



**STATE OF ARIZONA  
OFFICE OF THE  
AUDITOR GENERAL**

**A PERFORMANCE AUDIT  
OF THE**

**BOARD OF PESTICIDE CONTROL**

**SEPTEMBER 1983**

**A REPORT TO THE  
ARIZONA STATE LEGISLATURE**



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STATE OF ARIZONA  
OFFICE OF THE  
AUDITOR GENERAL

September 13, 1983

Members of the Arizona Legislature  
The Honorable Bruce Babbitt, Governor  
Mr. H. Lynn Anderson, Chairman  
Board of Pesticide Control

Transmitted herewith is a report of the Auditor General, A Performance Audit of the Board of Pesticide Control. This report is in response to a January 18, 1982, resolution of the Joint Legislative Oversight Committee. The performance audit was conducted as a part of the Sunset Review set forth in A.R.S. §§41-2351 through 41-2379.

The blue pages present a summary of the report; a response from the Board of Pesticide Control is found on the yellow pages.

My staff and I will be pleased to discuss or clarify items in the report.

Douglas R. Norton  
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REPORT 83-15

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## SUMMARY

The Office of the Auditor General has conducted a performance audit of the State Board of Pesticide Control in response to a January 18, 1982, resolution of the Joint Legislative Oversight Committee. This performance audit was conducted as part of the Sunset Review set forth in Arizona Revised Statutes (A.R.S.) §§41-2351 through 41-2379.

The Board's purpose is to protect the public by regulating the sale and use of agricultural pesticides in Arizona. To accomplish this the Board licenses various categories of pesticide users and conducts an enforcement program consisting of inspections and complaint investigations. Personnel in the Commission of Agriculture and Horticulture assist the Board by performing many of these inspections and investigations. Under a cooperative agreement with the Federal Environmental Protection Agency (EPA), the Board is also responsible for enforcing Federal pesticide laws in Arizona.

### The Board's Inspection Program Does Not Adequately Protect Public Health (see page 17)

The Board's inspection program has not effectively monitored the use of pesticides. We identified three weaknesses in the inspection program which seriously impair the Board's ability to regulate pesticide applicators and thus protect public health.

First, Board staff has not followed up on potentially serious violations reported by field inspectors. In one four-month period Commission inspectors reported potential violations during 102 inspections. At least 50 of these inspections cited deficiencies serious enough to warrant follow-up, such as improper disposals of pesticides and containers, spraying too close to residences and environmental contamination. However, no follow-up steps were taken in any of these cases.

Second, the Board staff has not been tracking repeat violators. Consequently, several applicators appear to have each committed numerous serious violations without any reaction from the Board or its staff. One of these applicators was reported for 49 potential violations in a four-month period.

Third, Board inspectors are not providing the most effective coverage of pesticide applications. The number of inspections per applicator does not appear to bear a relationship to the number of pesticide applications made by each applicator or to the number of previous violations. For example, one applicator made no applications during the year but was still inspected three times, whereas another applicator made 233 applications but was never inspected.

Board staff should improve its follow-up on reported potential violations, identify repeat violators and recommend Board disciplinary action when warranted. In addition, Board staff should develop a more effective system for allocating its inspection resources in order to provide coverage where it is most needed. The Board administrator reports that he now is following up on reported violations and identifying repeat violators.

Board Has Taken Few Disciplinary  
Actions (see page 31)

The Board has taken relatively few disciplinary actions and is perceived as a weak enforcement body by several knowledgeable sources. Several factors contribute to this condition. First, many potential enforcement cases have not even reached the Board because of an inadequate inspection program (mentioned earlier). Second, the Board does not have sufficient statutory authority for taking action against some categories of pesticide users. In particular, 1) the grounds for taking action against growers (farmers) are too restrictive; and 2) the Board does not have sufficient administrative sanctions to use against growers, private applicators and sellers. Finally, according to the EPA the Board has not taken appropriate actions in several disciplinary cases.

To strengthen the Board's enforcement ability, the Legislature should amend the laws to give the Board sufficient grounds and penalties for disciplining growers, private applicators and sellers, including the use of administrative fines. According to the EPA, the Board should also use its existing authority more aggressively to discipline violators and enforce State and Federal pesticide laws and regulations.

Board Should Be Consolidated With  
the Commission of Agriculture and  
Horticulture (see page 39)

The current administrative structure hinders the effective and efficient management of the pesticide regulatory program. Responsibility for administration of the program is currently shared between the Commission of Agriculture and Horticulture and the Board of Pesticide Control. The relationship between these agencies is unclear and has inherent weaknesses affecting program administration. Directors of both agencies believe they have been given the responsibility for the pesticide program without sufficient statutory authority or control over program resources. Because of the seasonal nature of the work load and the need for inspectors to be located throughout the State, the Commission appears to be the only agency which can efficiently supply all the manpower needed for an effective enforcement program. Therefore, the pesticide program should be placed fully within the Commission of Agriculture and Horticulture. As a part of this move, the Board of Pesticide Control should be reduced in size and limited to advising the Commission on the adoption of rules and regulations.

Some Pesticide Users Are  
Not Monitored (see page 49)

The Board does not have enough information to monitor pesticide use by growers and private applicators. Compared to other regulated users, these groups operate with relatively little oversight by the Board. These groups are not subject to any statutory reporting requirements, nor are they inspected by the Board's staff. Although the extent of pesticide misuse by these groups is unknown, the potential for harm appears to be substantial. Therefore, the Board should monitor pesticide use by these groups to determine if more stringent regulation is needed. To accomplish this, the Board needs statutory authority to require growers to maintain records of pesticide use. In addition, Board staff should inspect a limited number of growers on a random or spot-check basis.

