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BY THE COMPTROLLER GENERAL

Report To The Congress

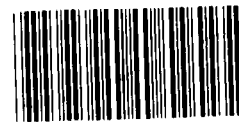
OF THE UNITED STATES

Stronger Enforcement Needed Against Misuse Of Pesticides

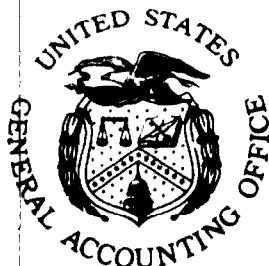
Programs enforcing Federal pesticide laws are key factors in making sure that the public and the environment are not unnecessarily exposed to hazardous pesticides. But these programs have not always been adequate. For example, the Environmental Protection Agency and the States do not always properly investigate cases and sometimes take questionable enforcement actions.

EPA and States also have problems with the special registration program. In some cases, State agencies may be circumventing pesticide laws.

EPA and States need to alleviate the problems that continue to plague the enforcement programs and improve their management to help ensure the public's protection.



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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON D.C. 20548

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To the President of the Senate and the
Speaker of the House of Representatives

This report summarizes the results of our review of the Environmental Protection Agency (EPA) and State programs to enforce pesticide laws and suggest ways to improve program activities. Because of enforcement, management, and special registration problems, the public and the environment may not be fully protected from potentially harmful pesticides.

We reviewed EPA and State pesticide enforcement programs because pesticide enforcement is a key factor in assuring that the public and the environment are not unnecessarily exposed to hazardous pesticides. We also reviewed special pesticide registrations to determine if some of the problems we identified in an earlier report had been corrected.

Copies of this report are being sent to the Director, Office of Management and Budget; the Administrator, Environmental Protection Agency; the Secretary of Agriculture; the Secretary of Health and Human Services; interested congressional committees; Members of Congress; and other interested parties.

A handwritten signature in black ink that reads "Milton J. Fowler".

Acting Comptroller General
of the United States

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D I G E S T

The benefits of pesticides to maintain and improve food and fiber production and protect the public health and welfare could be outweighed by their dangers if used improperly. (See p. 1.)

GAO reviewed Environmental Protection Agency (EPA) and State pesticide enforcement programs because they are the key factors in assuring that the public and the environment are not unnecessarily exposed to hazards. GAO also reviewed special pesticide registrations to determine if some of the problems identified in an earlier GAO report had been corrected.

Prior to 1978 EPA was responsible for enforcing the Federal Insecticide, Fungicide and Rodenticide Act by conducting investigations and taking enforcement actions. However, in that year the act was amended to give the States this lead responsibility. EPA still retains authority for enforcement action when States do not act expeditiously. EPA is also responsible for establishing enforcement guidelines, monitoring and evaluating the quality of State enforcement programs, and providing funding through State grants. GAO reviewed both EPA and State enforcement programs to determine the impact of increased State responsibility on program effectiveness. Although improvements have been made in recent years, GAO found that the public may not always be protected from pesticide misuse because EPA and the States

- sometimes take questionable enforcement actions against violators,
- have not implemented adequate program administration and monitoring, and
- are approving the use of pesticides for special local needs and emergency purposes which may be circumventing EPA's normal pesticide registration procedures.

LACK OF ADEQUATE
ENFORCEMENT ACTIONS

EPA and State enforcement programs do not always protect the public and the environment because:

- Many enforcement actions are questionable or inconsistent. (See p. 9.)
- Some cases are poorly investigated. (See p. 12.)
- State lead agencies often do not share EPA's enforcement philosophy. (See p. 14.)
- Most States lack the ability to impose civil penalties. (See p. 15.)

GAO's review of 2,855 randomly selected cases for the period 1975 to 1980 at 6 EPA regions and 11 States disclosed questionable enforcement actions in 491 cases, or 17 percent (10 percent for EPA and 19 percent for the States). The extent of questionable actions ranged from 5 to 80 percent for the States visited. In these cases, States either took no action or chose enforcement actions which were minimal when compared to the severity of the violation. Furthermore, GAO noted instances of inconsistent enforcement actions among the States for similar violations. State enforcement actions improved, however, during the period 1978 to 1980. (See pp. 9 and 10.)

GAO's review also disclosed that 704 of the 2,855 cases, or 25 percent (8 percent for EPA and 29 percent for States), were not investigated according to generally accepted EPA and State criteria. The extent of inadequate investigations ranged from 3 to 90 percent for the States visited. However, during the period 1978 to 1980 the percentage of inadequate investigations was reduced. (See p. 12.)

Differences between EPA and the States regarding their enforcement approach may account for the less stringent actions taken by State inspectors. In most cases, Federal pesticide environmental laws are enforced by State departments of agriculture which have broad responsibility to promote increased farm productivity. Generally, States are more likely to resolve misuse cases by negotiating settlements between parties involved, rather than by taking enforcement action against violators. According to EPA officials, inspectors

should not consider negotiated settlements as substitutes for enforcement actions against violators because of their limited deterrent impact on future misuse. (See p. 9.)

Most States are unable to assess civil penalties against violators, another reason deterring them from taking stronger enforcement action. While EPA has this option, few State agencies can administratively fine those who misuse pesticides. (See p. 15.)

While problems exist regarding the enforcement actions, some program benefits have been achieved. Most States have improved their pesticide laws, purchased new equipment to upgrade laboratories, hired additional staff, and conducted more inspections. (See p. 16.)

NEED TO IMPROVE PROGRAM ADMINISTRATION

EPA and the States have not developed adequate management information to document pesticide enforcement activities. In 8 of the 11 States visited, GAO found serious recordkeeping and reporting problems, such as incomplete identification and documentation of investigation files, inaccurate and inconsistent reporting of program accomplishments, and untimely submission of reports. GAO also noted similar recordkeeping problems at five of the six EPA regional offices visited. (See p. 20.)

EPA's monitoring of State programs to measure accomplishments has been limited and generally directed at administrative aspects rather than evaluations of the adequacy of enforcement actions. Without these evaluations EPA cannot determine whether State programs are adequately protecting the public from the dangers of pesticide misuse. (See p. 21.)

Need for better management controls over the pesticide enforcement program is illustrated by the lack of quick and effective processing of misuse cases referred between EPA and the States and between EPA and the Food and Drug Administration. Successful resolution of referral cases has been hindered by

- inadequate recordkeeping systems which have prevented identification of referral cases and evaluation of appropriateness of actions taken,
- the lack of followup actions by the referring agency to determine the status of investigations, and
- untimely enforcement actions. (See p. 22.)

According to EPA's Director of Pesticide Enforcement, the cause of many administrative problems is that EPA started the program with very little control and guidance.

In December 1980, however, EPA took action to require States to submit consistent information on program accomplishments. These new reporting requirements are a first step in providing a basis for evaluating the quality of enforcement actions. (See p. 24.)

CONTINUED PROBLEMS WITH SPECIAL PESTICIDE REGISTRATIONS

While pesticides must generally be registered by EPA before they can be used, Federal regulations allow the exemptions for (1) State registrations for special local needs, (2) experimental-use permits to develop new products or modify existing products, and (3) using unregistered pesticides for emergency use, such as for pest outbreaks. (See p. 3.)

However, pesticide manufacturers are submitting and EPA and the States are approving State pesticide registrations which may circumvent EPA's normal registration procedures and congressional intent. The Congress intended that these special registrations be limited to local problems. However, GAO identified four pesticides that were registered by 20 or more States for the same or very similar uses. Since the number of State registrations has increased significantly since 1975 and since EPA does not monitor this practice, the potential for adverse effects on the environment and human health and safety is increased. (See p. 28.)

EPA also continues to approve emergency pesticide exemptions to control repeated and predictable pest outbreaks in violation of EPA's own program guidance. The lack of an adequate

management system has prevented EPA from identifying repetitive requests for exemptions. (See p. 31.)

EPA and the States have not adequately monitored experimental use permits to ensure that experiments are conducted correctly and that the public is not unnecessarily exposed to potentially harmful pesticides. (See p. 32.)

RECOMMENDATIONS

The Administrator, EPA, should:

- Direct EPA regional office inspectors to emphasize the importance of conducting proper investigations and taking appropriate enforcement actions.
- Take action to help the States improve the quality of investigations and enforcement actions. This could include providing additional inspection and enforcement guidelines.
- Encourage passage of State laws to provide authority for assessing civil penalties.

The Commissioner, FDA, should:

- Improve management controls over referrals and strengthen coordination with EPA to help assure that investigations and enforcement actions are properly carried out. This could include requiring FDA to document pesticide misuse cases it refers to EPA and establishing a system to monitor the status of cases referred.

Additional recommendations are in chapter 3 (see p. 26) and chapter 4 (see p. 34).

AGENCY COMMENTS

EPA perceived that GAO was emphasizing the increased use of civil penalties as an enforcement tool. EPA stated that given the small size of available penalties, it is doubtful that increased emphasis on fines alone would materially alter the rate of compliance. Also, EPA stated that an effective enforcement program should not be merely punitive, but should emphasize compliance and voluntary corrective action.

GAO is not emphasizing the increased use of civil penalties but recommends that this enforcement option be available to States and used when appropriate. GAO agrees with EPA that an effective enforcement program should emphasize voluntary compliance and enforcement actions.

In general EPA and FDA agreed with the recommendations addressed to them. (See apps. III and IV.) Each state agency reviewed and generally agreed with the GAO summary of its program. (See app. II.)

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ABBREVIATIONS

EPA	Environmental Protection Agency
FDA	Food and Drug Administration
FFDCA	Federal Food, Drug, and Cosmetic Act
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
GAO	General Accounting Office
OMB	Office of Management and Budget
USDA	U.S. Department of Agriculture

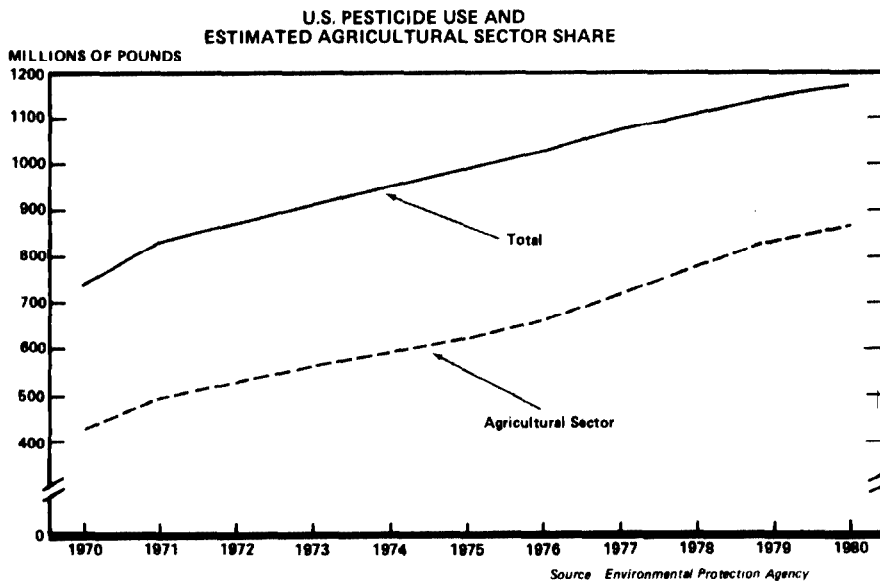
CHAPTER 1
PESTICIDE USE AND REGULATION
IN THE UNITED STATES

Pesticides have been used for many years to control insects, diseases, rodents, weeds, bacteria, and other pests that attack food and fiber supplies and threaten people's health and welfare. Although pesticides benefit agricultural production, public health, sanitation, and natural resources, they are a mixed blessing. If used improperly or without knowledge of their side effects, pesticides, like other chemicals, can poison, cause cancer and birth defects, and harm wildlife and the environment.

A major problem facing decisionmakers and the public is determining a balance between the damage pests do and the health and environmental problems and unknown risks pesticide use causes. ^{1/}

PESTICIDE USAGE

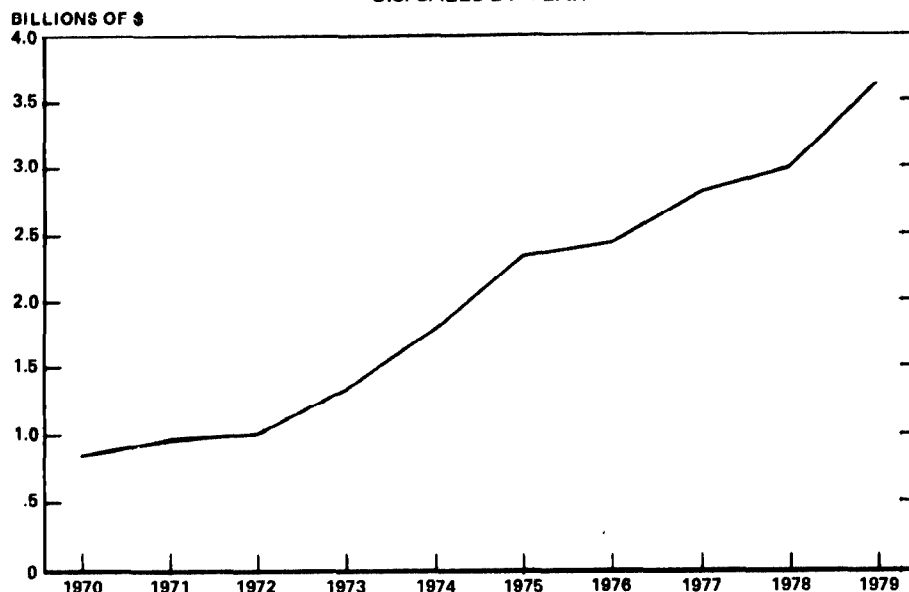
The domestic market for pesticides has increased dramatically as the Nation's agricultural sector increasingly depends on chemical pesticides to control crop damage. Although more than 1,200 chemicals are labeled for pesticide use and thousands for registered pesticide formulations, farmers currently use only a few. According to an October 1979 Office of Technology Assessment report, 43 major pesticides--17 herbicides, 20 insecticides, and 6 fungicides--account for more than 80 percent of all pesticides used. The following chart shows U.S. pesticide use and the agricultural sector's share.



^{1/}GAO Report "Delays and Unresolved Issues Plague New Pesticide Protection Programs" (CED-80-32, Feb. 15, 1980)

The use of pesticides to control pests in homes, health facilities, food processing and service institutions, and other structures has also increased, according to the National Pest Control Association. Pesticides are also big business and, like pesticide usage, pesticide sales have increased dramatically.

PESTICIDES AND RELATED PRODUCTS
U.S. SALES BY YEAR



Source: U.S. Tariff Commission

PESTICIDE REGULATION

Pesticide regulation has been at the forefront of environmental concerns since the mid-1960's and has always involved much controversy and emotion. Pesticide regulation is particularly controversial because it affects many sectors of society. The agricultural community is very concerned about the potential impact of pesticide use cancellation and restriction on food and fiber production. Other user groups, particularly professional pest control operators, are concerned about removing tools they use to combat structural and disease-carrying pests. The pesticide-producing industry is concerned about the impact of registration requirements, cancellation actions, and expensive and time-consuming data requirements. Environmental groups are concerned about the adverse effects of pesticides in the environment, not only the potential human health effects but also the long-term, subtle residual effects. All groups are interested in enforcement and each has its own "enforcement philosophy" based on its concerns.

The Environmental Protection Agency (EPA) is the primary regulator of pesticides. Its authority is given in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended (7 U.S.C. 136 et seq.), and the Federal Food, Drug, and Cosmetic Act (FFDCA) as amended (21 U.S. 301 et seq.). Under FIFRA, a

pesticide can generally not be sold, shipped, or delivered unless EPA has registered it. FIFRA further provides that EPA can unconditionally register a pesticide only if it determines, among other things, that the pesticide will perform its intended function without causing " * * * 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." FIFRA also contains provisions which govern pesticide inspections, unlawful actions, and penalties.

While a pesticide generally must be registered by EPA before it can be used in the United States, FIFRA and its implementing regulations allow certain exceptions for using unregistered and previously canceled or suspended pesticides under specified conditions. These exceptions include:

- State registrations: Pesticides are registered by States for use and distribution only within the State to meet special local needs. State pesticide registrations have the same force and effect as EPA registrations.
- Experimental-use permits: Permits are granted to use pesticides for accumulating information necessary to (1) register a product not previously registered with EPA or (2) modify the use, application, crop, amount, or pest involved with a currently registered product. Permits are normally granted for 1-year periods.
- Emergency exemptions: Exemptions are granted to Federal or State agencies to use suspended, canceled, or unregistered pesticides in emergency situations where (1) pest outbreaks have occurred, or are about to occur, and effective registered pesticides are not available, (2) significant economic or health problems will occur without the use of pesticides, and (3) insufficient time exists from the discovery of a pest outbreak to register a pesticide to control the pest.

If a pesticide remains in or on food, FFDCa requires that pesticide manufacturers, or other petitioners, apply to EPA for a tolerance--the maximum residue allowed in or on food. EPA sets tolerances on the basis of data the petitioner submits on the nature, level, and toxicity of a pesticide's residue. This data, including the results of tests of the pesticide's effect on laboratory animals, such as mice, is similar to the types of data pesticide manufacturers must submit to EPA to register a pesticide.

The task of enforcing tolerances--generally by sampling food--belongs to the Food and Drug Administration (FDA) and the Department of Agriculture (USDA). FDA enforces tolerances on general food commodities while USDA handles meat and poultry tolerances.

Prior to EPA's creation in December 1970, USDA regulated pesticides and FDA granted tolerances. The shift in 1970 reflected, in part, congressional dissatisfaction with USDA's lack of enforcement because of its conflicting roles--promoting increased food production using pesticides while regulating and enforcing pesticides. However, as discussed in chapter 2 (see p. 14), State departments of agriculture are generally now responsible for pesticide enforcement.

STATES' ROLES

In recent years primary responsibility for pesticides enforcement has shifted from the Federal Government to the States, although most States have had pesticide laws and regulations for many years. In 1974 and 1975, EPA's Office of Enforcement started pilot State enforcement grant programs with six States to determine the feasibility of implementing an enforcement program in each State. States were required to conduct inspection activities that were previously handled by EPA investigators, and in return the State received a grant. Also, from 1975 through 1978, EPA pesticide enforcement budget requests were modified by the Office of Management and Budget (OMB) to increase funding levels and decrease authorized agency personnel. By curtailing EPA's capability to take direct actions, OMB created a strong incentive for EPA to enter into more State cooperative enforcement agreements.

In 1978, while the pilot program was ongoing, the Congress further amended FIFRA to give States lead responsibility for enforcing pesticide-use violations and legislatively created provisions for a State enforcement grant program. The law provides that the EPA Administrator may rescind the State's primary enforcement responsibility for pesticide use violations if the Administrator determines the program to be inadequate.

As of March 1981, most States were participating in the enforcement program. During fiscal year 1980, EPA gave these States about \$8.7 million in grants to run their pesticide enforcement programs and estimates that it will give \$7.9 million for 1981 and \$8.7 million for 1982.

The following table shows the States 1/ that do not fully participate in the pesticide enforcement grant program.

1/The Trust Territories, Mariana Islands, Guam, and American Samoa do not receive specific enforcement grants. Instead they receive about \$25,000 each year for general pesticide activity.

No primary
enforcement authority 1/

Nebraska
Colorado
Wyoming

Enforcement primacy but
no EPA enforcement grant

Alabama
South Carolina
Alaska
Ohio

OBJECTIVE, SCOPE, AND METHODOLOGY

We reviewed the EPA Federal/State Pesticide Enforcement Grant Program because pesticide enforcement is a key factor in assuring that the public and the environment are not unnecessarily exposed to hazardous pesticides. While laws governing pesticides are important, the public and the environment will be protected from pesticides only if these laws are enforced. The assumption is that an energetic and strong enforcement program, fairly but firmly administered, is the best guarantee. An effective enforcement program will also generate a deterrent impact and contribute to less pesticide misuse.

