since the modification of FIFRA in 1972, there has been nearly non-stop controversy among the many interest groups (including farmers, pesticide manufacturers, commercial applicators, environmentalists, consumer activists, and labor groups) who are actively involved in the operations of the act, with attitudes tending to be either that the law is too restrictive or is not restrictive enough. Further modification of FIFRA was an important legislative priority for the 99th Congress, which ended on October 18, 1986. However, despite an unprecedented agreement between the farm chemical industry and environmental, consumer and labor groups, the House and Senate were unable to resolve the differences in the bills passed by each before the end of session. The chair of the House Agriculture Committee said that he hoped to see FIFRA

amendments enacted "promptly" by the 100th Congress, so the possibility exists that the legislation may be passed during the current session.

State regulation of pesticide use and certification under the Michigan Pesticide Control Act. State regulation of farm chemicals parallels federal efforts (with the exception of certain circumstances that make each state unique). The primary vehicle of regulation has been the state FIFRA plans that were adopted by all 50 states, with the lead agency for administration of these plans being located in the agriculture department in 37 states (five states have assigned the task to an environmental agency, the rest to other various state agencies). States carry out a variety of important responsibilities under FIFRA, including the certification and training of pesticide applicators, enforcement of the provisions on the pesticide labels, and granting of emergency exemptions and state labels.

Before Michigan could submit such a plan to the federal government, the legislature had to enact legislation providing the necessary statutory authority. The Department of Agriculture (MDA) had been administering the Economic Poisons Act (Public Act 243 of 1949) and the Commercial Applicators Act (Public Act 233 of 1959), and Governor William Milliken designated the department as the primary agency responsible for administering legislation regulating pesticide use. In 1976, the Michigan legislature passed the enabling legislation, the Pesticide Control Act (Public Act 171), which was modeled on FIFRA and which combined the two earlier state acts governing pesticide use.

Though the MDA began registering pesticides in 1949 (the year that the Economic Poisons Act was adopted), the current three-year Michigan certification program for people who wish to buy, apply, or supervise the use of restricted use pesticides was adopted only in 1976 with the passage of the Pesticide Control Act. FIFRA requires states to establish certification and training programs that meet standards established by EPA, though where, for any reason, a state does not establish a certification program, EPA bears that responsibility. All but two states (Colorado and Nevada) have an approved program. While the federal government sets minimum standards for training and certification of pesticide applicators, the administration of the process is left largely to the states. In most states, Michigan included, training is conducted by the state cooperative extension service, an arrangement identified but not required by FIFRA. Requirements for commercial and private applicators differ, as do those for applicators of restricted use and general use pesticides.

Under federal law, private applicators, mostly farmers, must demonstrate competence in the use and handling of pesticides through a written or oral certification process. In Michigan, private applicators can become certified through one of three ways: (a) self-study and examination, (b) classroom training and examination, or, when the applicant is unable to demonstrate competence by examination or classroom training (for example, for people with limited English language ability), (c) an oral evaluation administered by a representative of the MDA. The self-study manuals are available through all county cooperative extension offices for a fee. These training manuals include discussion of the proper use, storage, handling, and disposal of pesticides; the liabilities and responsibilities of applicators; and pesticide laws and regulations. Ideally, in order to demonstrate competency, private applicators should have practical knowledge of the pest control problems and practices associated with agricultural operations. More specifically, they should be

able to recognize common pests, understand labels and labeling, apply pesticides according to label instructions, be aware of local environmental problems, and be able to recognize poisoning symptoms.

Federal law requires commercial applicators to demonstrate knowledge in the area of their specialization through a written examination and, as appropriate, performance testing. In Michigan, applicants for commercial certification must successfully complete a written examination set by the MDA, and, once certified, must keep records of restricted use pesticide applications for two years after each application. Applicants are required to exhibit competency in those areas of pest control where they plan to make applications of restricted use products. They do this through using a "core manual" and through examination. General practical knowledge in the areas of label and labeling comprehension, safety, the environment, pests, pesticides, equipment, application techniques, supervision, and laws and regulations is required of all applicants. Additionally, specific knowledge in one or more of ten categories of pesticide application (each of which has its own specific manual and exam) is required, depending on which types of pesticide applications the applicant proposes to use. Because of this use of categories of application, it may be necessary for an applicator to become certified in more than one category in order to legally apply restricted use pesticides.