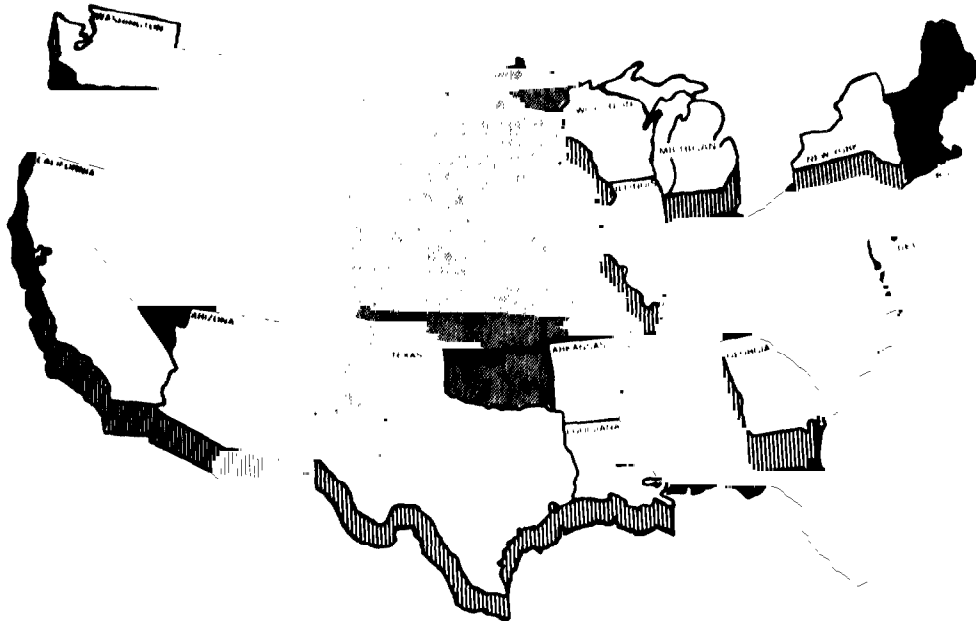
Since many State enforcement programs have been in existence for several years, we believed it was time to examine how well EPA and the States have adjusted to their new responsibilities. The basic objective of our work was to evaluate how well EPA and the States enforce pesticide laws. We also reviewed special pesticide registrations to determine if some of the problems we identified in our 1978 report 2/ had been corrected.

Our principal fieldwork was performed between August 1980 and February 1981. In making our selection of 11 States and six corresponding EPA regional offices, we included a representative mix of States participating in the enforcement grant program. The selection criteria included geographical dispersion and diversity in population, amount of pesticide usage, number of pesticide-producing establishments, number of farms, number of private and commercial applicators, amount of grants funds, size of migrant worker population, and lengths of time States participated in the enforcement program. EPA enforcement division officials agreed that our selection provided a representative sample of the program administration on the national level.

We performed our fieldwork at EPA headquarters; the 11 States shown below; and EPA regions 2, 4, 5, 6, 9, and 10:

1/In these States EPA is responsible for enforcing Federal pesticide laws.

2/"Special Pesticide Registration by the Environmental Protection Agency Should Be Improved" (CED-78-9, Jan. 9, 1978).



We also contacted officials at the Food and Drug Administration, Washington, D.C., to discuss their role in pesticide enforcement. We interviewed State and EPA program officials and reviewed and analyzed records covering enforcement actions, inspection correspondence, staffing, and grant expenditures. We also accompanied State inspectors during four pesticide use and misuse investigations and visited State laboratories that test for pesticide residues.

We reviewed and analyzed 2,855 randomly selected agricultural and nonagricultural enforcement cases out of 17,542 1/ for the 11 States 2/ and six EPA regions covering pesticide use, misuse, and complaints generally from fiscal year 1975 through September 1980. We also randomly selected and reviewed 207 of 239 EPA and State case referrals, plus 15 of 65 FDA referrals to EPA. We also reviewed a random sample of special pesticide registrations at the 11 States and selected cases at EPA headquarters. We did not review case files covering marketplace, producer, import/export, dealer, and applicator license inspections because violations for these categories generally represent a less serious threat and would have involved an inordinate amount of additional time.

1/Many records at EPA and the States were so poorly controlled and maintained that we were unable to be completely sure that our file counts were complete. However, these counts reflect the best available information at the time of our review.

2/In California and Texas, enforcement cases were decentralized to county and district levels, respectively. In California we reviewed cases in Los Angeles, Fresno, and Sutter Counties representing both agricultural and nonagricultural use and misuse cases. In Texas we reviewed cases in the Austin and Houston districts which represented most of the State's use/misuse cases.

Finally, we contacted numerous organizations, such as the American Farm Bureau Federation, the Environmental Defense Fund, the States FIFRA Issues Research and Evaluation Group, the National Agricultural Aviation Association, the National Agricultural Chemicals Association, the Chemical Manufacturers Association, and the National Pest Control Association, Inc., for their opinions regarding the pesticide enforcement program and special registrations.

Since the early 1970's we have issued several reports on pesticides. Appendix I lists these reports. Appendix II contains a brief overview of the State programs and activities we reviewed as well as State officials' comments on the sections.

CHAPTER 2

EPA AND STATE PESTICIDE ENFORCEMENT PROGRAMS DO

NOT FULLY PROTECT THE PUBLIC AND THE ENVIRONMENT

EPA and State pesticide enforcement programs do not always ensure that adequate enforcement actions are taken against pesticide violators. While laws governing pesticide use are important, they must be enforced to ensure that the public and the environment are protected from pesticides misuse. Although improvements have been made in recent years to enforce the laws, EPA and State enforcement programs have not always fully protected the public and the environment because

- many EPA and State pesticide enforcement actions are questionable or inconsistent,
- some cases are poorly investigated,
- State lead agencies often do not share EPA's enforcement philosophy, and
- most States lack the ability to impose civil penalties.

However, some pesticide enforcement program benefits have been achieved, such as strengthening State pesticide laws, purchasing new equipment, hiring additional staff, and increasing the total number of pesticide inspections and enforcement actions.

PESTICIDE INSPECTIONS--OBJECTIVES, CRITERIA, AND ENFORCEMENT OPTIONS

Generally, pesticide inspections are initiated as a result of complaints from the public or as part of the State's normal responsibility to monitor pesticide use. The objectives of inspections may include one or more of the following:

- To investigate and document an alleged pesticide misuse.
- To develop information on pesticide application practices.
- To determine whether pesticides are used according to label directions.
- To determine whether applicators properly maintain, store, and dispose of pesticides.

According to EPA and State officials, pesticide violations are generally analyzed on a case-by-case basis. However, officials identified both formal and informal criteria which are used in reviewing cases to ensure that proper enforcement is taken. For example, guidelines on investigations are contained in EPA's inspector and pesticide policy manuals. Also, the

following informal criteria include some important factors in deciding how severe enforcement actions should be:

- Exposure to humans, animals, and the environment.
- Toxicity and persistence of the pesticide.
- Intent of the pesticide applicator (for example, deliberate versus accidental misuse).
- Amount of evidence developed by the inspector.
- Economic impact of the damages sustained.
- Prior offenses.

If the inspector determines through an investigation that a violation has occurred and that an enforcement action is justified, the following civil and criminal options (ranked from the least to most severe) are generally available to State agencies.

- Informal verbal warning.
- Warning letter.
- Informal or formal hearing with State officials.
- Assessment of fines (not available in many States).
- Suspension or revocation of license or certification.
- Criminal prosecution.

EPA has basically the same options but is also able to administratively fine violators.

As part of their investigations, inspectors may identify the extent of damages sustained by the injured party as a result of pesticide misuse, and the parties involved may agree to a damage settlement. States are more likely to negotiate settlements than take enforcement actions against violators. According to EPA headquarters officials, inspectors should not generally consider negotiated settlements as substitutes for enforcement actions against violators because the settlements have limited deterrent impact on future misuse.

MANY PESTICIDE ENFORCEMENT ACTIONS ARE QUESTIONABLE OR INCONSISTENT

Our analysis of 2,855 randomly selected cases showed that EPA and State officials took questionable enforcement actions in 491, or 17 percent, of the cases reviewed for the period 1975 to 1980.

We considered an enforcement action to be questionable if no action was taken in response to a violation or if only a warning letter was issued in a case involving a serious violation. We discussed examples of these questionable actions with State and EPA regional officials, and they generally agreed with our results.

The number of questionable actions varied between the EPA regions and the States; EPA had 10 percent and the States 19 percent. Questionable actions also varied among the States, ranging from a high of 80 percent to a low of 5 percent.

We noted that State enforcement actions improved during the period 1978 to 1980 when compared to the period 1975 through 1977. The percentage of questionable enforcement actions was reduced to 16 percent compared to 32 percent in the earlier period. However, percentages varied among States.

The following cases describe some examples of EPA and State enforcement actions we believe were questionable.

--In May 1979 a person filed a damage report in Washington, contending that 25 acres of his pea field had been damaged by an aerial application of 2,4-D pesticide to an adjacent wheat field. The State inspector gathered samples of the damaged pea vines and pods, which after laboratory analysis showed symptoms of 2,4-D damage. In addition, he observed the damage to the pea field in relation to the adjacent wheat field and concluded that the 2,4-D had drifted. The inspector reported that an economic loss would result. He determined that the aerial application company should be responsible for the damages. The inspector indicated that no regulatory action was necessary and none was taken because the complainant and the company were going to work it out. We question whether getting the parties together without any enforcement action is an effective deterrent to future misuse. State enforcement officials agreed that some type of enforcement action should have been taken.

--During an October 1979 inspection of an aerial applicator's pesticide operation, Georgia inspectors noted improper pesticide loading and storage procedures that could cause serious human and environmental problems. In addition, drainage from the operation was going into a ditch next to a school and playground. At the time of the inspection the owner indicated that he would take measures to correct the problems. State officials issued a warning letter. In June 1980, during a followup investigation, a State inspector found the same serious problems. Again the State issued a warning letter. We question whether a second warning letter was appropriate based on the seriousness of the violation. State enforcement officials agreed

but said that instead of taking a stronger enforcement action, they requested the Georgia Department of Natural Resources to help the operator correct the problem.

--In March 1976 a person complained to EPA region 5 that the wells on his property were contaminated after a termite treatment. EPA conducted an investigation and determined that chlordane and other pesticides were applied beneath the basement floor and foundation walls of his house, but the applicators did not notice the wells on the property. Subsequent water sample analysis showed pesticide residues in the well water. No enforcement action was taken by EPA. We believe that the applicator could have been more careful in applying the pesticides and that an enforcement action should have been taken. EPA regional officials agreed.

During our analysis, we observed inconsistent enforcement actions on similar cases.

--In Arizona an aircraft performing an aerial spray application allegedly flew over the parking lot of a school in October 1979. Despite the allegation, we found no evidence that an investigation had been performed. In California a similar incident of pesticide spray drifting onto school grounds in January 1979 resulted in a full investigation and a subsequent administrative hearing in which the applicator pleaded guilty to several violations. The enforcement action required the applicator to obtain a job permit for each application of restricted material, as well as requiring each application to be under the direct supervision of county agricultural commission personnel.

--In May 1979 a homeowner complained to Texas officials that his house was contaminated and that he and his wife had become ill with headaches, lung problems, and rashes after a pest control operator had drilled a hole in their heating unit and pumped in a pesticide. The State's investigation disclosed that the hole had penetrated the air duct, which allowed the pesticide to be dispersed throughout the complainant's house. Discussions with the operator revealed that he had used 20 to 30 gallons of chlordane, which is not to be used inside homes. The State took no enforcement action against the operator for pesticide misuse because it considered this situation an honest mistake. It did advise the operator to report the incident to his insurance company.

--In a similar case, a homeowner complained to Louisiana officials in August 1979 that a pest control operator had treated her attic with a chemical to kill swarming termites. The chemical had soaked through the ceiling onto the floor

and made the homeowner ill. The agency took several samples and all showed the presence of chlordane and heptachlor. The application occurred in late April 1979, and the homeowner complained about her health problems to the operator in May 1979. The operator obtained accommodations for the homeowner at a local motel for 4 weeks while the operator completely renovated the interior of her house to remove pesticide contamination. The State's investigation documented that the operator had used the pesticides inconsistently with the label and the operator's termite control license was suspended for 45 days.

The above inconsistent and questionable enforcement actions did not create an effective deterrent impact to ensure that the public and the environment were adequately protected from pesticide misuse. Also, according to EPA's Deputy Assistant Administrator for pesticide programs, weak State enforcement programs could mean that EPA might be forced to cancel certain pesticide uses to ensure that products are not causing problems.

IMPROVEMENTS ARE NEEDED IN INVESTIGATING PESTICIDE MISUSE CASES

According to EPA and State officials, inspectors should take certain basic steps when investigating pesticide complaints, including

- interviewing all parties involved,
- visually inspecting the damage,
- taking samples for laboratory analysis if needed,
- reviewing pesticide application records, and
- completing an investigation report documenting the pertinent facts of the case.

These basic inspector activities--questioning, observing, and sampling--take on great importance with respect to their value as elements of proof, admission as evidence, and the eventual enforcement action. Yet, some cases we reviewed had been poorly conducted according to the above criteria. For example, inspectors failed to cover the basic requirements of a proper investigation in 44 cases, or 8 percent, of the 543 EPA investigations we reviewed from 1975 to 1980, compared with 660 cases, or 29 percent, of the 2,312 State investigations. The extent of inadequate investigations for the States ranged from 3 to 90 percent.

When a case is not properly investigated, necessary evidence is lacking and enforcement officials may not be able to take the appropriate enforcement action.

However, State investigations improved during the period 1978 to 1980 when compared to the period 1975 through 1977. The percentage of inadequate investigations was reduced to 24 percent compared to 46 percent in the earlier period. However, percentages varied among States.

In responding to our findings, EPA and State officials stated that in some cases adequate investigations were conducted and enforcement actions were taken, but the supporting documentation was not always prepared and placed in the case files. Chapter 3 discusses case file documentation and reporting problems.

The following cases show examples of poorly conducted EPA and State investigations.

- On September 26, 1979, Texas officials received a complaint from a schoolteacher stating that school personnel had been exposed to a pesticide in several classrooms. The teacher had cleaned the rooms before the students arrived but was concerned about the pesticide's possible effects on the students. State investigators conducted a 1-day investigation which consisted of interviewing the school principal. The principal assured the inspector that the situation had been taken care of and would not happen again. The principal told the inspector that other agencies (not identified) had investigated the matter 2 weeks before and that there was no need for further investigation. The inspector took no samples or photographs and took no enforcement action. The file contained no evidence that the inspector had contacted the other agencies to determine the extent of their investigations and plans for enforcement action.
- In June 1979 EPA region 5 officials conducted an inspection to ensure that a pesticide was used properly. The EPA inspector examined the site and talked to the landowner. However, the use inspection was conducted 2 months after the pesticide was applied. According to EPA policy, inspections of pesticide uses should be made during or immediately following the actual application.
- In August 1977 tenants complained of becoming ill after their apartment complex had been sprayed with a pesticide. EPA region 4 inspectors determined that the apartment owner's son had applied pesticides to dishes and food in the apartments. The case file included no inspector's report and no evidence of whether the applicator was certified or whether samples had been taken to determine what pesticide had been used. No enforcement action was taken.
- In May 1980 a farmer complained to Louisiana officials that his crops had been damaged by herbicides. The State investigated and found pesticide damage. The investigation appeared to center around estimating the value of the pesticide damage, rather than on determining who had caused the damage.

The State concluded its investigation in November 1980 with a report valuing the damage at \$702.50. No evidence in the State's records showed that the investigators had taken samples for laboratory analysis or had contacted any suspected violators. The State took no enforcement action.

STATE LEAD AGENCIES OFTEN DO NOT SHARE
EPA's PESTICIDE ENFORCEMENT PHILOSOPHY

Pesticide enforcement responsibility appears to have come full circle. It has shifted from USDA to EPA to State departments of agriculture. ^{1/} FIFRA and its legislative history do not indicate which State agencies the Congress intended would enforce Federal pesticide law. However, since the Congress was aware that most State pesticide regulation was exercised by State departments of agriculture, the Congress' silence on the issue suggests it did not object to Federal environmental law being enforced by State agricultural agencies.

Philosophical differences and occasional conflicts exist among EPA and State lead agencies in their approach to pest management and pesticide enforcement. Like USDA, State departments of agriculture have broad responsibility to promote increased farm production. As State lead agencies for agriculture, departments of agriculture are concerned with the ability of farmers and growers to produce adequate supplies of food and fiber in the most efficient and economical manner. While State departments of agriculture are also concerned with the environment, their top priority in pest management is to ensure that their programs offer farmers and growers adequate protection against pest damage at a reasonable cost.

EPA's involvement in pest management, on the other hand, stems from its overall responsibility to protect the quality of the environment by regulating environmental and public health hazards. EPA officials believe strong enforcement is a deterrent to future misuse while States prefer to handle violations through voluntary compliance and education. According to State officials,

^{1/}The following States are those where the lead agency is not the State department of agriculture:

- Connecticut, Department of Environmental Protection.
- District of Columbia, Department of Environmental Services.
- Indiana, State Chemist.
- New Jersey, Department of Environmental Protection.
- New York, Department of Environmental Conservation.
- Virgin Islands, Department of Conservation and Cultural Affairs.
- Kentucky, Department of Natural Resources and Environmental Protection.
- Rhode Island, Department of Environmental Management.

they must be more sensitive to local politics than EPA would be if it were the principal enforcement authority. Both EPA and State officials stated that the biggest issue in pesticide regulation is their different enforcement philosophies.

STATES LACK ABILITY TO IMPOSE CIVIL PENALTIES FOR PESTICIDE MISUSE

One of the primary distinctions between Federal and State enforcement options is the ability of EPA to assess civil penalties. 1/ Unlike EPA, few States are able to administratively fine pesticide violators. Only 2 of the 11 States in our review are able to assess civil penalties for pesticide misuse.

In the legislative history of FIFRA that granted EPA civil penalty authority, the Congress recognized the benefits of this enforcement option. According to Senate Report 92-838,

"Civil penalty provisions are considered a necessary part of a regulatory program such as pesticides control. While the criminal provisions may be used where circumstances warrant, the flexibility of having civil remedies available provides an appropriate means of enforcement without subjecting a person to criminal sanctions".

Although most States have had pesticide laws for many years and have amended their legislation to conform to FIFRA, few have added provisions to assess civil penalties. According to EPA officials, the inability to assess civil penalties places States in a dilemma. States are faced with either issuing warning letters (a relatively weak action) or initiating criminal proceedings (a very serious approach). According to most State officials, local district attorneys are reluctant to initiate criminal actions since they consider pesticide prosecutions to be a low priority and, in many cases, not in their political reelection interests.

While many States lack civil penalty authority and are reluctant to initiate criminal actions, many are able to suspend or revoke applicator and dealer licenses. However, State officials consider these enforcement options more stringent than assessing a civil penalty and are sometimes reluctant to take these actions. In New York and Georgia--two States where civil fines are issued for pesticide misuse--State enforcement officials told us that the use of civil penalties is an effective enforcement tool because it gives them flexibility in choosing the appropriate enforcement option. Civil penalties also help the State gain compliance with pesticide laws.

1/Civil penalties are administrative fines assessed by an agency without involving the court system.

According to a December 1979 EPA consultant's report, 1/ EPA regional personnel felt that while some States were beginning to take more enforcement actions, on the whole, such actions were not stringent enough and were at least one or two levels lower than Federal actions would have been for comparable pesticide violations.

SOME PROGRAM BENEFITS
HAVE BEEN ACHIEVED

While problems exist regarding the quality of investigations and enforcement actions, EPA grants to States have resulted in the following improvements.

- Better pesticide laws. In order to obtain enforcement grants, most States had to pass legislation to make their laws conform to FIFRA. This resulted in additional and stronger enforcement authority over pesticide use. For example, new laws provided States with the authority to inspect producer establishments and pesticide products sold in the marketplace.
- Purchase of new equipment. Most States have used a large portion of their grants to purchase equipment to improve inspection capabilities and administrative controls. Capital items acquired included laboratory analysis equipment, computers and related programs, office equipment, and automobiles.
- Hiring of additional staff. Many States hired new staff to increase the capacity of their inspection and laboratory and administrative staffs. New hires included field inspectors (not all work full time on the pesticide program), chemists, and clerical support staff.
- Increased enforcement activities. The 1978 shift in pesticide enforcement responsibility to the States has contributed to the increase in investigations and enforcement actions. From 1977 to 1979, State pesticide investigations increased from 1,131 to 7,390, while enforcement actions increased from 561 to 2,650. For some States with ongoing enforcement programs, only a portion of this increase is attributable to the shift to the States, while in other States enforcement programs were virtually nonexistent before enforcement grants were initiated. Furthermore, the grants have allowed States to cover a much larger pesticide user population.

1/"Field Survey of EPA's Federal/State Cooperative Pesticide Enforcement Grant Program." Messer Associates, Inc., December 7, 1979.

--Improved EPA and State relations. An outgrowth of the grant program has been the establishment of the States FIFRA Issues Research and Evaluation Group, which provides a means for EPA and State officials to freely exchange ideas on proposed FIFRA regulations and other issues affecting the States.

CONCLUSIONS

The U.S. population is exposed to a wide variety of chemical contaminants, including pesticides, for which the long-term health effects and possible chemical interactions are unknown. The Congress has passed legislation to provide protection against pesticide misuse. An energetic and strong enforcement program, fairly but firmly administered, is the best guarantee that the public and the environment are protected from pesticide misuse.

Our evaluation of EPA and State pesticide enforcement programs disclosed that although improvements have been made in recent years, these programs do not always ensure that adequate enforcement actions are taken against pesticide violators. In many cases, EPA and State officials either took no action or took minimum action when compared with the severity of the violation. Furthermore, we noted instances where enforcement actions lacked consistency.

Various factors have contributed to the number of questionable enforcement actions, including

- instances of poorly investigated cases,
- the fact that State agencies often do not share EPA's enforcement philosophy, and
- the inability of States to assess civil penalties against violators.

Program benefits have been achieved as a result of EPA grants to the States. Generally, States have improved their programs by passing new laws and strengthening existing ones, purchasing new equipment, and hiring additional staff. Furthermore, the shift in pesticide enforcement responsibility to the States has contributed to increased investigations and enforcement actions.

RECOMMENDATIONS

To improve the effectiveness of the pesticide enforcement program, we recommend that the Administrator, EPA:

- Direct EPA regional office inspectors to emphasize the importance of conducting proper investigations and taking appropriate enforcement actions.

- Take action to help the States improve the quality of investigations and enforcement actions. This could include providing additional inspection and enforcement guidelines.
- Encourage the passage of State laws which provide authority for assessing civil penalties. This could include an outreach effort through the EPA regions with letters to State Governors and key legislators.

AGENCY COMMENTS AND OUR EVALUATION

EPA agreed with our recommendation to emphasize the importance of conducting proper investigations and taking appropriate enforcement actions. It said its recent reviews of regional program operations support our recommendation for more thorough investigations in a number of the regions and States. EPA has made specific recommendations to the regions to improve deficiencies in implementing the EPA and State pesticide enforcement program. These recommendations include

- the need to follow all required inspection procedures,
- more thorough documentation of suspected violations, and
- the need for more immediate and thorough supervisory review of inspection reports to ensure completeness.

EPA said that it had taken efforts to improve training and would provide each State with specific additional training designed to solve any problems identified during scheduled program evaluations.

In commenting on our recommendation to encourage the passage of State laws, EPA noted that before entering into an enforcement agreement, EPA determined that the State appeared to have adequate legal authority to ensure a successful enforcement program. Some States, it said, may find after several years that they need additional authority to assess civil penalties. EPA would assist any State in preparing a request to its legislature; however, it is not EPA's policy to dictate the need for such authority to the States. EPA perceived that we are emphasizing the increased use of civil penalties as an enforcement tool. EPA stated that, given the small size of available penalties, it is doubtful that increased emphasis on fines alone would materially alter the rate of compliance. Compliance rate, not dollars collected, is the measure of the success of any regulatory program, according to EPA. EPA also stated that an effective enforcement program should not be merely punitive, but should emphasize baseline compliance and voluntary corrective actions. Awareness on the part of regulated parties that EPA can and will monitor them will encourage good faith efforts to voluntarily comply with the law.

Our recommendation neither stated nor intended that EPA should dictate to the States the need for civil penalty authority. EPA should, however, inform the States that it is ready to assist

them. Also, we are not advocating the increased use of civil penalties but think this enforcement option should be available to the States and used when appropriate. We agree with EPA that an effective enforcement program should emphasize voluntary compliance and enforcement action.

CHAPTER 3

EPA AND STATES NEED TO IMPROVE

PESTICIDE ENFORCEMENT PROGRAM ADMINISTRATION

EPA and the States have not developed adequate management information to document the results of the pesticide enforcement program. Program records and reports lack data on the quality of enforcement activities and are plagued with inaccurate, incomplete, and inconsistent information. EPA has recognized the need for better management information and has recently implemented new reporting requirements. EPA's monitoring of State programs to measure accomplishments has been limited. Finally, EPA, the States, and FDA have not established adequate management controls over pesticide enforcement cases referred between the agencies. As a result, EPA cannot readily evaluate the effectiveness of the program in meeting its main goal of protecting the public and the environment from improper pesticide use.

PESTICIDE ENFORCEMENT RECORDS AND REPORTING SYSTEMS NEED IMPROVEMENT

EPA has established various reporting mechanisms in an attempt to provide some indication of State program effectiveness. However, much of the data required by EPA provides only a quantitative rather than qualitative measure. For example, in most States information was not organized or maintained to document the quality of enforcement activities and actions or to report such efforts to EPA.

Compounding the problem, EPA had not established uniform reporting requirements for the States, and many States had not provided reliable, timely, and consistent input. In 8 of the 11 States we visited, we found recordkeeping and reporting problems, including the lack of filing systems to identify case files, incomplete documentation in investigative files, untimely submission of reports, and inaccurate and inconsistent reporting of program accomplishments. According to EPA's Director of Pesticides and Toxic Substances Enforcement Division, the cause of many of the pesticide enforcement program's administrative problems is that EPA started the program with very little control and guidance. EPA is now starting to establish more controls and procedures to better administer the program.

The following examples highlight the extent of the record and reporting problems.

- In Illinois, agency officials had no filing system before 1980 to identify pesticide misuse investigations.
- In Wisconsin, some case files consisted only of a warning letter issued by an inspector and had no documentation of the inspection itself.

- New York was submitting monthly reports to the EPA regional office about 60 to 80 days late. In EPA region 5, late State submission of reports required EPA officials to obtain State monthly information over the telephone and prepare the report forms themselves.
- Arkansas' grant activities for fiscal years 1979 and 1980 were inaccurately reported to the EPA regional office. Only 461 inspections of the 580 reported could be documented from State records.
- Louisiana reported the number of aerial applicators certified and the number of aircraft inspected as the number of certified applicator records inspected in fiscal year 1980.
- Texas overstated the number of agricultural pesticide misuse investigations reported during fiscal years 1978 to 1980 because it counted the number of different site visits or trips investigators made during their investigations rather than the number of separate and distinct complaint investigations conducted.
- EPA regional requirements to review State pesticide misuse cases varied considerably depending on the EPA regional office involved. For example, all State enforcement case files were submitted to EPA region 2 for review; only selected files were submitted to region 10; and in region 5, States provided no files at all.

We also identified similar recordkeeping problems at five of the six EPA regional offices we visited. For example, records in region 2 were haphazard and disorganized. Pesticide enforcement files received from the States were bound together and randomly stacked on tables and desks, which prevented orderly retrieval of needed case files. In region 6, enforcement files were in disarray and many did not adequately document the final disposition of a case.

INDEPTH MONITORING IS NEEDED

EPA headquarters guidance requires that regional staffs meet with State personnel at least twice a year to review and evaluate the grant programs. More specifically, the guidelines require both a midyear evaluation (during the seventh month of each grant year) to assess program accomplishments and identify problem areas and areas needing improvement, and an end-of-year review within 30 days after the end of the grant year to review accomplishments and establish future goals. The regional offices are required to prepare a written report documenting each visit.

Given the inaccurate, incomplete, and inconsistent program information, EPA must rely heavily on onsite monitoring to evaluate State programs. However, this monitoring has not provided the type of information needed to evaluate whether State programs

are adequately protecting the public from the dangers associated with pesticide use. In a June 1980 program study, EPA headquarters concluded that while onsite monitoring was a potentially excellent management tool, improvements were needed because

- the lack of uniform standards for conducting these evaluations resulted in a lack of consistency between the regional offices,
- monitoring consisted primarily of comparisons of projected grant activities with activities actually performed, and
- evaluation of the quality of the programs was minimal.

Our review of monitoring activities conducted by EPA staff in the six regions generally confirmed EPA's observations. The midyear reviews usually took about 1 day, whereas the end-of-year evaluations required 2 to 3 days. The scope of these visits varied but was generally directed at administrative aspects and comparisons of grant commitments and accomplishments. There was little emphasis on evaluating the adequacy of State enforcement actions. Furthermore, EPA staff in three of six regional offices did not prepare written reports of their onsite visits as required by headquarters guidance.

NEED FOR IMPROVED MANAGEMENT CONTROLS OVER REFERRED CASES

Section 27(a) of FIFRA requires EPA to refer to the States any information regarding significant violations of pesticide use laws. If a State has not started an appropriate enforcement action within 30 days, EPA may investigate the matter. States may also refer cases to EPA when enforcement action at the Federal level would be more appropriate or effective.

In addition to referrals between EPA and the States, information on potential violations may also be referred to EPA from FDA, which is responsible for monitoring pesticide residues on general food commodities.

EPA, the States, and FDA need to establish management controls over referred pesticide enforcement cases to ensure that investigations are timely and that adequate enforcement actions are taken. Successful resolution of referral cases has been hindered by

- poor agency recordkeeping systems which have prevented the identification of referral cases and the evaluation of the appropriateness of actions taken,
- the lack of followup actions by the referring agency to determine the status of the investigations, and
- the lack of timely enforcement actions.

Referrals between EPA and the States

Documentation of referral cases in 9 of the 11 States and five of the six EPA regional offices was so inadequate that it was difficult, and sometimes impossible, to identify the cases involved and the extent of enforcement actions taken. For example, in region 6, referrals to States were made over the telephone and not recorded. In region 5, EPA officials could only identify cases referred from the States based on their memory since the cases were not otherwise identified in the records.

To further complicate matters, neither EPA nor State officials routinely followed up on the status of referred cases. Without such followup the referring agency has no idea whether the alleged violation was being expeditiously and appropriately investigated. Furthermore, State enforcement actions for 45 of 157 referral cases we reviewed were not begun within the 30-day time period specified in FIFRA.

Our analysis of a random sample of 36 cases referred by States to EPA also shows the need for better documentation by EPA and more timely enforcement action. For 31 cases the documentation was so limited that we could not make any judgments regarding the appropriateness or timeliness of the enforcement activities. EPA enforcement actions were delayed for over a year for three of five remaining cases, thereby reducing the actions' deterrent impact.

Referrals from FDA to EPA

EPA, FDA, and other regulatory agencies are members of the Interagency Regulatory Liaison Group ^{1/} which is designed to expeditiously identify and correct serious violations and hazards to the public. One goal of the group is to refer potential violations between agencies to expedite reviews and maximize the limited investigative resources.

Our review of referrals by FDA to EPA disclosed a lack of coordination and management control by both agencies. Neither agency maintained records of referrals or had any idea of the number of cases referred. Also, followup action to determine the status of investigations was practically nonexistent and some enforcement actions were questionable. Our analysis of 26 of the 65 referral cases between January 1978 and December 1980 which FDA could identify, based on its field staffs' memoranda, showed instances of poor investigations and questionable enforcement actions. For example, FDA referred a case to EPA

^{1/}In March 1980, EPA, the Consumer Product Safety Commission, FDA, and USDA agreed to formalize a national referral inspection program. FDA and EPA also refer cases based on a June 12, 1975, Memorandum of Understanding.

based on an analysis of popcorn grain which showed very high pesticide levels. EPA officials did not conduct an investigation because FDA was unable to clearly identify the person who may have misused the pesticide. That identification, however, is EPA's responsibility.

EPA INITIATIVES TO IMPROVE
PESTICIDE ENFORCEMENT REPORTING

In a June 1980 study, EPA recognized the need for more and better information to evaluate the success of the program. The study concluded that "without accurate, reliable, and timely information, it will be impossible to determine the status of enforcement activities, perform program evaluations, or make appropriate program adjustments." A subsequent February 1981 program overview noted that EPA needed to modify its reporting system to require States to report enforcement actions by type of investigation. This would allow EPA to evaluate the appropriateness of enforcement actions taken by States in response to the violations identified.

In November 1980 EPA published regulations which expanded State reporting requirements. These regulations, effective December 1980, require States to submit quarterly reports on grant outputs, such as number of establishment and marketplace inspections, use observations, enforcement actions, and detailed explanations of all use investigations. The regulations also require States to submit a chronological log showing the

- source of information indicating a violation;
- nature of the violation, including the name and EPA registration number of the pesticide involved and the certification category of the applicator; and
- status of the actions taken in investigating the alleged violation.

As of June 1981, EPA had not provided the States with additional instructions or a report format to be used in transmitting the requested information. Since our fieldwork was completed before the implementation of this regulation, we did not have the opportunity to evaluate the impact of the new reporting requirements. However, the effect of this reporting will be diminished unless the States develop better recordkeeping systems to assure reliable and accurate input.

On February 10, 1981, EPA published for comment a proposed interpretive rule which, among other things, provides that EPA will implement a tracking system to determine whether a State is expeditiously and appropriately responding to pesticide use violation referrals. As of June 1981, this rule had not been finalized.

FUTURE TRENDS FOR PESTICIDE ENFORCEMENT PROGRAMS

Since the current administration perceives that less Federal and more State controls over environmental programs are needed, environmental programs such as pesticide enforcement have an uncertain future. Some EPA enforcement officials would like to see the States eventually have self-supporting programs, but little progress toward that goal has been made. An OMB official responsible for EPA's budget told us that in the short run the enforcement program will probably be fully funded, perhaps slightly increased. However, the administration is considering providing State environmental agencies with consolidated block grants to fund Federal and State environmental programs. Under these consolidated block grants, State environmental agencies would have wide discretion over how the money is spent to address State environmental problems. Yet, the OMB official recognizes that the pesticide programs represent a problem, since these environmental programs are administered generally by State departments of agriculture. A final decision by the administration has not yet been made.

According to State officials, the impact of not having federally funded State pesticide enforcement programs varies from little or no effect to major reductions in resources.

CONCLUSIONS

EPA needs to improve administration of the pesticide enforcement program by instituting better recordkeeping and reporting systems and conducting more frequent and indepth onsite monitoring. The lack of effective investigation techniques, inconsistent and questionable enforcement actions, and lack of controls over referral cases attest to the need for such action to provide information necessary for better program evaluation.

As part of this effort, EPA could improve its system for program evaluation by

- requiring EPA regional offices and States to maintain consistent, accurate, and complete program information so that EPA can readily evaluate State programs and
- increasing the frequency and comprehensiveness of onsite program reviews to include evaluations of the quality of investigations and enforcement actions.

The need for better management controls over the pesticide enforcement program is best shown in regard to the processing of referral cases. Since these cases involve some of the most potentially serious violations, care must be exercised to assure adequate documentation, cooperation, and followup among EPA, States, and FDA so that enforcement actions are appropriate and timely.

EPA has recognized the need for better information to evaluate the program's success. Recent changes in reporting requirements are a first step in improving the consistency of data reporting and providing some basis for evaluating the quality of enforcement actions.

The administration's plans to use block grants to fund environmental programs raise questions regarding the future funding of the pesticide enforcement program.

RECOMMENDATIONS

We recommend that the EPA Administrator:

- Require EPA regional offices and States to improve record-keeping and reporting systems so that accurate, complete, and timely data is generated and information on program results is provided.
- Establish standards for increasing the frequency and scope of onsite monitoring to assure State compliance with regulations and to evaluate the quality of investigations and enforcement actions.
- Strengthen coordination with FDA and improve management controls over referrals to assure appropriate and expeditious investigations and enforcement actions.

We recommend that the Secretary of Health and Human Services, through the Commissioner, FDA, improve management controls over referrals and strengthen coordination with EPA to help assure that investigations and enforcement actions are properly carried out. This could include requiring FDA to document pesticide misuse cases it refers to EPA and establishing a system to monitor the status of cases referred.

AGENCY COMMENTS AND OUR EVALUATION

EPA agreed that existing recordkeeping and reporting systems at the Federal and State levels need improvement. EPA has made recommendations to its regions regarding specific recordkeeping improvements, and according to EPA regional officials, changes are being made.

EPA is also working with the States to modify existing investigation forms to include such additional data as

- the circumstances of each pesticide misuse violation and
- the final disposition of the case.

EPA anticipates this additional information will enable the States and EPA to identify the causes of recurrent pesticide problems and to assess the appropriateness of the enforcement actions taken to address them.

Also, EPA has developed a ranking procedure to assist the States in establishing pesticide enforcement priorities and allocating enforcement resources. EPA stated that while the States are free to adopt or modify this procedure, it expects that all States will apply an objective ranking procedure to allocate their enforcement resources.

In commenting on our recommendation to increase the frequency and scope of onsite monitoring, EPA stated that it is working with the States FIFRA Issues Research and Evaluation Group to ensure more intensive and uniform qualitative and quantitative evaluations of the pesticide enforcement program. While EPA does not intend to increase the frequency of program evaluations, it does expect more thorough and qualitative program oversight.

We agree that the major factor should be improved quality of onsite visits. However, the frequency of these visits should be increased until program improvements are achieved.

FDA, responding for HHS, and EPA agreed that improvements are needed in controlling pesticide misuse referrals between their agencies. For example, EPA will work with FDA to ensure that existing referral procedures are followed. FDA plans to more formally and systematically document its referrals to EPA. It also plans to discuss with EPA the need to establish better management controls on the way FDA is notified on the outcomes of the pesticide misuse cases it refers to EPA.

CHAPTER 4

PROBLEMS CONTINUE TO PLAGUE

EPA AND STATE SPECIAL PESTICIDE REGISTRATIONS

Pesticide producers are submitting and EPA and numerous States are approving identical or similar State registrations for special local needs in conflict with what the Congress intended. Also, some problems continue with EPA approving emergency exemptions year after year. Finally, experimental-use permits are being approved by EPA with little or no monitoring by EPA or State officials. In our prior report 1/ we discussed how EPA was not always effective in administering special pesticide registrations and, as a result, the American public may not be adequately protected from potentially harmful and dangerous pesticides used under these programs.

MANY STATES HAVE APPROVED IDENTICAL OR VERY SIMILAR SPECIAL LOCAL NEED REGISTRATIONS

The Congress substantially broadened the States' authority to register pesticides for additional uses to meet special local needs and correspondingly limited EPA's authority over the States' pesticide registration process. Because of EPA's reduced role and its lack of monitoring special local need registration, pesticide producers are submitting and EPA and the States are approving similar pesticide registrations for special local needs which may be circumventing EPA's normal registration procedures.