In addition, Michigan requires aerial applicators and space fumigators to be certified in those specific methods of application, so that they carry dual certification in both method and specific category.

Finally, every three years certified applicators must be recertified. Private applicators can do this by self-study or by attending extension training programs and then passing a written exam (with oral evaluation a continuing option for non-native English speakers). Commercial applicators may recertify by passing a written examination, or, in the case of applicators certified in structural pest control and aerial application, by attending approved continuing certification programs.

FISCAL IMPLICATIONS:

According to the Department of Natural Resources, the increased fees proposed in the bill would generate additional resources for enforcing the act, but there is no estimate of the amount at this time. (6-30-97)

ARGUMENTS:

For:

In the past decade, since the passage of the Pesticide Control Act, the public has become increasingly aware of the use of pesticides and increasingly concerned about the negative effects of these toxic chemicals on both human health and environmental quality. There are numerous short- and long-term problems associated with the chemically-based approach to pest management, ranging from environmental contamination and threats to human health to the emergence of chemically-resistant pests and of new pest problems, the reduction of biological control agents, and the resurgence of pests. It is imperative that Michigan adopt a pest management strategy that enhances quality of life while minimizing environmental and human health risks. The bill would implement the beginnings of such a strategy through a number of its provisions. The upgrading of pesticide applicator training (including the creation of the "registered applicator" category and adding an apprenticeship requirement for

commercial and aerial applicators) should result in an increased level of expertise among commercial pesticide applicators, and thus in a reduction of the number of pesticide misapplications. The fee increases, the first since the act was passed in 1976, will provide not only for administrative costs but also will go to improving training programs in pesticide application. And the restructuring of the Pesticide Advisory Committee, and the additional responsibilities charged to the committee, will ensure ongoing supervision of the effectiveness of the training, testing, and performance of commercial pesticide applicators.

For:

Currently, Michigan has a number of pesticides classified as restricted use materials beyond those classified as such under federal law. This is one of the major strengths of Michigan's pesticide control efforts. The administrative process to accomplish these restrictions, however, is overly burdensome and time-consuming. For example, the placement of the insecticide chlordane on the state's restricted use list took nearly a year, even with the full support of the Governor's office, the state Agricultural Commission, and the Departments of Natural Resources, Public Health, and Agriculture. As more is learned about the hazards of chemical pesticides and as analytical techniques for detecting chemical residues improve, the list of restricted pesticides is bound to grow. By giving increased administrative authority to the director of the MDA to classify a pesticide as a restricted use material, the bill would make it easier for the director to restrict the application of the most dangerous chemicals to trained individuals and not the general public. In addition, the director's increased discretionary authority to refuse to register a pesticide, or to revoke a pesticide registration (based on substantial scientific evidence of acute imminent hazards, chronic hazards to health or long term environmental damage) will allow the director to act in the best interests of all the citizens of the state to protect them and the environment as new scientific evidence comes to light.

For:

The enforcement provisions of the Pesticide Control Act are woefully inadequate. Fines for violations are too small to compel compliance with the existing act, and enforcement, when it occurs, is frustratingly slow.

The act stipulates that violations are a misdemeanor punishable by a fine of not more than \$500 for each offense. Even so, according to the 1985 Environmental Cabinet Council Report, the maximum fine has never been assessed by a court. For example, the MDA finalized 12 court actions in fiscal 1984. The average fine assessed in these actions was \$86.66, with the fines ranging from nothing to \$300. Costs assessed averaged \$45, and ranged from nothing to \$150. Clearly these sums will not deter violators. But even the present maximum fine of \$500 will neither force violators to correct current violations nor deter future violations.