The Congress was concerned about this potential problem and did not intend that States register additional pesticide uses to avoid Federal registration requirements. Senate Report 92-838 stated that the purpose of State registration is

"* * * to give a State the opportunity to meet expeditiously and with less cost and administrative burden on the registrant the problem of registering for local use a pesticide needed to treat a pest infestation which is a problem in such State but is not sufficiently widespread to warrant the expense and difficulties of Federal registration."

Therefore, State pesticide registrations were intended to deal with localized problems that arise because of gaps in EPA's registration process.

1/"Special Pesticide Registration by the Environmental Protection Agency Should Be Improved" (CED-78-9, Jan. 9, 1978).

In addition, according to the Chairman, Subcommittee on Agricultural Research and General Legislation, Senate Committee on Agriculture, Nutrition and Forestry, in 1978,

"* * * [State registration] is not intended to permit an end run around Federal registration requirements. States must be cognizant of the potential problems in extending pesticide uses and Congress is no less determined today than it was in 1972 to protect U.S. citizens and their environment from unreasonable pesticide hazards regardless of State boundaries.

"Thus, while the provision is designed to ease the administrative burden for all involved and facilitate availability of pesticides, it is not intended to limit the Administrator's ultimate authority to enforce FIFRA and protect the environment and human health and safety. We expect 'each similar' use question to be carefully assessed by EPA."

Also, the 1978 amendments to FIFRA removed the requirement that EPA determine if a special local need exists. According to EPA's Director of Registration, the 1978 amendments limited EPA's scrutiny over special local need registrations because EPA must now rely solely on the States to determine whether a need exists. Therefore, EPA now examines only (1) whether the pesticide has a residue tolerance and (2) if the pesticide registration for such a use has been previously canceled or denied. The following table shows the increase in special local need registrations from 1975 through 1980.

Special Local Need Registrations
Submitted and Approved from 1975 through 1980

<u>Year</u>	<u>Number submitted to EPA</u>	<u>Number EPA approved</u>	<u>Not approved by EPA</u>
1975	13	12	1
1976	465	425	40
1977	1,227	1,200	27
1978	1,281	1,275	6
1979	1,431	1,409	22
1980	1,381	1,377	4

EPA Registration Division officials further stated that the number of special local need registrations varies significantly from State to State, as the following table shows.

Special Local Need
Registrations for Selected States
Calendar Years 1978 through 1980

<u>State</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Arizona	28	44	34
Arkansas	32	24	27
California	225	336	183
Georgia	38	22	28
Illinois	11	17	12
Louisiana	30	30	33
Michigan	19	31	31
New York	29	17	6
Texas	58	39	43
Washington	70*	90	100
Wisconsin	-	4	-

According to officials in EPA's Registration Division, EPA does not regularly determine how many other States have requested a registration for the same or similar pesticide use because the 1978 FIFRA amendments limited EPA's review of special local need registration. However, because of the significant increase in special local need registrations and the lack of EPA review, the same pesticides with the same or very similar uses are being approved in many States. For example, we reviewed special local need registrations for 1980 from EPA headquarters records and noted several cases where a large number of States had approved the same or similar registration, as shown below.

Examples of Multiple State Registrations

<u>Pest</u>	<u>Chemical</u>	<u>Used on</u>	<u>Number of States with same or similar special local need</u>
Leafminers	Pramex 13.3%	Chrysanthemums	28
Flies	Atruban WP	Livestock and poultry	23
Flies	Ectiban EC	Livestock premises	23
Leafminers	Permethrin 10% EC	Chrysanthemums	20
Beetles	Lindane/xylene	Wood structures	14
Grasshoppers	Acephate	Pasture grass	13
Seed diseases	Thiram/carboxin	Soybeans	11
Leafminers	Pounce 3.2 EC	Chrysanthemums	8

Furthermore, many pesticides were registered for special local needs for more than one use or pest. For example:

- One pesticide was registered in Arkansas for 32 pests and 448 different uses. It was also registered for 118 different uses in at least 10 other States.

--Another pesticide was registered by Connecticut for 2,990 different uses--23 different pests on 130 different crops. The same product was registered in Maine and New Jersey for 2,967 uses and 2,960 uses, respectively.

--Another pesticide was registered in Oregon for 31 sites with 13 pests--403 different uses.

Some State registrations have caused problems. For example:

--In May 1980 EPA officials in region 6 received a complaint that four workers had been hospitalized because of pesticide misuse on a farm. The region referred the complaint to Texas officials to conduct an investigation. The State investigated and learned that a private applicator had used a pesticide for a State-registered use without having the special local need label. As a result, farmworkers had been allowed to enter the fields too soon after the pesticide was applied and therefore had become ill. The State filed charges of misuse against the applicator. In June 1980 a local court ordered the applicator to pay a \$50.00 fine and \$3.50 court costs.

--In 1975 New York approved a special registration for increasing a pesticide's application rate. Four years later company officials observed pesticide residues in drinking wells.

According to EPA officials, EPA must assume that the States are more aware and have a better understanding of their own special geographic situations. EPA noted, however, that only a few States have the capability to assess the environmental hazards associated with special local need registrations. Furthermore, many State cooperative extension services and State agriculture departments review proposed registrations based on how the pesticides will improve agriculture production and may discount potential environmental problems.

A limited EPA analysis in March 1980 showed that 29 products had special local need registrations in 10 or more States. One product that had numerous special local need registrations was not even federally registered.

SOME PROBLEMS CONTINUE WITH EPA AND STATES REPEATEDLY APPROVING EMERGENCY EXEMPTIONS

Problems continue with EPA and the States repeatedly approving emergency pesticide exemptions. In our 1978 report to the Congress, we disclosed that EPA had repeatedly granted Federal and State agencies emergency exemptions to control continuing and predictable pest outbreaks. We questioned whether some situations involved were true emergencies and whether EPA should continue to grant emergency exemptions in these situations or should

register the pesticides necessary to control these continuing and predictable pest outbreaks.

Section 18 of FIFRA permits EPA to grant Federal and State agencies exemptions to use suspended, canceled, or unregistered pesticides in emergency situations. By EPA definition an emergency exists when (1) a pest outbreak has occurred or is about to occur and no registered pesticide is available, (2) significant health or economic problems will occur without the use of a pesticide, and (3) insufficient time exists to register a pesticide to control the pest outbreak.

We analyzed 167 randomly selected emergency exemptions which disclosed that 45, or 27 percent, were repeatedly approved for 2 or more consecutive years and 15, or 9 percent, were for 3 or more consecutive years. For example:

--In New York, 7 of 30 emergency requests we reviewed were approved by EPA for the same use in successive years.

--In two cases, emergency exemptions were approved in Washington for 5 and 6 consecutive years, respectively.

--In Arizona, the same emergency request was approved twice in 1979 and again in 1980.

According to EPA's Director of Registration, emergency exemptions should not be repeated year after year. However, EPA does not maintain information on emergency exemptions which would allow it to analyze those chemicals used repeatedly. The absence of this basic information makes it difficult for EPA to control emergency exemption requests.

In a December 1979 letter EPA did, however, notify State agencies that some emergency exemption requests were being submitted year after year:

"Section 18 of FIFRA was not intended to be a substitute for section 3 of FIFRA. While we are aware that the States are not in a position to gather much of the data necessary to register a pesticide, we cannot sanction the continued use of a pesticide under section 18 year after year. States must either solicit help from companies producing the product to ensure that data is gathered and submitted in support of registration or search for alternative pesticides which can be registered."

MONITORING OF EXPERIMENTAL PERMITS NEEDS IMPROVEMENT

In our 1978 study of special pesticide registrations, we reported that experimental-use permits were not being adequately

monitored by EPA to ensure that special permit terms and conditions were being met. Problems continue between EPA and the States in adequately monitoring experimental-use permits.

--In New York we reviewed 25 permits; of those, 11 experiments were conducted, but none were monitored.

--In Texas and Louisiana, EPA regional officials required the States to monitor permits. However, according to State officials, they gave only token attention to this requirement. As a result, no records were available at each State to disclose which permits were monitored.

--In Georgia, no permits were monitored in 1980 because State officials were not sure how many permits were approved or how many experiments were actually conducted.

According to EPA and State officials, experimental-use permits are not being adequately monitored because

--they have a low priority,

--the experiments do not always take place,

--more information is needed to let officials know when the experiments are going to be conducted, and

--limited staff is available to conduct the needed onsite monitoring.

According to EPA officials, experimental-use permits need to be monitored to ensure that the experiments are conducted correctly. Monitoring of these unregistered products whose safety has not been established is important to ensure that permit restrictions are followed and that the public is not unnecessarily exposed to harmful pesticides.

CONCLUSIONS

Problems continue to plague EPA and State special pesticide registrations. EPA and the States are approving

--State registrations of pesticides for similar or identical needs in numerous States,

--repetitive emergency exemptions, and

--experimental-use permits with little or no monitoring.

Without ongoing monitoring of State registrations, EPA cannot determine the frequency with which States are registering the same

pesticides for the same or similar special local needs. Since these registrations are occurring, as our review disclosed, Federal registration procedures to ensure the safety of pesticides may be circumvented.

Similarly, because of the lack of information on emergency exemptions by the States, EPA is not in a position to identify which pesticides are being used repetitively for continuing and predictable pest outbreaks. In these situations, EPA should reject requests for emergency exemptions and require Federal registration.

Furthermore, the monitoring of unregistered, experimental pesticide products, whose safety has not been established, needs to be given high priority as a basis for ensuring that permit restrictions are followed and that the public is not unnecessarily exposed to harmful pesticides.

RECOMMENDATIONS

We recommend that the Administrator, EPA:

- Review each similar special local need registration to ensure that products or additional uses are being properly registered by the States.
- Develop an information system which identifies emergency exemptions by State so that repetitive requests can be analyzed and reviewed for conformance with FIFRA guidelines.
- Notify States that repetitive emergency exemptions will not be approved unless their justifications are fully documented.
- Require EPA Registration Division, regional offices, and State offices to better coordinate experimental-use monitoring. This could include a requirement that requestors of experimental-use permits notify EPA region and State officials when they actually plan to conduct their experiments.

AGENCY COMMENTS AND OUR EVALUATION

Notwithstanding EPA's philosophy of giving States more responsibility over approving special local need registrations, EPA agreed that it needs to do a better job of attempting to get applicants to apply for a Federal registration where there are clearly multiple special local need registrations which circumvent the Federal registration process.

EPA agreed to notify States that repetitive emergency exemptions will not be approved unless their justifications are fully documented.

EPA agreed that better coordination over experimental-use monitoring is needed. EPA is implementing coordination requirements to ensure that all parties are informed about the issuance of experimental use permits and associated monitoring requirements. Specifically, operating procedures require EPA to (a) publish the experimental-use permit in the Federal Register, (b) send a copy of the label, formal letter authorizing the permit, and a description of the program to regional offices for forwarding to the States, (c) encourage the applicant to notify State officials of the issuance and conditions of the permit, and (d) comply with applicable State laws as well. In those cases where the region has reduced its level of effort in the pesticide area due to resource constraints, States will be contacted directly.

PRIOR GAO REPORTS ON PESTICIDES

"Better Data Needed to Determine the Extent to Which Herbicides Should be Used on Forest Land" (CED-81-46, April 17, 1981).

"Need for Comprehensive Pesticide Use Data" (CED-80-145, September 30, 1980).

"Federal-State Environmental Programs--The State Perspective" (CED-80-106, August 22, 1980).

"Need for a Formal Risk/Benefit Review of the Pesticide Chlordane" (CED-80-116, August 5, 1980).

"Delays and Unresolved Issues Plague New Pesticide Protection Programs" (CED-80-32, February 15, 1980).

"Better Regulation of Pesticide Exports and Pesticide Residues in Imported Food Is Essential" (CED-79-43, June 22, 1979).

"Problems in Preventing the Marketing of Raw Meat and Poultry Containing Potentially Harmful Residues" (HRD-79-10, April 17, 1979).

"Need for EPA To Improve Foreign Nation Notifications" (CED-78-103, April 20, 1978).

"Special Pesticide Registration by the Environmental Protection Agency Should Be Improved" (CED-78-9, January 29, 1978).

"Adequacy of Safety and Efficacy Data Provided to EPA by Nongovernmental Laboratories" (RED-76-63, January 26, 1976).

"Federal Pesticide Registration Program: Is It Protecting the Public and the Environment Adequately from Pesticide Hazards?" (RED-76-42, December 4, 1975).

"Questions on the Safety of the Pesticide Maleic Hydrazide Used on Potatoes and Other Crops Have Not Been Answered" (B-133192, October 23, 1974).

"Pesticides: Actions Needed To Protect the Consumer from Defective Products" (B-133192, May 23, 1974).

"Environmental Protection Agency Efforts To Remove Hazardous Pesticides from the Channels of Trade" (B-133192, April 26, 1973).

STATE PESTICIDE ENFORCEMENT PROGRAM SUMMARIES

The following summaries contain general information on the State pesticide enforcement programs we reviewed and are intended to provide a brief overview of State programs and activities and the regulatory agencies that administer them.

State officials were given the opportunity to review and comment on these summaries and their comments are included. The summaries in this appendix are shown below.

<u>State</u>	<u>Page</u>
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New York	67
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Wisconsin	81

ARIZONA'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

In Arizona pesticides are used extensively in agriculture, structural pest control, businesses, and homes. The majority are used in agricultural production. In 1979 Arizona's agricultural receipts totaled \$1.7 billion. The following products are the State's most important.

<u>Crop</u>	<u>Value</u>
	(millions)
Cotton	\$321.0
Vegetables	130.5
Citrus	45.8
Grapes	13.5

In 1979 almost 10 million pounds of pesticides were sold in Arizona. As of December 1980, 2,708 certified pesticide applicators were certified in the State (1,532 commercial and 1,176 private). The Structural Pest Control Board (SPCB) had more than 1,000 certified commercial applicators. Also, about 3,000 establishments in the State sell EPA-registered pesticides. The use of these pesticides is regulated by the following State agencies.

- Structural Pest Control Board enforces structural pest control activities.
- Board of Pesticide Control (BPC) enforces agricultural pest control activities.
- Commission of Agriculture and Horticulture issues emergency exemptions.
- Office of the State Chemist issues special local need registrations.

PESTICIDE ENFORCEMENT

The responsibility for State pesticide enforcement is divided between the Board of Pesticide Control and the Structural Pest Control Board. BPC's enforcement activities deal primarily with the agricultural uses of pesticides. BPC is affiliated with the Commission of Agriculture, from which it receives support for its investigation and inspection activities. The board is supported financially by fees charged for certifications and registrations and by the Agriculture Commission, which is supported by the State general fund. In 1981 BPC received its first EPA enforcement grant. Also participating in Arizona's pesticide program are the Commission of Agriculture and Horticulture and the State Chemist.

The commission, in addition to supporting the BPC, issues pesticide emergency exemptions. Since 1977, only 15 have been issued.

Since fiscal year 1978, SPCB has received the following grants.

<u>Year</u>	<u>Grant</u>
1978	\$ 30,400
1979	37,500
1980	45,556
1981	<u>51,320</u>
Total	<u>\$164,776</u>

These funds have been used to support two inspectors and one clerical worker, purchase equipment and supplies, and pay travel expenses.

ENFORCEMENT ACTIVITIES AND ACTIONS

During fiscal year 1979, SPCB met 78 percent of its grant commitments. According to State officials, all commitments were not met because only one inspector was on board for the full year and a second inspector was not hired until the end of the year.

SPCB improved its performance during fiscal year 1980 by meeting 92 percent of its grant commitments. In fiscal year 1980, SPCB took the following 291 enforcement actions:

- 2 referrals to EPA.
- 2 special warning letters.
- 16 notices of warning.
- 194 letters of correction.
- 63 signed consents.
- 10 pending consents.
- 2 pending consents (possible misuse).
- 2 license revocations.

Although the BPC did not have an EPA grant, it has been responsible for enforcing Arizona's agricultural pesticide laws. In 1978 BPC received 859 complaints and completed 240 investigations. Of the 240 pesticide-related complaints,

accidents, and episodes investigated, 50 pesticide violations were verified and the following actions were taken:

Refused to renew applicator licenses and referred case to county attorney	5
Notice of warning	2
Case referred to county attorney	1
Notice of warning resulting in organizational and personnel changes	2
Penalty assessed to cover cost of investigation	38
Dismissed	<u>2</u>
Total	<u>50</u>

In 1979, of 390 incidents reported to the BPC, 268 were investigated and 6 enforcement actions taken, as follows:

Consent agreement and order	1
Consent agreement and order in lieu of license suspension or revocation	4
Notice of warning	<u>1</u>
Total	<u>6</u>

FUTURE TRENDS

SPCB is aware that it may not receive as much, or any, of the grant funds it has received in the past. As a result, it is increasing its fee structure and taking other steps to decrease its dependence on the EPA enforcement grants. Additionally, it is attempting to obtain legislation to collect fines as a way of enforcing State/Federal pesticide laws. Not only will this help in gaining independence from the EPA, but it will also give SPCB another enforcement tool (something between doing nothing and revoking or suspending a license).

BPC has just received its first enforcement grant and is aware that there may not be as much, if any, funding available in the future from EPA. Even before the grant, BPC was working toward getting its status changed from a fee-supported agency to one supported out of the State's general funds. This change, as well as one to give BPC direct fining power, is currently before the State legislature for consideration. According to the board's administrator, if operating funds are not forthcoming, the board's activity will be reduced to that of examining and issuing credentials (certification, permits, licenses). There will be no enforcement activity. However, he expressed belief that the Arizona Legislature will support the pesticide enforcement program and provide funding to maintain a strong program.

AGENCY COMMENTS

State officials generally agreed with our summary overview.

ARKANSAS' PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

In 1979 Arkansas' agricultural production was valued at more than \$2 billion, ranking the State 14th nationally in agricultural income. The chief products grown on Arkansas' 17 million acres of farmland are rice, cotton, and soybeans.

Pesticide production in Arkansas during 1979 exceeded 89 million pounds. However, State officials do not know the amount of pesticides used annually in the State. However, a 1974 EPA survey estimates usage at about 41 million pounds annually.

The State Cooperative Extension Service at the University of Arkansas funds the educational and training services for prospective pesticide applicators. Also, the extension service is involved in various integrated pest management programs within the State, and when the State requests, the extension service gives input into the processing and granting of emergency exemptions and special local need registrations.

PESTICIDE ENFORCEMENT

Arkansas received its first EPA enforcement grant in 1979. The grant supplemented the State's ongoing enforcement program to continue regulating the production, sale, use, and distribution of pesticides, as well as deter pesticide misuse. Since its inception in 1917, the State Plant Board (SPB), equivalent to a department of agriculture, has dealt with agricultural problems in the State, including pesticide use. The board is the lead agency for the EPA enforcement program. Organizationally, the board's 16 members govern an operating unit in the State's Department of Commerce. Both the board members and the SPB's four operating divisions represent nearly all aspects of agricultural production, as well as carry out regulatory enforcement actions instituted by State laws. Two of the divisions deal with pesticides. The Feeds, Fertilizers, and Pesticides Division (FFPD) concentrates on the agricultural aspects of pesticide laws and regulations. The Division of Plant Industry (DPI) deals with nonagricultural pesticide use.

Specific problems, proposals, or actions initiated by FFPD and DPI officials are first presented to the Pesticide and Pest Control Committees, respectively. These committees consist of up to seven board members, who, with the exception of one plant pathologist and one entomologist, represent major pesticide users, applicators, or manufacturers. Their proposals, or recommendations, are then presented to the full board for a final decision.

ENFORCEMENT ACTIVITIES AND ACTIONS

In fiscal year 1979 Arkansas received a \$116,000 enforcement grant. Since all the funds were not spent the first year, the remainder was carried over to 1980. During the 2 years the State spent a total of \$76,920 to pay a full-time inspector, laboratory technician, secretary, and a part-time director, assistant director, and laboratory supervisor for FFPD and three part-time inspectors in DPI. The funds were also used to purchase office equipment and supplies and a gas chromatograph to perform pesticide residue and formulation analyses.