In addition to inadequate fines, however, prosecution of violators has often been either frustratingly slow or nonexistent. For example, in 1983 the MDA secured a warrant against a commercial applicator. After a year and a half of postponements and delays, the department withdrew the charge. The case was then given to the EPA, who in 30 days levied a civil fine of \$2,800 (though an appeal was made). Of the 12 cases successfully litigated in fiscal 1984, a significant number of violations were not successfully charged. Prosecutors shied away from giving warrants because of higher prosecutorial priorities, while

postponements and delays often caused loss of witnesses and evidence and a lack of willingness to continue because of demands on scarce judicial resources.

The increased penalties included in the bill could deter future violations of the act, particularly by commercial pesticide applicators and pesticide dealers and distributors. Increased fines should encourage prosecutors to pursue violations, and civil penalties, which are essential for effective enforcement, would become available for the first time.

Response: The increased penalty provisions are still inadequate. If the courts have refused to impose the current maximum \$500 fine, what reason is there to believe that raising the maximum fine — particularly without stipulating a minimum fine — will result in the courts actually imposing these higher maximums? What really is needed to deter and punish violators is to require not only increased maximum fines but also stiff minimum fines and jail sentences. These stiffer penalties also should apply to private farmers as well as to commercial applicators.

For:

Current occupational health regulations do not adequately protect the health of workers (especially agricultural, horticultural and forest workers) who may be exposed to pesticides in the course of their employment. The federal Occupational and Safety Health Act (OSHA) and the Michigan Occupational Safety and Health Act (MIOSHA), which is modeled on the federal law, contain specific regulations designed to protect workers from unacceptable exposure to pesticides. However, the agricultural workplace is exempted from most of OSHA's (and therefore MIOSHA's) rules and regulations, which, with regard to pesticides, apply only to facilities manufacturing or formulating pesticide products, not to agricultural workers.

Worker safety provisions, particularly for agricultural workers, are badly needed. Workers at small agricultural operations (those with fewer than five employees) are exempt from MIOSHA regulations. For larger agricultural operations there are a number of other problems in ensuring worker protection, such as language barriers, ignorance of regulations and pesticide hazards, or fear of reprisals from crew leaders or employers (which then may lead to noncompliance with existing worker protection rules). No federal or Michigan agency has proposed or promulgated field sanitation regulations which would help reduce pesticide exposure to workers, while current federal regulations on protective clothing are inadequate and appropriate protective clothing is unavailable or not used. Re-entry intervals after application of pesticides are not always observed and workers are not necessarily aware of the specific pesticides being used.

The rule-making directive in the bill which puts the MDA on a schedule to submit rules regarding the protection of agricultural workers from agricultural pesticides recognizes this need for worker safety provisions and indicates the legislature's desire to see that such provisions are developed.

Against:

The bill does make some minor changes in the regulation of commercial pesticide use in the state, but it fails to make any significant progress in containing (let alone reversing) the problem of pesticide contamination because it fails to address the heart of pesticide contamination — agricultural chemicals. For too long now agriculture has been "protected" from much-needed regulation, having been granted favored status or outright exemption from legislation or regulations governing the use of toxic

chemical pesticides. As a result, and despite widely recognized problems inherent in the use of toxic chemicals to control pests, farmers have been encouraged to rely almost solely on these dangerous chemicals for pest control rather than to seek out environmentally safe (or at least safer) alternatives.

Amid rising concern about the effect on both farmers and consumers of the billions of pounds of agricultural chemicals used to control insects, weeds and fungi on crops and lawns, more and more pesticides are linked to health problems almost every year. In the past three years alone, consumers were warned about risks posed by residues of Alar on apples, Aldicarb on California watermelons (with a reported 1500 people falling ill from the contaminated melons in 1985) and ethylene dibromide (EDB) in flour, and farmers were warned about the possible danger of exposure to dinoseb and 2,4-D. A study by the National Cancer Institute found that Kansas farmers who use 2,4-D, the nation's most widely used agricultural and garden herbicide, are as much as eight times more likely to contract lymphatic cancer than non-exposed populations. In addition to the dangers to consumers of chemical residues on food and to farmers and farm workers of direct exposure during pesticide application, scientific evidence also clearly demonstrates that the amount of farm chemicals contaminating the environment — particularly groundwater — is on the rise. And once groundwater is contaminated, it is likely to stay that way for decades.