EPA's enforcement grant has had little impact on the emphasis SPB puts on pesticide enforcement. Our analysis of SPB's activities during the last 7 years showed that SPB spent about 14 percent of its time on pesticide enforcement both before and after the EPA grant. The EPA grant did, however, increase the board's financial resources by about 3 percent.

Though emphasis on total pesticide-related work changed little, the grant did bring about major qualitative changes in SPB's ongoing enforcement program. EPA's grant program gave SPB inspectors for the first time the opportunity to inspect producer establishments, added routine agricultural-use observations to the inspectors' activity, and added the resources needed for taking samples during inspections and conducting laboratory analyses of these samples.

These changes, as well as the other enforcement activities required by EPA's enforcement grant, are shown on the following chart.

Type of inspection	Fiscal year 1979		Fiscal year 1980	
	Grant commitments	Accomplishments reported to EPA	Grant commitments	Accomplishments reported to EPA
Producer establishments (samples)	30	18	24	24
Marketplace (samples)	35	32	55	55
Agricultural-use observations (samples)	25	37	100	150
Structural-use observations (samples)	55	-	20	45
Dealer record checks	55	62	85	56
Applicator records checks	2	15	42	24
	60	8	70	25
	40	-	40	41
Total	-	-	64	114
	-	-	104	80
	<u>302</u>	<u>172</u>	<u>604</u>	<u>614</u>
Label checks	179	14	-	-
Total	<u>481</u>	<u>186</u>	<u>604</u>	<u>614</u>

State officials explained the reasons for not meeting their commitments as follows:

--Only one agricultural inspector and three part-time nonagricultural inspectors were responsible for all the grant activities.

--Grant commitments were derived by a former EPA inspector and the board's agricultural enforcement FFPD director, based on past experience, but the time frames were never established for specific types of inspections.

--Use observations often were made only as an opportunity presented itself during the performance of another inspection activity.

Additionally, when SPB originally started the grant program, it had planned to use most of its 25 agricultural inspectors and 6 nonagricultural inspectors to work part-time on grant activities. However, SPB became apprehensive about Federal audits and specific Federal timekeeping methods. As a result, only five EPA credentials were issued, four of which went to division and section head levels, which limited enforcement work. Consequently, grant outputs rested solely with one full-time agricultural inspector and one part-time nonagricultural inspector.

During fiscal year 1980 Arkansas initiated the following enforcement actions.

- 31 warning notices.
- 15 stop sale, use, or removal orders.
- 2 license revocations.

FUTURE TRENDS

SPB officials are taking steps to correct the deficiency in conducting use observations and are expanding the use of more State inspectors in conducting grant work. According to the supervisory inspector, the fiscal year 1981 program places greater emphasis on use observations. For example, the grant proposal sets forth specific criteria for determining where monitoring should take place within the State. According to the plan, " * * * use monitoring should occur in those areas that are demonstrated sources of numerous draft complaints." According to the supervisory inspector, the additional four part-time State inspectors will allow him the time to concentrate on this activity.

Also, according to the supervisory inspector, increased aerial application observations will encourage applicators to be more careful. Use observations by inspectors will make it easier to prove misuse as opposed to investigating a complaint after the fact.

AGENCY COMMENTS

State officials found the summary generally correct. However, they questioned our statement that the members of the Pesticide and Pest Control Committees represent major pesticide users. According to SPB officials, it was the members' pesticide-related expertise which allowed their appointment to the committees. While some may represent major pesticide user groups, such as farmers or applicators, the members are also Arkansas consumers and are therefore concerned about the hazards of misuse.

CALIFORNIA'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

California's agriculture is among the most diverse and productive in the world. Over 200 commercial crops are grown in California, and the State leads the Nation in the production of 44 of them. California's production accounts for more than one-third of the country's fruits, vegetables, and nuts. Pesticides are an integral part of this production.

In 1976 about 200 to 250 million pounds of pesticides were used in the State. About 120 million pounds were used in agriculture, and the remainder were used by households, industry, government, and pest control professionals. Of the 200 to 250 million pounds, only 20 million pounds were restricted pesticide products.

PESTICIDE ENFORCEMENT

The lead agency in California for pesticide enforcement is the Department of Food and Agriculture. Its responsibilities are carried out through a pesticide regulatory program under its Division of Pest Management, Environmental Protection, and Worker Safety. This division has four units, a combined budget of about \$7 million, and over 190 staff members. The figures increased by \$2.3 million and 61 persons during 1980 to meet requirements of the California Environmental Quality Act.

In addition to the State department, each county has a Department of Agriculture managed by a county agricultural commissioner who is certified by the department and appointed by the County Board of Supervisors. Exceptions are Inyo/Mono, El Dorado/Alpine, Sierra/Plumas, and Madera/Mariposa, which are combined county groups. These local commissioners enforce California laws and regulations pertaining to pest control and pesticides, including the use and possession of restricted materials. The commissioners commit over 135 staff years and \$5 million to pesticide regulation.

The Department of Food and Agriculture issues licenses for pest control operators, dealers, advisors, and others (except structural pest control operators who are licensed by the Structural Pest Control Board in the State's Department of Consumer Affairs).

To carry out the enforcement program the county agriculture commissioners periodically evaluate the operations of those who are licensed to sell, advise on, use, or possess pesticides. They also conduct investigations of pesticide exposures, illnesses, complaints, and other incidents that involve pesticides.

The county commissioners have inspectors who are certified by the State to perform pesticide inspections and investigative work. They submit their findings to an evaluator in each commissioner's office to determine the actions, if any, to be taken on any violations of State or Federal laws.

For most violations county officials conduct the investigations and determine the enforcement action. However, for appealed decisions and for certain other cases, the State Department of Food and Agriculture gets involved. When the State lacks authority or cannot get effective prosecution, or when other States might be involved, the cases are referred to EPA.

ENFORCEMENT ACTIVITIES AND ACTIONS

Even before the enforcement grants, California had an extensive agricultural pesticide use enforcement program. However, except for some urban areas, structural enforcement programs were limited. In 1978 California began receiving enforcement grants. Since then it has received the following funds.

<u>Fiscal year</u>	<u>Grant</u>
1978	\$ 567,100
1979	1,399,592
1980	<u>796,620</u>
Total	<u>\$2,763,312</u>

Grant funds have been used primarily to improve the structural program, update equipment, and augment aspects of the agricultural pesticide program. According to State officials, the EPA enforcement grant has had its greatest impact by supporting the expense of developing the structural pesticide program.

The department allocates the grant funds to the counties. During fiscal year 1978 it selected seven counties to participate in the initial enforcement grant program.

The number of inspections and investigations reported for fiscal years 1975 through 1979 is shown below.

	<u>Number of inspections/investigations conducted</u>				
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Record review:					
Pest control operators	(a)	3,868	926	N/A	1,668
Pesticide dealers	1,709	1,413	1,212	1,448	1,082
Agricultural pest control advisors	3,072	3,017	2,338	2,463	1,459
Inspections:					
Applications	25,340	19,060	16,238	17,360	16,630
Mixing and loading sites	N/A	N/A	7,702	11,947	10,756
Storage and disposal facilities	38,208	20,994	26,030	22,091	22,391
Headquarters of operation	N/A	N/A	4,140	8,908	8,359
Application equipment	(a)	9,671	10,612	12,958	16,259
Field workers	N/A	14,919	N/A	6,630	7,892
Investigations:					
Reports of loss	263	299	384	504	331
Pesticide illnesses	N/A	1,404	1,102	1,842	1,338
Complaints:					
Employee	N/A	N/A	199	51	135
Other	2,015	1,746	1,261	1,347	1,319

a/Included in the storage and disposal facilities figure.

During this same period, the number of enforcement actions (administrative and legal) were as follows:

	<u>Number of enforcement actions taken</u>				
	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
Notices of violation	1,986	1,739	1,896	1,692	2,136
Permits revoked or suspended	1,752	266	306	344	424
Registrations canceled--					
pest control operators	133	186	42	60	20
Registrations suspended or					
revoked--pest control					
advisors	3	9	2	1	-
Complaints and citations	11	26	11	66	35
Office interviews and					
hearings	82	141	134	N/A	N/A

Although many enforcement actions were taken, the State lacks authority to impose civil penalties as sanctions against violators of pesticide laws and regulations. The State and county attorneys and the courts are reluctant to taken on criminal prosecutions of pesticide violations. As a result, most violation cases are handled with administrative sanctions and very few cases ever result in criminal prosecutions.

The Department of Food and Agriculture also registers and evaluates pesticide products. Under California regulations, before a pesticide can be used it must be registered with the State even though it is registered with EPA. The responsibility for these activities has been assigned to the Pesticide Registration and Agricultural Productivity Unit. The unit has a staff of over 50 and a budget exceeding \$1.7 million, currently funded from an annual \$40 fee per pesticide product, a mill tax assessment on pesticide products, and the State general fund.

In addition to regular pesticide products, the department registers products for special local needs and emergency exemptions. Special local needs are evaluated to determine the validity of the need and are generally justified on the basis that (1) there is no EPA-registered product that can be used or (2) the registered product is not available or not as safe as the product under consideration. Each special local need registration issued is submitted to EPA for comment and rejection.

The State has three types of emergency exemptions--specific, public health quarantine, and crisis. Each emergency application is evaluated to determine if an emergency exists and whether there are feasible alternatives. Except for crisis exemptions, the registrations are not issued until an EPA approval is received.

California also has a registration program for the experimental use of pesticides in the basic research phase of development. Basically, the program is concerned with pesticides before residual tolerance levels have been established. All such registrations provide that the pesticides cannot be sold to the user and the product/item that the pesticide is used on has to be destroyed.

FUTURE TRENDS

Both State and county pesticide officials indicate that they anticipate that Federal grant funds will decrease or be discontinued. State officials believe the loss of funds will have only a limited impact on the agricultural pesticide control program, but they anticipate a substantial adverse impact on the structural pest control program. The agricultural program is basically self-supported by licensing fees and chemical taxes, whereas the

structural program has no other established sources of funds. Also, State officials believe it will be difficult to get the State to pay for an activity that is currently supported with Federal grant funds.

AGENCY COMMENTS

State officials generally agreed with the summary but provided us with some updated figures which we incorporated into the summary.

GEORGIA'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Georgia is the 14th most populous State and ranks 9th in pesticide usage, applying about 33 million pounds per year. Georgia has about 54,000 farms averaging about 260 acres. The State's 1980 agricultural production value was estimated at \$1.1 billion; leading crops are corn, cotton, peanuts, tobacco, soybeans, and hay. About 300 pesticide-producing establishments are registered in Georgia, in addition to about 33,000 private and 5,000 commercial applicators.

PESTICIDE ENFORCEMENT

Pesticide laws are enforced by Georgia's Department of Agriculture (GDA) Entomology Division and Pesticide Division. GDA's Entomology Division is in charge of structural pest control activities, while the Pesticide Division is responsible for all other enforcement activities.

GDA received its first EPA enforcement grant of \$70,000 in 1978 covering a 9-month period. Funds were used to supplement current enforcement staff salaries, fringe benefits, and travel and to purchase laboratory equipment and other supplies.

GDA did not request an EPA enforcement grant in 1979 or 1980. The State believed that requirements for inspection documentation and controls over pesticide samples and grant funds significantly increased the State's workload. However, through many discussions with EPA, GDA gained a better understanding of the grant program and reporting requirements and submitted a proposal for 1981.

The Cooperative Extension Service (CES) at the University of Georgia's College of Agriculture trains pesticide applicators and has developed manuals and slide presentations for each applicator type--public health, ornamental and turf, and aquatic, for example. In addition to its training activities, CES collects technical data on pesticide experiments and test programs and emergency exemptions. Based on CES' input, GDA has approved nine emergency exemptions during the last 5 calendar years, including four crisis exemptions. During the same time frame, GDA approved 115 special local need requests based on CES' input. Because some applications did not meet registration criteria and a few were not supported by CES, GDA denied 39 special local need requests made between 1976 and 1980.

ENFORCEMENT ACTIVITIES AND ACTIONS

The State met or exceeded its 1978 grant commitments in all but 2 of the 11 activity categories. However, State officials feel that the number of total accomplishments above the State's commitments outweigh not meeting the commitments in these two areas. Activities in the grant proposal were based on what the State believed its inspectors could realistically accomplish in the 9-month grant period. The following table compares the activities the State proposed to do under its grant and its reported performance.

	<u>Grant commitments</u>	<u>Reported accomplishments</u>
Establishment inspections	35	35
Establishment samples	35	46
Contractor inspections	150	242
Dealer/applicator inspections	90	249
Marketplace inspections	225	255
Marketplace samples	45	50
Experimental-use permits monitored	10	<u>a/9</u>
Nonagricultural-use observations	5	5
Nonagricultural-use observation samples	2	2
Agricultural-use observations (note b)	25	40
Agricultural-use samples	20	<u>a/6</u>

a/Grant commitment not met.

b/Includes misuse complaints.

The number of misuse complaints the State has investigated each calendar year since 1975 has not established a definite pattern of increases or decreases.

<u>Calendar year</u>	<u>Misuse investigations</u>
1975	41
1976	48
1977	31
1978	51
1979	82
1980	68

However, before 1979, GDA's investigation files did not readily disclose the enforcement actions taken in specific areas. GDA has now improved its recordkeeping system by including information

on enforcement actions in the case file. GDA also maintains a master log of all cases and results by calendar year. Inspection documentation has also improved in that more samples are being taken to support misuse cases. The State's increased pesticide-sampling capability can be attributed to the EPA grant program which provided funds to purchase necessary equipment.

According to State officials, their enforcement philosophy combines education and penalty assessment. Officials believe that penalty assessment alone is not an appropriate enforcement remedy, but must be combined with training and education so that violations can be reduced. By closely working with violators on an individual basis, they believe they can achieve a much higher degree of compliance than by penalties alone. The State also mediates misuse complaints to help the party alleging damage and the applicator to reach a mutually satisfactory settlement and to ensure that the damaged party is reimbursed for losses.

The State primarily issued warning letters in instances where violations occurred. In 1979, 14 warning letters were issued. But when necessary the State takes stronger actions. Recently, Georgia has taken stronger enforcement actions against pesticide use violators, particularly by assessing fines and imposing license probations.

Since Georgia's pesticide laws do not include civil assessment authority, in 1980 the State began using its Administrative Procedure Act to take additional action in violation cases; namely holding hearings, assessing fines, and putting probationary periods on licenses. If a hearing discloses grounds to suspend, cancel, or revoke the applicator's license, the State may impose a fine up to \$1,000 in lieu of these actions. During calendar year 1980, the State held nine hearings which resulted in fines and applicator license probations. GDA believed that most of these cases, although first offenses, were too serious to issue only a warning letter. Instead of issuing a warning letter, the State levied a fine in each case but suspended part of it. Of \$2,200 in fines assessed, GDA suspended \$1,450 and actually collected \$650. In 1980 GDA also issued 13 warning letters in other cases.

FUTURE TRENDS

In February 1981 Georgia received its 1981 EPA enforcement grant. GDA will receive about \$178,000, of which an estimated \$100,000 will be used to purchase a gas chromatograph for the State's residue laboratory. During the grant period which ends September 30, 1981, GDA will use the remainder to fund two full-time inspectors, two chemists who will work at the residue laboratory, and one secretary. GDA will use future grant funds to

expand its enforcement activities at public health institutions and to computerize its inspection files.

AGENCY COMMENTS

State officials generally agreed with our summary of Georgia's pesticide enforcement program.

ILLINOIS' PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Illinois is the fifth most populous State with an estimated 107,000 farms. In 1978 it ranked fourth nationally in farm production. Corn and soybeans account for nearly 90 percent of the total 22.7 million acres harvested. Illinois exports over \$2.5 billion in food, making it number one in U.S. agricultural exports.

Large amounts of pesticides are used annually in Illinois. A 1978 Illinois survey estimated that over 87 million pounds were applied that year on major crops.

PESTICIDE ENFORCEMENT

Fiscal year 1980 was the first year Illinois had a Federal pesticide enforcement grant. The Illinois Department of Agriculture (IDA) began its pesticide program in 1967, focusing on training and licensing persons who apply agricultural pesticides to others' property. Misuse enforcement was added in 1973. Illinois also has had a Federal pesticide applicator certification grant since fiscal year 1976. As of October 1, 1980, Illinois had certified almost 6,000 commercial applicators, 55,000 private farm applicators, and over 1,500 structural pest control applicators.

IDA is the lead agency for the pesticide enforcement grant. IDA entered into a cooperative enforcement agreement with EPA in October 1979. The enforcement agreement stipulated the number and types of enforcement activities or commitments that IDA would perform in fiscal year 1980. However, no appreciable amount of enforcement work was performed until after IDA and the Illinois Department of Public Health (IDPH) entered into their own cooperative pesticide enforcement agreement in January 1980.

Pesticide enforcement in Illinois is performed by both IDA and IDPH. The Illinois Pesticide Act of 1979, administered by IDA, regulates pesticides used in agricultural production. The Illinois Structural Pest Control Act of 1975, administered by IDPH, regulates pesticides used in structures.

Illinois spent \$353,524 of its \$594,706 fiscal year 1980 enforcement grant--IDA spent \$129,620 and IDPH spent \$210,533. The enforcement grant was used by both IDA and IDPH to purchase additional laboratory analytical equipment, various supplies, and to hire some additional staff. The \$13,371 balance was spent by IDA on a subcontract to analyze 80 pesticide residue samples. The grant had proposed that 250 samples would be analyzed. The pesticide residue analysis work was contracted to the University

of Illinois because the IDA laboratory is not equipped to perform residue analysis. The laboratory does not have the space to perform residues and formulation analysis simultaneously. A new IDA laboratory is currently under construction.

Illinois also has an Interagency Committee on Pesticides comprised of seven State agencies. IDA chairs the committee. Its purpose is to study and advise State officials on the use of pesticides within the State, recommend changes in laws or rules and regulations, and review and approve rules and regulations relative to the use of pesticides in the State. The committee is not directly involved with pesticide enforcement. However, the committee does review and comment on State special local need regulations that are being considered by IDA. IDA has approved 53 of 76 special local need pesticide requests since 1977. IDA has also approved 4 of the 11 emergency exemption requests received, but the committee provided no comments on these since IDA alone has this responsibility.

ENFORCEMENT ACTIVITIES AND ACTIONS

IDA agreed to perform various enforcement activities in order to obtain fiscal year 1980 pesticide enforcement grant funds. The enforcement commitments by IDA and IDPH and the reported activities accomplished are shown below.

<u>Type of inspections</u>	<u>Grant commitments</u>	<u>Reported accomplishments</u>
Marketplace	200	a/ 200
(samples collected)	100	a/ 100
Producer establishments	500	327
(samples collected)	100	83
Use/misuse	600	234
Certified applicator checks	300	a/ 300
Restricted-use inspections	<u>100</u>	<u>25</u>
Total	<u>1,900</u>	<u>1,269</u>

a/Reported accomplishments that exceeded grant commitments were not included.

Illinois met only 67 percent of its grant commitments in fiscal year 1980 for several reasons. First, the enforcement program started 4 months late. Also, State officials stated that EPA region 5 program guidance was not adequate. For example,

the region did not clearly define what and how many State enforcement activities were to be performed and reported in order to meet grant commitments. Finally, two of the enforcement activities--planned use inspections and producer establishments inspections--had not previously been done by State enforcement officials. As a result, the original grant commitments may have been unrealistic.

Although Illinois experienced some problems its first year, it did complete numerous inspections and took the following 51 enforcement actions.

- 47 warning letters.
- 2 stop sale orders.
- 1 civil prosecution.
- 1 criminal action.

The comparatively low number of enforcement actions reflects two major limitations. First, State pesticide laws do not allow enforcement officials to assess monetary fines for pesticide violations. Second, criminal actions for pesticide violations must be processed through the State judicial system. Some local county prosecutors are reluctant to prosecute pesticide violators for political reasons. Pesticide violations also have a low priority.

FUTURE TRENDS

State enforcement officials feel that the enforcement workload will increase as the public becomes more aware of the State's new role in pesticide enforcement. IDA and IDPH intend to increase the number of full-time pesticide inspection staff to keep pace with the expected increase. Finally, completion of the new laboratory will allow IDA to perform all pesticide analyses.

The State joint Committee on Regulatory Agency Reform recently reviewed the Illinois Structural Pest Control Act and the IDPH pesticide program. As a result of its work, the committee recommended that the Structural Pest Control Act remain on the statutes, but with certain revisions. Some members of the committee recommended that the act be administered by IDA rather than IDPH since this would reduce duplication and State expenditures. The State legislature planned to act upon the recommendations of the committee in October 1981.

AGENCY COMMENTS

Illinois officials provided extensive comments on our draft. According to State officials, we did not fully portray EPA's role in developing and guiding enforcement activities in the State:

"In approving the initial cooperative enforcement grant USEPA stipulated that there could be no expenditure of funds until an agreement between the two State agencies had been consummated. Later USEPA indicated that actual interpretation and implication of that stipulation should not have delayed start up. [Nevertheless] without available funds the State authorities are reluctant to approve spending general revenue funds and receiving reimbursement later. The grant, therefore, did not begin until January 22, 1980. USEPA had full knowledge of this situation."

Furthermore, State officials felt Illinois enforcement actions should not be categorized as limited. They explained that

"* * * in extensive discussion over a number of years Illinois has made it clear to USEPA that our philosophy of enforcement action is based on securing compliance. It is just as likely, in our judgment, that the low number of enforcement actions is explained by the fact that our work with applicators and industry over the years has improved expertise and awareness so that Illinois is not plagued with significant pesticide use problems."

State officials also felt that if numbers of enforcement actions were the sole criteria used by EPA to judge program quality, the State would drop out of the grant program and continue under its own laws.

LOUISIANA'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Louisiana's agricultural output in 1979 exceeded \$1.6 billion. The State's 34,500 farms total 10.2 million acres ranking it 33rd nationally. Louisiana's four major crops are soybeans, cotton, rice, and sugarcane. From 1977 to 1979 the total estimated amount of pesticides used on these major crops decreased about 12 percent from 26 million pounds to 23 million pounds. No estimates were available for the amounts of pesticides used on the State's minor agricultural crops or for nonagricultural pest control purposes.

Louisiana began receiving EPA pesticide grant funds in June 1975 to train and certify pesticide applicators and in July 1978 to enforce State and Federal pesticide control laws. As of September 30, 1980, Louisiana had

- certified 246,986 applicators (15,183 commercial and 231,803 private),
- registered 100 pesticide-producing establishments, and
- registered 320 pesticide dealers.

PESTICIDE ENFORCEMENT

The Louisiana Department of Agriculture, Office of Agricultural and Environmental Sciences (A&ES), is the lead agency for the pesticide enforcement grant. EPA first awarded Louisiana an enforcement grant of \$242,400 in July 1978, but enforcement activities did not begin until November 1978. As of September 1980, \$115,718, or 48 percent of the grant, remained unspent. EPA awarded the State an additional enforcement grant of \$225,638 in September 1980.

Louisiana used its fiscal years 1979 and 1980 enforcement grants to fund four positions--one Federal coordinator, one enforcement inspector, and two clerical staff. In fiscal year 1981 the State plans to hire another enforcement inspector and a chemist. Louisiana also used grant funds to purchase three automobiles, word processing equipment, cameras, tool boxes, and office furniture and equipment. The State plans to use much of its grant carryover to purchase three laboratory items--a gas chromatograph, a high-pressure liquid chromatograph, and an infrared spectrophotometer.

Louisiana's agricultural pesticide enforcement work is planned and monitored by an A&ES staff of three, but most of the inspecting, investigating, and sampling is conducted by field

inspectors assigned to five regional offices. A&ES staff trains field inspectors, provides them guidance, and provides quarterly output goals to the regional biologists who make the actual work assignments. Field inspectors report inspection and investigation results through the regional biologists to A&ES, where records are maintained and EPA reports are prepared.

As of November 1980 the State had 30 agricultural field inspectors. Three of these, called enforcement inspectors (one funded by EPA and two funded by Louisiana), spend all their time on pesticide-related activities. The remaining 27 field inspectors spend about 50 percent of their time on pesticide-related activities.

A Pesticide Advisory Commission, appointed by the Commissioner of Agriculture, advises the commissioner on the regulation and control of all aspects of the pesticide industry and related fields. The commission hears cases of suspected pesticide law violations and recommends enforcement action to the commissioner. The commission's 17 members include certified aerial and ground applicators, farmers, agricultural chemical producers and dealers, certified pest management consultants, and representatives of other special interest groups.

Louisiana's structural pest control activities did not change when the State received EPA enforcement funds. The State had for several years conducted use observations and misuse investigations and had taken dilution and residue samples. The EPA enforcement grant provides funds for structural pest control activities, but A&ES does not use the grant to fund these activities. Structural pest control activities are, however, reported to EPA as grant outputs. The activities are funded through license and inspection fees collected from the industry and are conducted by a separate A&ES staff of four. However, agricultural field inspectors conduct some of the structural inspections and investigations.

A&ES obtains laboratory support from a State-funded laboratory at Louisiana State University. A&ES officials consider the laboratory support inadequate because of (1) the low priority the laboratory assigns to pesticide work, (2) insufficient laboratory staffing, and (3) outdated and inoperative equipment. These problems cause 6- to 8-month delays in receiving sample results. As mentioned previously, the State plans to use a portion of its grant carryover to purchase laboratory equipment and hire a chemist to perform pesticide analyses.

The Louisiana Cooperative Extension Service located at Louisiana State University (1) trains pesticide applicators for certification, (2) reviews and approves special local need registrations, and (3) develops, in conjunction with Louisiana State University, the State's integrated pest management programs.

ENFORCEMENT ACTIVITIES AND ACTIONS

EPA and A&ES developed enforcement grant inspection, investigation, and sampling commitments based on the State's experience with its own pesticide programs. Some commitments, such as the number of samples, producers' establishment inspections, and use observations were optimistic and have since been reduced to meet State capabilities. But others, such as the number of dealer and applicator records inspections, have been increased. The State's performance relative to these commitments is the primary criterion EPA uses to assess the adequacy of State enforcement efforts and continued eligibility for enforcement grant funds. EPA requires the State to maintain records supporting the output commitments claimed. However, recordkeeping has been inaccurate and incomplete. Commitments and accomplishments, according to the State, are shown below for fiscal year 1980. Because of the condition of A&ES records, we could not document the numbers for 1979. We could not locate records to support all reported commitments.

<u>Type of inspection</u>	Grant commitments <u>1980</u>	Accomplishments reported to EPA <u>1980</u>
Producer establishments	100	100
Marketplace	200	124
Agricultural-use observations	100	96
Nonagricultural-use observations	50	109
Applicator records	250	a/2,366
Dealer records	200	337
Misuse	300	318
Emergency-use permits monitored	20	4
Import	-	8
Total	<u>1,220</u>	<u>3,462</u>
Samples taken	360	708

a/Our tests showed that A&ES was counting the number of aircraft inspections and the number of applicators certified rather than the number of times A&ES inspectors actually examined an applicator's records on use of restricted-use pesticides.

According to EPA records, A&ES reported taking the following 90 enforcement actions in fiscal years 1979 and 1980.

<u>Action</u>	<u>1979</u>	<u>1980</u>
Warning letters	19	4
Stop sale, use, or removal	42	3
Suspended licenses	2	4
License probations	9	-
Civil penalties	1	-
Criminal penalties	1	-
Suspended hearings	-	3
Cases referred to EPA	1	-
Revocation of certification	<u>1</u>	<u>-</u>
Total	<u>76</u>	<u>14</u>

FUTURE TRENDS

The A&ES Director for Pesticide and Environmental Programs anticipates that Louisiana's pesticide enforcement program will continue to grow only as long as EPA grant funds are available. Should grant funds not be available, the enforcement program would probably revert to its pregrant status. The Director doubts whether the State legislature would increase program funding to absorb the loss of EPA funds.

AGENCY COMMENTS

State officials generally agreed with the information presented. However, State officials did disagree with our comment regarding the State's poor recordkeeping. State officials contend that they have records to support EPA grant outputs except for applicator record inspections.

MICHIGAN'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Michigan is the seventh most populous State and has over 63,000 farms. Total receipts from the State's 11 million harvested acres in fiscal year 1979 exceeded \$2.7 billion. The bulk of the crops grown in Michigan in both acreage and cash value include corn, wheat, fruit, small grains, dry beans, soybeans, sugarbeets, alfalfa and other hay, vegetables, and pasture crops.

The State has approximately 150 pesticide-producing establishments. State enforcement officials did not know the amount of pesticides used in the State; however, a 1974 EPA survey estimated that over 17.5 million pounds of pesticides are used annually.

PESTICIDE ENFORCEMENT

The Michigan Department of Agriculture (MDA) is the lead agency for the Federal pesticide enforcement grant. The State started receiving grant funds in May 1977. Since then, Michigan has received \$265,617 in Federal grant funds as follows:

<u>Fiscal year</u>	<u>Amount</u>
1978	\$ 35,642
1979	56,231
1980	173,744

Michigan has also been receiving a Federal pesticide applicator certification grant since January 1976. As of June 1980, Michigan had certified over 11,000 private applicators and almost 4,000 commercial applicators.

Several other organizations in the State are involved with pesticide use and enforcement. The Interagency Pesticide Advisory Committee, comprised of five State agency officials and six public members, advises MDA on statewide pesticide problems. The Toxic Substances Control Commission, among other duties, refers pesticide misuse cases to MDA for investigation. The Michigan Department of Natural Resources occasionally prosecutes pesticide violators under other State or Federal environmental and water quality laws.

MDA also has agreements with the Michigan State University Cooperative Extension Service and the Agricultural Experimental Station to review State special local need registration requests, and 20 of the 32 emergency exemption requests were approved by MDA for use in the State. The number of special local need registration requests and approvals is high, and State officials believe some producers try to circumvent Federal registration. State

officials believe special local need requirements by EPA may need strengthening.

MDA's Plant Industry Division's legal authority is currently provided in 22 laws and 25 department regulations. Pesticide enforcement is only one of the division's many areas of responsibility.

MDA divided the State into seven areas to perform inspections. Seven of the 60 MDA inspectors are pesticide specialists and assist other inspectors when pesticide issues arise. The pesticide inspectors devote about 20 percent of their time to pesticide enforcement, with the balance devoted to eight other agricultural programs, such as commercial feed and elevator sanitation inspections. Grant funds were not used to increase the inspection staff. The funds were generally used to purchase laboratory analytical equipment, office supplies, and computer equipment.

Pesticide residue and formulation laboratory sample analysis is done by MDA's laboratory, but it is only a minor portion of the laboratory workload. However, the number of pesticide residue and formulation analyses has increased over the past 3 years--92 in 1978, 131 in 1979, and 245 in 1980. Only two chemists, of the 42 laboratory staff, are regularly assigned to the State's pesticide program.

ENFORCEMENT ACTIVITIES AND ACTIONS

MDA agreed to perform various pesticide enforcement activities in order to obtain a Federal enforcement grant. Its enforcement commitments and reported accomplishments for fiscal year 1980 are shown below.

<u>Type of inspections</u>	<u>Grant commitments</u>	<u>Reported accomplishments</u>	<u>Percent accomplished</u>
Marketplace	38	a/ 38	100
(samples collected)	53	a/ 53	100
Producer establishments	60	a/ 60	100
(samples collected)	92	71	77
Misuse	48	a/ 48	100
(samples collected)	126	86	68
Experimental-use permits	8	-	-
Private pesticide application practices	<u>550</u>	<u>550</u>	100
Total	<u>975</u>	<u>906</u>	93

a/Reported accomplishments that exceeded grant commitments were not included.

MDA was able to meet all of its fiscal year 1980 enforcement grant commitments with the exception of producer and misuse sample collections and experimental-use permit investigations. MDA officials said that they had overestimated the number of producer establishment and misuse samples they could collect and next year will reduce their commitments.

As a result of the above activities, MDA took the following 98 enforcement actions in fiscal year 1980:

- 45 cease and desist orders.
- 1 stop sale order.
- 1 criminal prosecution.
- 47 warning letters.
- 4 informal hearings.

MDA had few enforcement actions compared to the number of activities performed in fiscal year 1980. This can be attributed to the education approach, rather than enforcement actions that MDA inspectors sometimes take when pesticide violations occur. Because the State did not maintain summary records, reliable enforcement action data from fiscal years 1975 through 1979 was unavailable.

However, MDA took additional actions that were not related to meeting grant commitments. For example, MDA uncovered about 1,300 State registration violations, and the manufacturers were contacted for payment of required fees. In addition, actions were taken for pesticide certification and license violations.

FUTURE TRENDS

Pesticide enforcement program resources have been limited by the State legislature. State officials believe the legislature would be reluctant to increase program staff if program funds are eliminated by the Federal Government.

Michigan's economic conditions have resulted in State budget cuts. Six MDA Plant Industry Division staff members have recently been laid off. Also, State employees are accepting involuntary layoff days without pay to reduce the possibility of future layoffs. State officials do not know what effect financial problems will continue to have on the pesticide program.

AGENCY COMMENTS

Michigan Department of Agriculture officials generally agreed with our summary. However, State officials believe that some special local need requests may be used by producers to circumvent Federal registration. Yet, Michigan officials said that they work hard to avoid this situation. When requests

appear to circumvent Federal registration requirements, the request is denied unless the producer can prove otherwise, or if a critical State need is obvious. State officials attribute the numerous special local need registrations in Michigan to the diversity of crops, many of them so-called minor crops.

Regarding our assessment that grant funds were used for equipment and supplies, Michigan officials state that some funds were used to offset the cost of a chemist plus time and mileage for inspectors and costs for analyzing samples.

Finally, we stated that Michigan did not meet its commitment for experimental-use permit investigations. According to State officials, only one experiment was conducted in 1980. The other seven producers applied to EPA for use in Michigan but did not engage in experimental trials in the State. Officials suggested that EPA should confirm actual commitments by the producers rather than base State commitments solely on initial applications.

NEW YORK'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

New York, the second most populous State, has operated under a Federal pesticide enforcement grant since fiscal year 1978. Nationally, New York ranks 23rd in agricultural income. According to 1979 estimates, New York has 45,000 farms averaging 222 acres. The State's agricultural products were valued at more than \$2.2 billion in 1979. Following are New York's leading agricultural products.

<u>Product</u>	<u>Dollars</u> (millions)
Milk	\$ 1,317
Cattle	166
Apples	112
Greenhouse/nursery	111
Eggs	83
Corn	54
Potatoes	49
Grapes	45
Onions	34
Hay	25

The State has had an EPA pesticide applicator certification grant since fiscal year 1976. As of October 1, 1980, the State Department of Environmental Conservation (DEC), Bureau of Pesticides Management, had certified 28,240 (14,113 commercial and 14,127 private) applicators.

The Director of the Bureau of Pesticides Management estimated that 100,000 establishments in the State sell registered pesticides. While State and EPA regional officials were unable to provide estimates of the amount of pesticides used in New York, a 1974 EPA survey estimated that about 12 million pounds are used annually in the State.

PESTICIDE ENFORCEMENT

DEC's Bureau of Pesticides Management is responsible for the pesticide enforcement grant. New York is one of the few States where the lead agency is located in a department other than a State department of agriculture. Since New York began participating in the enforcement grant program, it has received \$1,940,759 as follows.

<u>Fiscal year</u>	<u>Grant</u>
1978	\$372,619
1979	619,134
1980	619,006
1981	330,000

The State has used the grant money to purchase a computer terminal and printer, laboratory equipment, safety equipment, a word processing machine, and office supplies. It used its 1980 grant to hire one supervisory inspector, two senior analytical chemists, three senior pesticide inspectors, two clerk-typists, 11 pesticide inspectors, and three laboratory technicians. Laboratory maintenance and supplies, inspection supplies, and travel and contractual service costs were also covered in the 1980 budget.

As of October 1, 1980, the bureau had a staff of 54, including the bureau director; a supervisory pesticides inspector; 3 analytical chemists, 3 laboratory technicians, 5 senior pesticide inspectors; 24 pesticide inspectors; 1 computer programmer; and 16 typists, stenographers, and clerks. Reductions in the fiscal year 1981 enforcement grant will cause DEC to search for alternate sources of income to support many of the existing positions. The director said that because of grant reductions he will ultimately lose as many as 11 pesticide inspectors, as well as several laboratory and clerical positions.

DEC is divided into nine regions. The Bureau of Pesticides Management maintains two to five inspectors in each region and divides its statewide work accordingly. During fiscal years 1979 and 1980, State inspectors sent 740 samples to the State pesticides laboratory for analysis. Turnaround time for analysis averaged 30 days or more per sample during fiscal year 1980. From April 1, 1979, to November 30, 1980, the State laboratory analyzed 505 of 605 samples.

The State Cooperative Extension Service at Cornell University is responsible for pesticide education and integrated pest management programs in the State. It also has major input into the processing and granting of statewide emergency exemptions and special local need registrations.

ENFORCEMENT ACTIVITIES AND ACTIONS

Since the inception of the New York enforcement grant, the State has operated under the following time frames established by the EPA region 2 Pesticides Branch.

Activity	<u>Time frame</u> (days)
Use/misue inspection investigation	3
Producer establishment inspection	2-1/2
Experimental-use permit inspection	2-1/2
Marketplace survey	1
Certified applicator inspection	1/2
Restricted-use dealer record check	1/2

Based on this schedule EPA has established the number of inspections that the State must conduct to receive credit against the grant. The Bureau of Pesticides Management, in turn, establishes a schedule for the pesticide inspectors in each region. In fiscal year 1980 New York met 62 percent of its grant commitments.

<u>Type of inspection</u>	<u>Grant commitments</u>	<u>Reported accomplishments</u>
Producing establishments	125	48
Marketplace	750	708
Nonagricultural use	293	145
Agricultural use	293	43
Certified applicator records	740	579
Business records	518	326
Restricted dealer records	171	106
Restricted dealer records-- chlordan	488	95
Experimental-use permits	12	7
Other	-	59
Total	<u>3,390</u>	<u>2,116</u>

Enforcement activities and actions have increased since New York began operating under the EPA enforcement grant. In fiscal year 1980 the bureau issued 104 warning letters, 125 civil complaints, and 72 seizures/quarantines. But although the State is undertaking more enforcement activities than EPA did when it had control, New York has never met all of its annual commitments under the EPA enforcement grant. Part of the problem lies with the DEC regional design which results in a "two-boss" syndrome. Pesticide inspectors must answer to a regional supervisor (and ultimately the regional director) and to the Director of the Bureau of Pesticides Management in Albany. Sometimes the priorities of the two differ significantly. For example, regional directors share secretaries and vehicles, limiting the productivity and mobility of some pesticide inspectors. The bureau has had conflict with four DEC regions. The greatest problem is evident in DEC region 3 where pesticide inspectors met only 1 percent of their fiscal year 1980 commitments.

The bureau is also having problems with special registrations and recordkeeping. As of November 1, 1980, several pending applications for special local need registrations and experimental-use permits were being stalled in the State office because the bureau staff did not have time to review the requests. Some of the applications have been in the State's possession for over a year and, according to the Bureau's associate analytical chemist, may never be reviewed if staffing is not increased.

Also, though many of its case records are now computerized, the bureau still has recordkeeping and filing problems. Complaint followups and EPA referrals are not consistently tracked at the Albany headquarters. EPA estimated that 20-25 percent of all New York inspection cases sent to the region's Pesticides Branch for review are insufficient or incomplete and must be returned to the State for corrections. According to EPA and State officials, some of these problems will be corrected with the recent addition of a case review officer.