Contamination of groundwater by agricultural chemicals (including pesticides and fertilizers) is a national problem, though it is perhaps of particular concern to Midwestern rural communities, where both the risks and benefits of farm chemical use run highest. Just counting contamination from normal agricultural use, the Environmental Protection Agency reports pesticides in groundwater in 23 states, with residues over health guidance limits in 12 states. Hints of the threat of groundwater contamination appeared in the 1970s, but it was not until 1979 that the threat of groundwater contamination by pesticides became more than remote theory. In 1979, DBCP (a cancer-causing nematocide) was found in more than 60 California wells and aldicarb (a nematocide and systemic pesticide) was discovered in over 2,200 wells on Long Island in levels up to 50 times above the EPA's advisory levels of 10 parts per billion (PPB).

These discoveries, which led to the complete or partial banning of the pesticides involved, were just the tip of the proverbial iceberg. Since 1979, more pesticides have turned up in groundwater, and public awareness of, and alarm over, this contamination has risen. However, efforts to encourage non-chemical pest management have been minimal and attempts to restrict the use of dangerous agricultural chemicals have been consistently (and successfully) opposed by the powerful multinational chemical industry and agribusiness. The use and abuse of agricultural chemicals must be addressed in any bill that seriously proposes to improve the management of pesticides. This bill does little to face up to the real source of most pesticide contamination of the environment and should not be passed until it does.

Response: In the first place, the recommendations represented by the amendments proposed in this bill were never intended to address the problems of contamination by agricultural chemicals. The work group which convened last fall did so with the express purpose of looking at ways to improve management of commercially applied pesticides, even though the bill it proposes does make two direct references to agricultural applications (eg. requiring farmers to instruct their non-registered and non-certified employees in the safe application of agricultural pesticides

and requiring the MDA to submit rules regarding the protection of agricultural workers from agricultural pesticides). The existing bill is the result of patient negotiating and compromise among all of the interest groups, and it is a good beginning in revising Michigan's ten-year-old pesticide bill. To reject the bill because it does not do everything at once would be foolish and politically unrealistic. Rather than wait until all desirable changes can be made at once (even if that unlikely event were possible), it is better to make a good beginning in the less controversial areas.

POSITIONS:

The Department of Agriculture supports the bill. (7-28-87)

The Department of Natural Resources supports the bill. (7-28-87)

The Michigan Pest Control Association supports the bill. (7-29-87)

The Horticultural Industry of Michigan supports the bill. (7-28-87)

The Sod Growers Association of Michigan supports the bill. (7-28-87)

The Metropolitan Detroit Growers Association supports the bill. (7-28-87)

The Michigan Turfgrass Foundation supports the bill. (7-29-87)

The Michigan Agricultural Business Council supports the bill. (7-29-87)

The Michigan Agri-Dealers Association supports the bill. (7-29-87)

The Michigan Agricultural Aviation Association supports the bill. (7-29-87)

The Lawn Sprayers Association of Michigan supports the bill. (7-29-87)

The Michigan Environmental Council supports the bill. (7-29-87)

The League of Women Voters of Michigan supports the bill with some reservations. (7-29-87)

The West Michigan Environmental Action Council supports the bill. (7-29-87)

The Michigan United Conservation Clubs supports the concept of the bill. (7-29-87)

The Michigan Farmworkers Coalition supports the bill. (7-29-87)

Dow Chemical Company supports the bill. (7-30-87)

Agri-Business Consultants supports the bill. (7-30-87)

The Office of Spanish-Speaking Affairs supports the bill. (7-31-87)

The Toxic Substances Control Commission supports the bill. (8-3-87)

The Michigan Association of Nurserymen supports the bill. (8-3-87)