FUTURE TRENDS

The New York Bureau of Pesticides Management wants to improve its relationship with EPA and continue its participation in the pesticides enforcement grant program. According to the director, increased grant funds could be used to add a supervisory inspector in the field, develop program coordinators in the Albany headquarters, and add 5 to 10 inspectors in the more heavily populated regions.

Also, the bureau will continue to watch recent pesticide concerns involving the use of endrin and aldicarb. Because of a dispute over an April 1980 DEC decision to ban the use of endrin for control of pine vole infestation in apple orchards, some State legislators attempted to remove pesticide enforcement from DEC to the State Department of Agriculture and Markets. The bill, which was narrowly defeated in the State Senate (though it faced certain veto by the Governor), was supported by the Farm Bureau and other agricultural interests and opposed by environmental groups, EPA, DEC, and the Department of Agriculture and Markets. The endrin incident was a major catalyst in establishing an Interagency Pesticide Advisory Committee comprised of members from the Departments of Environmental Conservation, Health, and Agriculture and Markets, the Cooperative Extension Service, the Farm Bureau, and the Pesticide Association of New York State. The committee has opened communications on the statewide registration process and other pesticide issues in New York.

Aldicarb recently poisoned Long Island ground water. Aldicarb, the chemical ingredient in Union Carbide's Temik, was registered by EPA for use on potatoes in 1974. Under a federally

adopted State label and a special local need registration, the chemical was used to control the Colorado potato beetle and the golden nematode on potatoes. Although Temik was designed to biodegrade before leaching could occur, preliminary tests did not anticipate Long Island's sandy soil conditions. Intensive sampling resulted in aldicarb detection in almost 2,000 private and public wells--914 of which contained levels higher than the State-established allowable level of seven parts per billion in drinking water. Temik was voluntarily removed from the Long Island market (and subsequently banned by DEC) but it is still available for purchase in other parts of New York, as well as New Jersey, Connecticut, and other States.

AGENCY COMMENTS

In general the New York State DEC Bureau of Pesticide Management agreed with our assessment of its pesticide enforcement program.

TEXAS' PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Agricultural production for Texas in 1979 was estimated at \$10 billion. Its 159,000 farms totaling 139,000,000 acres rank the State first in total farm acreage. Texas' four major crops are cotton, grain sorghum, wheat, and corn.

According to a 1974 EPA survey estimate, Texas ranks second nationally in pesticide use, applying about 89 million pounds of all types of pesticides a year. A Cooperative Extension Service entomologist said that the trend is upward for total pesticide use due primarily to increased use of pesticides on grain sorghums.

Texas began receiving EPA grant funds in June 1975 to train and certify pesticide applicators. As of August 31, 1980, Texas had certified 118,987 applicators (5,046 commercial and noncommercial and 113,941 private), registered 796 pesticide-producing companies and 8,013 pesticide products, and licensed 1,396 pesticide dealers. In January 1978 the State began receiving grant funds to enforce State and Federal pesticide control laws.

PESTICIDE ENFORCEMENT

The lead agency in Texas for the pesticide enforcement grant is the Department of Agriculture (TDA). The Agricultural and Environmental Sciences Division (A&ES) administers the entire pesticide program. EPA first awarded Texas an enforcement grant of \$403,500 in 1978. In February of 1979 the grant was amended--increasing it to \$905,403 and extending the grant period through September 1979. For calendar year 1980, EPA awarded Texas a grant of \$550,318, bringing the total amount of the pesticide enforcement grants awarded to Texas through calendar year 1980 to \$1,455,721.

Since 1978, Texas has used its Federal pesticide enforcement funds to purchase equipment and supplies for its field inspectors, and equipment (chromatographs, spectrophotometers, etc.) and supplies to furnish TDA's new laboratory. Texas also uses its pesticide grant funds to pay for operating expenses and salaries and wages.

As of January 1981 the TDA pesticide staff totaled 79, including the division director, 12 district supervisors, 2 administrative assistants, 4 entomologists, 3 agronomists, 33 inspectors, 5 chemists, 2 laboratory technicians, and 17 secretaries. The pesticide enforcement grant enabled Texas to hire 13 (3 chemists, 2 district supervisors, 6 inspectors, and 2 administrative assistants) of the 79 staff members. Since these employees perform other duties for TDA, the estimated full-time equivalent for pesticide work is 38 staff members.

TDA conducts its agricultural enforcement activities through the A&ES Division and 12 district offices. The districts conduct all State agricultural inspection programs. Within each district inspectors travel a fixed territory and implement all programs within that territory. District offices are responsible for determining and taking enforcement actions. While the districts receive pesticide training and guidance and periodic output goals from A&ES, the districts operate, to a large degree, independently of the A&ES staff.

The Texas Structural Pest Control Board, a separate entity from the Texas Department of Agriculture, conducts nonagricultural pesticide enforcement activities. The board receives funding for pesticide enforcement activities through an interagency cooperation contract with TDA. The board employs seven inspectors, all of whom conduct pesticide enforcement activities. One of the seven inspectors was hired after the board accepted the interagency cooperation contract. The board operates independently of TDA in terms of enforcement activities and certification of applicators. However, the board reports quarterly to TDA on enforcement activities.

The Texas Cooperative Extension Service is responsible for pesticide applicator education. The extension service, supported by the research efforts of the Texas A&M Department of Entomology, directs the State's integrated pest management program. TDA receives advice from the extension service on the justification for special local need registrations and emergency exemptions.

ENFORCEMENT ACTIVITIES AND ACTIONS

EPA and TDA developed enforcement grant commitments based on the State's previous year's experience in its own hormone herbicide and pesticide sampling and enforcement program. In its first year of operating under the grant, the State's grant commitments were met only for samples collected. After assessing the results, TDA discovered that because of increased paperwork it had not allotted enough time to meet its commitments. Thus, for the following years' grants, commitments were adjusted and the State overall has achieved at least 100 percent of its total commitment in each year since 1978. While Texas' outputs to EPA indicate that it is meeting its commitment of pesticide enforcement activities conducted for the 3-year period ending September 30, 1980, our test showed that commitments for activities, such as producer establishment inspections, marketplace inspections, import inspections, and nonagricultural-use observations have not been documented because the State has only recently developed and implemented the use of report forms. The State had exceeded activities, such as complaint (misuse) investigations, dealer

record inspection, and agricultural-use observation, and consequently counteracted the areas where it did not meet its commitments.

The State's performance relative to the commitments is the primary criterion EPA uses to assess the adequacy of State enforcement efforts and continued eligibility for enforcement grant funds. Since EPA requires the State to maintain records supporting the output commitments claimed, we tested the records in two district offices. Our tests at the district offices indicated that reported figures for agriculture misuse/complaint investigations were overstated. The overstatement occurs because some field inspectors count each visit during an investigation as a complaint investigation. We also found that the State's reports to EPA are habitually late. The following table compares the State's cumulative commitments and accomplishments for fiscal years 1978, 1979, and 1980. We were unable to document all the numbers the State reported to EPA.

<u>Type of inspections</u>	<u>Grant commitments</u>	<u>Reported accomplishments</u>
Producer establishments	300	262
Marketplace	775	236
Nonagricultural-use observations	163	122
Agricultural-use observations	720	1,011
Applicator records	250	291
Dealer records	550	898
Misuse	530	1,403
Experimental-use permits monitored	4	8
Import inspections	38	8
Emergency exemptions monitored	-	14
Other	<u>250</u>	<u>47</u>
Total	<u>3,580</u>	<u>4,300</u>
Samples collected (all types)	4,672	5,984

According to EPA records, TDA reported taking the following 351 enforcement actions in fiscal years 1978, 1979, and 1980:

- 236 warning letters.
- 87 stop sale, use, or removal.
- 26 criminal actions.
- 2 EPA referrals.

In addition, TDA officials said that they had suspended 800 commercial and noncommercial licenses for noncompliance with the Texas Pesticide and Control Law. TDA also sent letters to 750 individuals who failed to renew their certified applicator licenses.

FUTURE TRENDS

The A&ES director believes that enforcement activities will increase in the future as the public becomes more aware of pesticide usage and concerned with pesticide problems. In his opinion, the State legislature will appropriate more funds for the program as the public demand indicates.

The director would prefer to conduct more use/misuse observations and fewer establishment inspections. He believes that the use observations are more important because the agency can keep a closer watch on applicators to reduce unnecessary pesticide exposure.

AGENCY COMMENTS

State officials generally agreed with the information presented. We revised the draft to include some updated information and certain clarifications.

Much of the State's response explained problems encountered with estimating grant commitments based on prior State experience, developing inspection and reporting forms to document pesticide activities, and reporting these activities to EPA. Some improvements have been made. But as result of these problems, the documentation we sought in support of each grant output activity was not always available. In some activities, according to the officials, the only documentation available would be the field inspector's daily activity reports which the various inspectors around the State maintain. They cautioned, though, that these reports may not identify the specific types of activities conducted, but just the number of activities conducted.

State officials said that all activities reported to EPA were actually conducted although they might not have been documented. When fiscal years 1979 and 1980 are considered collectively, they said all grant projections were met except for marketplace inspections, applicator records inspections, import inspections, and incident investigations. However, agricultural-use observations, dealer records inspections, and misuse inspections significantly exceeded projections for the period.

State officials said that our review of their pesticide program had shown them the importance of keeping good work performance documentation. The State will take a closer look at the program and plan some changes to improve its quality.

WASHINGTON'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Agriculture is the number one industry in Washington. In 1979 the State's agricultural products were valued at more than \$2.3 billion, ranking it 19th nationally in agricultural income. The following list shows the main items produced on Washington's 17 million acres of farmland.

<u>Item</u>	<u>Dollars</u>
	(millions)
Wheat	\$466.1
Milk	342.9
Apples	312.3
Cattle	309.5
Hay	174.6
Potatoes	123.5

Washington also is a major producer of berries and a variety of specialty crops, such as hops, lentils, and mint. The State is also a major producer of lumber products and has over 23.9 million acres of forest land.

According to State and EPA pesticide officials, most pesticides used in Washington are for agricultural and forest lands. A 1974 EPA survey estimates that the State uses about 13 million pounds of pesticides a year.

Pesticide laws were first adopted by Washington in 1915 with major revisions in 1945, 1958, 1961. Most current regulations are based on the 1961 laws. These regulations, which remain in effect today, have been essentially unchanged and, according to State officials, are more stringent than EPA's.

PESTICIDE ENFORCEMENT

The Washington State Department of Agriculture is the lead agency for pesticide control and implementation of the EPA enforcement grant. Although the pesticide program is supervised by an assistant director in the Department of Agriculture, the program responsibility is assigned to the Pesticide Branch of the Grain and Chemical Division. The branch has 15 staff members including the branch chief. In addition, the Department of Agriculture has three laboratory staff members who do pesticide evaluations.

The enforcement activities are carried out primarily by 10 branch investigators. In 1980 the investigators spent about 50 percent of their time in enforcement (that is, doing inspections,

investigations, and other field work). The rest of their time was spent in supporting activities, which included conducting training classes, administering and correcting pesticide-licensing examinations, preparing cases for enforcement actions, and appearing as witnesses at hearings.

The State started participating in the EPA enforcement grant program in 1974 under the pilot program, and through fiscal year 1980 it had received more than \$500,000. These funds were used to develop the State's enforcement program by improving its laboratory, hiring inspectors, and upgrading its Pesticide Branch support staff.

State funding for pesticide activities has generally been increasing. Since 1973 the State general fund and user fees have provided about \$3.2 million.

The Washington pesticide program's main limitation is the available staff. According to State officials, EPA grant funds do not guarantee additional staff because it is doubtful whether matching funds from the State would be available. In addition, the State is reluctant to hire more new investigators with Federal money because it is not sure that this money will be available the next year.

ENFORCEMENT ACTIVITIES AND ACTIONS

Washington has had an active pesticide use enforcement program for many years. Its regulations cover all aspects of pesticide application and handling. The State regulations have not significantly changed as a result of Federal pesticide laws. Although the State program was supported by a limited staff, its recordkeeping was organized. With the help of the EPA enforcement grant, progress has been made to improve the State program. Commitments and reported accomplishments for fiscal years 1979 and 1980 are shown below.

APPENDIX II

APPENDIX II

Type of inspections	Grant commitments		Reported accomplishments	
	1979	1980	1979	1980
Misuse	120	120	120	135
(samples collected)	70	70	71	73
Agricultural use	8	8	8	14
(samples collected)	8	8	15	16
Nonagricultural-use observations	2	2	1	6
(samples collected)	2	2	1	2
Dealer records	20	20	20	20
Applicator/licensing records	10	10	10	10
Experimental-use permits monitored	7	7	8	5
(samples collected)	10	5	-	-
Producer establishments	30	30	35	37
(samples collected)	25	25	35	25
Marketplace	15	15	16	15
(samples collected)	15	20	18	21
Import investigations	5	5	11	3
(samples collected)	5	5	11	3
Incident investigations	3	3	5	4
Reviews of special local need product labeling at manufacturer/dealer level	5	10	-	10
Total	360	365	385	399

For both years this activity exceeded the overall plan; however, some specific activity goals were not met and were offset by excess performance on other activities.

From 1975 through September 1980 Washington conducted 2,224 misuse case investigations. Although the State did not have statistics on the results of its investigations, an analysis of a random sample of 224 cases showed that 89 enforcement actions were taken.

The State statutes have not made any provisions for civil penalties. And while State officials agreed that the authority to use civil penalties would improve the program, they believe the administrative sanctions against a licensee are important and achieve better results.

In recent years Washington has referred one misuse case to EPA. In addition, the State has referred many product quality cases to EPA for action. In most cases the State and EPA have sought resolution of cases independently, although the State

Department of Agriculture was the only agency to investigate.

Washington also uses the special local needs registration and emergency exemption programs to meet the pesticide requirements. For both programs applications are processed through the Pesticide Branch's registration section. Each application is screened for justification and need against EPA's criteria. Also, each application is evaluated by the other concerned agencies in the State.

From 1976 to October 1980, 323 special local need applications were processed and 247 were approved. During the same period 66 emergency exemptions were approved. Many of the requests were repeat requests, which State officials attributed to EPA's lack of timeliness in registering a product for a particular use.

Washington has had very little involvement with experimental-use permits. It does monitor the use of the permits issued by EPA under its grant agreement--at the direction of EPA. State laws provide for issuance of experimental permits. Thirty-one were issued in 1980 either for situations already covered by a Federal experimental-use permit (and federally directed monitoring) or for very small acreages and situations where a Federal permit was not required. In the second situation, the permits were under the control of Washington State University personnel or a recognized researcher and were not extensively monitored.

FUTURE TRENDS

The bulk of Washington's pesticide program funding comes from the State general fund and fees rather than the grant; therefore, if the grant moneys stop, the basic program is expected to continue.

Termination of the EPA grant would reduce coverage and staff. It would also lead to a reorientation in priorities since some State programs, such as herbicide drift monitoring, would assume greater importance, and Federal programs, such as producer establishment inspections and import sampling, would cease. It is likely that the combination of reduction and priority reorientation would be significant.

AGENCY COMMENTS

Washington officials generally agreed with the summary of their program.

WISCONSIN'S PESTICIDE ENFORCEMENT PROGRAMBACKGROUND

Wisconsin ranks 15th in population and has about 95,000 farms. In 1979 the Wisconsin Department of Agriculture, Trade and Consumer Protection reported that cash receipts from the 18.7 million harvested acres totaled almost \$4 billion, nearly 60 percent from dairying.

The State has an estimated 270 pesticide-producing establishments and 721 pesticide manufacturers and labelers licensed to sell an estimated 6,500 pesticide products. While State enforcement officials do not know the amount of pesticides used in the State, a 1974 EPA survey estimated that over 11 million pounds of pesticides are used annually in Wisconsin.

PESTICIDE ENFORCEMENT

The Wisconsin Department of Agriculture, Trade and Consumer Protection has been responsible for pesticide regulation since 1969 and is the lead agency for the Federal pesticide enforcement grant. Its initial 1-year grant, beginning January 1, 1979, was later extended to September 30, 1980, to conform to the Federal fiscal year. For convenience this 21-month period is referred to as fiscal year 1980.

Wisconsin has also had a Federal pesticide applicator certification grant program since fiscal year 1976. As of September 30, 1980, over 27,000 private applicators and 8,000 commercial applicators have been certified. In addition, the department issued 721 pesticide manufacturing and labeler licenses in fiscal year 1980.

The department also approves special pesticide registrations. For example, from January 1976 to October 1980 it approved 19 special local need registrations and two emergency exemptions. As of October 1, 1980, 33 special local need applications were pending. The department approves only a limited number of special pesticide registrations because officials do not want pesticide manufacturers circumventing national registration procedures by using State registrations.

Pesticide use in Wisconsin is regulated by two State laws, one administered by the State Department of Agriculture, Trade and Consumer Protection, regulating pesticides used in agricultural production, and one administered by the Wisconsin Department of Natural Resources, regulating pesticide use that affects land, air, or water quality. Both departments entered into an agreement on May 22, 1972, which formalized their planning, reporting, and enforcement responsibilities.

Wisconsin also has a Pesticide Review Board comprised of three State agencies. The board studies pesticide problems and recommends pesticide policy changes to the State legislature and State agencies. In addition, there is a Pesticide Technical Advisory Council comprised of nine technical experts who assist the board by obtaining data and making recommendations.

The Agriculture Department spent \$141,387 of the \$171,824 fiscal year 1980 enforcement grant to purchase additional analytical equipment and supplies for its laboratory. It also purchased office and inspection supplies and equipment. The grant money was not used to increase the size of the State's pesticide enforcement staff.

The department's pesticide program staff consists of 10 inspectors, one agriculture field supervisor, one agricultural specialist, one plant industry specialist, and one assistant administrator. The assistant administrator and inspection staff members devote about 20 percent of their time to the enforcement program. The remaining 80 percent is used to administer and conduct four other State agricultural programs.

In fiscal year 1980, the inspection staff submitted 526 samples to the laboratory for analysis. As of September 30, 1980, 384 samples were completed, resulting in 762 laboratory analyses being performed during the grant period.

ENFORCEMENT ACTIVITIES AND ACTIONS

The Agriculture Department agreed to perform various pesticide enforcement activities in order to obtain its fiscal year 1980 grant. However, because of several problems during the first grant year, the State did not meet its commitments. First, the department and EPA region 5, optimistically set grant commitments too high. Also, the State had little or no experience in performing producer-establishment and experimental-use permit inspections. The Agriculture Department inspection staff was not trained by EPA to perform these activities until 12 months of the 21-month grant period had elapsed. Also, the staff was extensively involved in revising Wisconsin's pesticide statutes; therefore, most of the grant outputs, excluding misuse investigations, were performed during the last 6 months of the grant period. Commitments and reported accomplishments for fiscal year 1980 are shown below.

<u>Type of inspection</u>	<u>Grant commitments</u>	<u>Reported accomplishments</u>
Marketplace	105	a/105
(samples collected)	190	115
Producer establishments	85	36
(samples collected)	160	43
Misuse	175	a/175
(samples collected)	350	a/350
Use	93	8
(samples collected)	21	4
Experimental-use permits	24	1
Certified applicators	460	30
Restricted pesticide dealer records	<u>300</u>	<u>29</u>
Total	<u>1,963</u>	<u>896</u>

a/Actual accomplishments that exceeded grant commitments are not included.

Fiscal year 1980 enforcement actions included

- 72 warning letters,
- 4 verbal warnings,
- 10 civil prosecutions,
- 2 administrative hearings,
- 182 holding and/or voluntary removal from sale orders,
- 1 voluntary assurance agreement, and
- 1 criminal prosecution.

FUTURE TRENDS

Several environmental groups in Wisconsin were not satisfied with the Agriculture Department's pesticide-use regulations or its enforcement effort. In 1979 the groups' concerns were submitted as petitions to the department by the State public intervenor. Public hearings were held in 1980 and new pesticide-use regulations are expected to be approved and in effect by 1982.

In 1979 and 1980 the ground water in central Wisconsin--a major potato-growing area--showed detectable residue levels of a pesticide used to control numerous potato pests. State officials do not believe this recent problem will affect the currently proposed pesticide use regulations, but it may have some future impact. While current testing indicates that pesticide levels are within an acceptable range, continued pesticide use in the area could potentially increase residue levels in the area's drinking water.

AGENCY COMMENTS

The Wisconsin Department of Agriculture, Trade and Consumer Protection generally agreed with our summary.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 19 1981

Mr. Henry Eschwege
Director
Community and Economic Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Eschwege:

The Environmental Protection Agency (EPA) reviewed the General Accounting Office (GAO) draft report entitled "Stronger Enforcement of Pesticide Laws Is Needed to Protect the Environment."

While we are in general agreement with many of the recommendations made in the report, there is what we perceive to be a disturbing emphasis on increased use of civil penalties as an enforcement tool to foster compliance with the Act. Given the small size of available penalties, it is doubtful that increased emphasis on fines alone will materially alter the rate of compliance. It is our belief that the effectiveness of an enforcement program cannot be judged solely by the number of cases brought or by the size of the fines collected. Compliance rate, not dollars collected, is the measure of the success of any regulatory program.

An effective enforcement program should not be merely punitive in nature, but should emphasize baseline compliance and voluntary corrective action. Awareness on the part of the regulated industry that the Agency can and will monitor industry will encourage good faith efforts to voluntarily comply with the law. We feel that strong enforcement action should be taken against firms which fail to initiate affirmative measures to comply and which are repeatedly found to violate environmental standards. The fair but firm application of these principles will result in compliance, and will foster responsible voluntary actions by the regulated community.

We have concentrated our review of GAO's draft report on its recommendations. Our position on the major issues raised by the report is discussed below.

GAO Recommendation

That the Administrator, EPA, emphasize to EPA regional office inspectors the importance of conducting proper investigations and taking appropriate enforcement actions.

GAO NOTE: Some page numbers have been changed to agree with the final report.

EPA Response

The Agency has just completed its first round of Regional Reviews. As part of each visit, the Review Teams examined the quality and management of the inspection and enforcement portions of the Federal-State pesticide program. The results of these reviews generally support the GAO report's recommendations for more thorough investigations in a number of the Regions and States. EPA Headquarters has made specific recommendations to the Regions for improvement of any deficiencies discovered in management and implementation of the Federal-State program (i.e., the need to follow all required inspection procedures, more thorough documentation of suspected violations, and the need for more immediate and thorough supervisory review of inspection reports to ensure completeness.)

[GAO COMMENT: These comments are addressed on page 18.]

GAO Recommendation

That the Administrator, EPA, work with the States to improve the quality of investigations and enforcement actions. This could include providing additional inspection and enforcement guidelines.

EPA Response

EPA has undertaken a number of efforts to improve training of both Federal and State inspectors. Over the past few years, the Agency has implemented and expanded the State pesticide inspection training workshops. This training program has been conducted under the auspices of the National Enforcement Investigations Center. Also included in this training program are workshops for State pesticide analysts.

EPA will, of course, also provide each State with specific additional training designed to solve any problems identified during the program year or through scheduled program evaluations.

[GAO COMMENT: These comments are addressed on page 18.]

GAO Recommendation

That the Administrator, EPA, encourage the passage of State laws which provide authority for assessing civil penalties.

EPA Response

As a precondition to entering into a cooperative pesticides enforcement agreement with each State, EPA determined that the State appeared to have adequate legal authorities to ensure a successful enforcement program. Some States may find after several years of participating in the program that they need additional authority to assess civil penalties. Under such

circumstances, EPA would, of course, assist any State in preparing a request to its legislature for civil penalty authority. It is not, however, EPA's policy to dictate the need for such authority to the States.

[GAO COMMENT: These comments are addressed on page 18.]

GAO Recommendation

That the Administrator, EPA, require EPA Regional offices and States to improve recordkeeping and reporting systems so that accurate, complete, and timely data is generated and information on program results is provided.

EPA Response

EPA agrees that existing recordkeeping and reporting systems at both the Federal and State levels need improvement. During FY 80 and 81, EPA conducted reviews of the pesticide programs in the ten EPA Regions. The results of these reviews generally support GAO's findings that recordkeeping systems in most of the Regions require improvement. Where appropriate, EPA Headquarters has made recommendations to the affected Regions regarding specific recordkeeping improvements. Regional responses indicate that appropriate changes are being made. Improvements in Regional recordkeeping will be verified in the next round of Regional Reviews.

In the area of improved State data collection and reporting, EPA is working with the States to modify existing investigation forms to include additional data concerning (1) the circumstances of each pesticide misuse violation and (2) the final disposition of the case. We anticipate that data provided on the modified form will enable the States and EPA to identify the causes of recurrent pesticide problems and to assess the appropriateness of enforcement actions taken to address them.

To assist the States in making the most effective use of the data collected during pesticide inspections, EPA has developed a ranking procedure for establishing pesticide enforcement priorities and allocating enforcement resources. This ranking procedure was included in the FY 82 Cooperative Enforcement Agreement Program Guidance as a suggested method for defining major problems and setting priorities. While the States are free to adopt or modify this procedure, we expect that all States will apply an objective ranking procedure in determining how best to allocate their enforcement resources.

[GAO COMMENT: These comments are addressed on page 26.]

GAO Recommendation

That the Administrator, EPA, establish standards for increasing the frequency and scope of onsite monitoring to assure State compliance with regulations and to evaluate the quality of investigations and enforcement actions.

EPA Response

In consultation with the State FIFRA Issue Research and Evaluation Group (SFIREG), EPA is developing a protocol to ensure a more extensive and uniform qualitative and quantitative evaluation of the Federal-State pesticides enforcement program. This protocol will be included in future Cooperative Enforcement Agreement Program Guidance. These evaluation criteria will be used to evaluate State programs. While EPA does not intend to increase the frequency of program evaluations, we do expect that application of the protocol will result in more thorough and qualitative program oversight.

[GAO COMMENT: These comments are addressed on page 26.]

To qualitatively evaluate State program performance, one must determine how all aspects of the program contribute to protection of the public and the environment. Evaluating effectiveness of State enforcement programs solely on the basis of fines collected is to ignore the contribution to environmental protection which is made by the many non-punitive aspects of the cooperative program. Participation by State personnel in calibrating and testing of application equipment, in providing pest control advice, and in establishing a regulatory "presence" all foster compliance in ways which cannot be measured by dollar fines.

Furthermore, the appropriate "mix" of punitive and non-punitive regulatory actions may vary from State-to-State. Such variations may well represent different degrees of local concern. Our guidance enables States to retain flexibility to apply the remedies available under State law in a manner which will, in the State's view, achieve our common objective.

[GAO COMMENT: The report does not imply that the effectiveness of State enforcement programs should be based solely on the amount of fines collected.]

GAO Recommendation

That the Administrator, EPA, strengthen coordination with the Food and Drug Administration (FDA) and improve management controls over referrals to assure that investigations and enforcement actions are appropriately and expeditiously carried out.

EPA Response

EPA has signed a Memorandum of Understanding (MOU) with FDA governing the referral of pesticide misuse cases involving pesticide tolerance levels. EPA will work with FDA to ensure successful implementation of the tracking system already described in the MOU.

On March 28, 1980, the Inter-agency Regulatory Liaison Group (IRLG) agencies published a Federal Register Notice concerning the implementation of a total referral inspection program. EPA will make every effort to follow these procedures.

[GAO COMMENT: These comments are addressed on page 26.]

GAO Recommendation

That the Administrator, EPA, review each similar special local need registration to ensure products or additional uses are being properly registered by the States.

EPA Response

The program is moving in the opposite direction of this recommendation. We are actually contemplating doing less rather than more case-by-case monitoring. Our thinking is to leave more responsibility with the States, including the determination that there are valid tolerances for those registrations involving food or feed uses and that the use is similar to a Federal registration. We do intend to periodically audit the State programs to ensure compliance with Federal regulations. This trend reflects our current Federal-State partnership philosophy coupled with our desire to achieve greater program efficiency. These remarks notwithstanding, we agree with GAO that we should do a better job of attempting to get applicants to apply for a Federal registration where there are clearly multiple section 24(c) registrations which circumvent the intent of section 3. We are discussing this problem with the States and hope to come up with some creative solutions.

[GAO COMMENT: These comments are addressed on page 34.]

GAO Recommendation

That the Administrator, EPA, develop an information system which identifies emergency exemptions by State so that repetitive requests can be analyzed and reviewed for conformance with Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) guidelines.

EPA Response

Although the report cites recordkeeping as a deficiency (equally applied to the handling of State registrations as well as emergency requests), we have already developed a system to quickly identify repetitive requests. However, we believe that recordkeeping is not the important issue concerning repetitive requests.

If the States can adequately define the existence of an emergency (as specified in EPA guidance issued to the States in December 1979), EPA will consider repetitive requests. We do not think we can automatically deny a State the use of a pesticide under emergency conditions simply because exemptions were granted for emergencies having identical or similar recurring situations. As in the past, while we will continue to request that States petition the industry to seek full registrations for those unregistered pesticides or uses, EPA intends to continue its review of emergency requests from the risk/benefit standpoint required by FIFRA.

[GAO COMMENT: None.]

GAO Recommendation

That the Administrator, EPA, notify States that repetitive emergency exemptions will not be approved unless their justification is fully documented.

EPA Response

EPA agrees with this recommendation. Every emergency request is scrutinized using the December 1979 letter to the State Lead Agencies. We will continue to counsel the States about repetitive emergency exemptions.

[GAO COMMENT: These comments are addressed on page 34.]

GAO Recommendation

Require EPA Registration Division, Regional offices, and State offices to better coordinate experimental use monitoring. This could include EPA requiring that requestors of experimental use permits notify EPA Region and State officials when they actually plan to conduct their experiments.

EPA Response

EPA agrees with this recommendation and is already implementing coordination requirements to ensure that all parties are informed about the issuance of experimental use permits and associated monitoring requirements. Specifically, our operating procedures require us to a) publish the experimental use permit in the Federal Register, b) send a copy of the label, formal letter authorizing the permit, and a description of the program to Regional offices for forwarding to the States, and c) encourage the applicant to notify State officials of the issuance and conditions of the permit, and to comply with applicable State laws as well. In those cases where the Region has reduced its level of effort in the pesticide area due to resource constraints, we have contacted the States directly.

[GAO COMMENT: These comments are addressed on page 35.]

Attached are specific comments relating to the draft report's text which we believe need clarification.

We appreciate the opportunity to comment on this draft report prior to its publication and submission to Congress.

Sincerely yours,



Nolan E. Clark
Associate Administrator for Policy
and Resource Management

Enclosure

Specific Comments on GAO's Draft Report,
"Stronger Enforcement of Pesticide Laws Is
Needed to Protect the Public and the Environment"

On page 12, the Deputy Assistant Administrator (DAA) is reported to have said that "weak State enforcement programs could mean that EPA might be forced to cancel certain pesticide uses to ensure products are not causing problems." It would be advisable to put that sentiment into context.

The DAA was speaking at that time about the Rebuttable Presumption Against Registration (RPAR) process. One of the options EPA considers in developing a proposed position in these risk/benefit reviews is whether the risk can be reduced through label restrictions and/or use pattern modifications. EPA has to have confidence that risk reduction measures will actually be effected in the field. If restrictions are imposed but not followed in real life situations, then EPA has not succeeded in bringing the risk down to reasonable levels. Since the law instructs EPA to make findings not only on the strictly legal uses but also "commonly recognized practice," a general lack of conformance to new restrictions would tilt the risk/benefit scales back to the pre-RPAR situation, and the Agency might have to take stronger measures to reduce or eliminate the unreasonable risk.

[GAO COMMENT: None.]

We would also like to clarify the intent of the 1978 FIFRA amendments and several comments attributed to the Director of the Registration Division. The draft report (p. 29) says that the Director implied the "the 1978 amendments weakened EPA's scrutiny over special local need registrations because EPA must now rely solely on the States to determine whether a need exists" (underlining supplied). The Director feels that this statement does not reflect the meaning he intended to convey. The intent was to reflect the Director's understanding of the change in the Congressional mandate. A more accurate report of the conversation would be that the Director understood that the 1978 amendments changed the statutory mandate such that the Agency was no longer required to judge whether individual 24(c) registrations represent a "special local need." The statement in the report implies a judgement on the part of the Director which was neither stated or intended.

A similar problem exists on page 30, first paragraph. The quote, "...they interpret the 1978 amendments to restruct (sic) EPA's review..." again does not convey the intended meaning. Again the question is an interpretation of the Congressional mandate rather than a conclusion that the law restricts action. The Director interprets the Congressional mandate to exclude the requirement for a case-by-case review of 24(c) registrations for the purpose of determining whether a special local need would cease to exist after the first, second or 20th State had declared that one existed.

[GAO COMMENT: We have revised the Director's statement to clarify his comments. See pages 29 to 30.]

The figures GAO uses to support its findings that a large number of uses are being authorized multiple times by several States are, in our opinion, misleading. In order to calculate figures like "2,967 uses" and "2,990 uses" (p. 31), GAO has multiplied the number of pests on the label times the number of sites. While this results in impressive numbers, we are really talking here only about 2 products. It really doesn't matter how many pests are listed on the label, since Congress has said in FIFRA 2(ee) that a user can control basically any pest so long as the site is authorized on the label. The site is the critical point. States cannot authorize pesticides to be used on food or feed crops without an EPA tolerance in effect, so they are limited to non-food sites, if a tolerance has not been established. Therefore, we do not agree that the high "use" figures quoted by GAO actually represent large exposures not already sanctioned by the Federal government.

[GAO COMMENT: We believe our report adequately outlines the problems of multiple State and special local need registrations. Our major support is EPA's own data which shows that numerous States are registering identical or similar special local needs. We believe that the above additional examples are not misleading but indicate control problems over States approving special local need requests.]

In general, we believe that GAO should reexamine the legislative history associated with the 1978 amendments to better understand how EPA's policies on State registration authority reflect the Congressional intent. Since we are currently in oversight hearings, and since the oversight subcommittee is aware of the forthcoming GAO report, we may benefit by additional Congressional guidance on whether we are following the mandate of the 1978 amendments.

[GAO COMMENT: We have closely examined FIFRA's legislative history and believe our report is correct in stating that EPA needs to review similar special local need requests. EPA should benefit from additional congressional guidance on whether it is following FIFRA's 1978 amendments.]



DEPARTMENT OF HEALTH & HUMAN SERVICES

Office of Inspector General

Washington, D.C. 20201

17 AUG 1981

Mr. Gregory J. Ahart
Director, Human Resources
Division
United States General
Accounting Office
Washington, D.C. 20548

Dear Mr. Ahart:

The Secretary asked that I respond to your request for our comments on your draft report entitled, "Stronger Enforcement of Pesticide Laws Is Needed to Protect the Public and the Environment." The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,

Richard P. Kusserow
Inspector General

Enclosure

COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES
ON THE GENERAL ACCOUNTING OFFICE'S DRAFT REPORT ENTITLED:
"ENFORCEMENT OF PESTICIDE LAWS IS NEEDED TO PROTECT THE
THE PUBLIC AND THE ENVIRONMENT"

GAO Recommendation to the Congress

We recommend that the Secretary, HHS, through the Commissioner, FDA:

- Improve management controls over referrals and strengthen coordination with EPA to help assure that investigations and enforcement actions are properly carried out. This could include requiring FDA to document pesticide misuse it refers to EPA and establishing a system to monitor the status of cases referred.

HHS Comment

We concur. Under a Memorandum of Understanding concerning "Enforcement Activities on Misuse of Pesticide and Pesticide Contamination of Food," (Federal Register, Vol. 40, No. 114 June 12, 1975, and FDA Compliance Policy Guide 7155.35), FDA and EPA agreed that each agency will maintain a close working relationship in headquarters and the field in carrying out their respective pesticide responsibilities. This includes immediately notifying EPA when FDA surveillance/enforcement activities reveals possible misuse of a pesticide on a food or feed crop. These referrals may result in regulatory action being initiated by EPA under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). The Memorandum of Understanding also provides that EPA will report to FDA the results of its investigation of such referrals.

Although the Agency believes that EPA is informed of all situations that appear to violate the law enforced by that agency, we agree that there is a need for improved management control and in the future we will more formally and systematically document our referrals to EPA on pesticide misuse.

FDA will also discuss with EPA the need for establishing better management control and come to agreement on how to ensure that, in the future, FDA is informed in a more formal and systematic way about the outcome of pesticide misuse cases it refers to EPA.

[GAO COMMENT: These comments are addressed on page 26.]

Technical Comments

The report primarily concerns the enforcement responsibilities of EPA and States with respect to misuse of pesticides. However, the title of the report, "...enforcement of pesticide laws...", implies that other aspects of pesticide enforcement (e.g., tolerance enforcement) are covered by the GAO charge that stronger enforcement is needed. The report only addresses one Federal law (i.e., FIFRA) regarding pesticide use. Therefore, it is suggested that the title be changed to read, "Stronger Enforcement Against the Misuse of Pesticides is Needed to Protect the Public and the Environment."

[GAO COMMENT: We have revised the report title.]

The Digest and Chapter 1 of the report repeatedly refer to "pesticide enforcement." However the specific type of pesticide enforcement and related investigations is not clearly and exactly defined until pages 8 and 9 of Chapter 2. To orient the reader, it would be helpful if the Digest and Chapter 1 included a brief description of what is meant by "pesticide enforcement" and "misuse."

[GAO COMMENT: We believe that our report digest fully explains pesticide enforcement.]

Pages 2-3 of Chapter 1 briefly mention FIFRA and some of its requirements. However, there is no mention of the provisions of FIFRA which govern inspection enforcement, unlawful acts, and penalties. These provisions of the law are pertinent to the main subject matter of the report and should be addressed.

[GAO COMMENT: We have added a statement that FIFRA also contains provisions which govern inspections, unlawful acts, and penalties. See page 3.]

Pages 23-24 of Chapter 3 discusses "referrals from FDA to EPA." However, to someone outside of FDA and EPA, it would probably be unclear what is meant by "referrals" and how they originate under FDA pesticide program responsibilities. More details would be helpful, a source of which is the formal Memorandum of Understanding (MOU) FDA and EPA have regarding "enforcement activities on misuse of pesticides and pesticide contaminations of food." This MOU, which was published in the FEDERAL REGISTER of June 12, 1975 (40 FR 25078), also should be cited in the GAO report as the basis for FDA referrals to EPA (see section B.1 of the MOU) rather than the IRLG reference. This MOU is the appropriate reference because of its specificity to the subject matter of the GAO report and it is cited in FDA pesticide programs.

[GAO COMMENT: We believe that our report fully defines referrals. We have, however, added information regarding EPA's and FDA's Memorandum of Understanding. See page 23.]

On page 24, an example is given of an FDA referral to EPA that was supposed to illustrate "instances of poor investigations and questionable enforcement actions." The fact that FDA was unable to clearly document who misused the pesticide does not necessarily mean that this particular incident was poorly investigated. Often times we find food in commerce with illegal pesticide residues that may have resulted from misuse, but it is simply impossible to trace, identify, and document with certainty the person who misused the pesticide. Moreover, without such information, EPA cannot be expected to take an enforcement action. If anything, this one example may indicate only that FDA should not have referred the violation to EPA (i.e., section B.1 of the MOU requires that a referral to EPA include information "necessary to support an investigation").

[GAO COMMENT: The point of the example was that EPA should have conducted an investigation based on FDA's referral. We were not implying that FDA conducted a poor investigation.]

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