## INTRODUCTION AND BACKGROUND

The Office of the Auditor General has conducted a performance audit of the State Board of Pesticide Control in response to a January 18, 1982, resolution of the Joint Legislative Oversight Committee. This performance audit was conducted as part of the Sunset Review set forth in Arizona Revised Statutes (A.R.S) §§41-2351 through 41-2379.

### Historical Background

Agricultural pesticides were first regulated in Arizona by the Board of Pest Control Applicators, created in 1953. This agency's primary purpose was to control the use of agricultural pesticides by licensing custom applicators (those paid to apply agricultural pesticides). In 1964, in an effort to exercise some control over the sale of pesticides, the Board's statutory responsibilities were expanded to include the issuance of pesticide use permits to growers (farmers).

Legislation in 1968 changed the Board's title to the Board of Pesticide Control and added the responsibility to regulate the storage and disposal of pesticides and pesticide containers. The law also required custom applicators to file reports of pesticide applications with the Board (see page 50). Later amendments required agricultural pest control advisors\* and agricultural aircraft pilots to be licensed by the Board.

### Federal Regulation

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), passed in 1972, has affected pesticide regulation in several major ways. FIFRA requires that manufacturers register all pesticides with the EPA and provide

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\* As defined in Board statutes, an agricultural pest control advisor is "any person who, as a requirement of, or incidental to, his employment or occupation, offers a recommendation to a grower or to any public or private agency concerning the control of any specific agricultural pest condition. . . ."

evidence that their products will not injure humans, livestock, crops or wildlife when used as directed. EPA then classifies the pesticides for either general or restricted use. General-use pesticides may be used by anyone. Restricted-use pesticides are those which may pose an unreasonable risk to the user or the environment unless applied with great care.\* Restricted-use pesticides can only be used by or under the direction of certified applicators. FIFRA requires EPA to set standards for certification; however, the individual states certify applicators through their own programs based on Federal standards.

FIFRA also establishes some minimum standards for the use of registered pesticides, particularly restricted-use products. Again, the EPA can delegate its enforcement authority to the states through a cooperative agreement. However, if the state fails to adequately enforce FIFRA, the EPA may withdraw that enforcement authority or may take enforcement action itself against any particular violator.

The EPA awards grants to states to help fund these certification and enforcement programs. The Board of Pesticide Control is currently the lead agency in Arizona responsible for enforcing FIFRA within the State. In connection with this, the Board has two agreements with the EPA which provide Federal funds for 1) certifying applicators for restricted-use pesticides (\$7,000 for Federal fiscal year 1982-83) and 2) conducting an inspection/enforcement program (\$112,500 for Federal fiscal year 1982-83). The latter grant enabled the Board to hire three additional inspectors.

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\* A restricted-use pesticide is defined by A.R.S. §3-391 as ". . . a pesticide which, when applied in accordance with its directions for use . . . may generally cause, without additional regulatory restrictions, unreasonable adverse effects on the environment, including injury to the applicator."

### Current Activities

The Board's purpose is to protect the public by regulating the sale and use of pesticides. The Board's regulatory program consists of 1) licensing, permit and certification programs and 2) enforcement activities--including routine inspections, monitoring of pesticide applications and investigation of complaints.

The Board issues licenses in four categories: 1) custom applicators, 2) equipment (aircraft and ground rigs), 3) agricultural aircraft pilots, and 4) agricultural pest control advisors. They issue permits to sellers of registered pesticides and to growers for use of such pesticides. Through an EPA agreement, the Board also certifies growers and custom applicators to buy or apply restricted-use pesticides.\* Table 1 summarizes the Board's licensing activities for a four-year period.

As part of its enforcement role, the Board inspects applicator-base operations, satellite airstrips and sellers' establishments for compliance with applicable laws and regulations. The Board also monitors a portion of the estimated 30,000 pesticide applications reported annually by custom applicators throughout the state. In addition, Board inspectors must investigate all pesticide-related incidents reported to them (including public complaints) and gather evidence for disciplinary actions by the Board, the EPA or the courts. Table 2 summarizes the Board's enforcement activities for a four-year period.

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\* Persons must be certified as private applicators to apply restricted-use pesticides to their own property or elsewhere without compensation. All other persons applying restricted-use agricultural pesticides must be certified as commercial applicators. Thus, a custom applicator who applies restricted-use pesticides must also be certified as a commercial applicator.

TABLE 1

SUMMARY OF BOARD LICENSING ACTIVITIES  
FISCAL YEARS 1979-80 THROUGH 1982-83

	<u>1979-80</u>	<u>1980-81</u>	<u>1981-82</u>	<u>1982-83</u>
<u>Permits, Licenses &amp; Certification</u>				
Growers (use) permits issued	1,630	1,662	1,642	1,682
Sellers permits issued	126	114	118	113
Custom applicator licenses issued	97	91	94	94
Equipment licenses issued	337	298	276	290
Agricultural aircraft pilot licenses issued	190	236	233	227
Agricultural pest control advisor licenses issued	397	414	528	517
Private applicators certified	913	852	660	701
Commercial applicators certified	414	416	358	472

Source: Fiscal Year 1983-84 Budget Request for the Board of Pesticide Control and other documents provided by Board staff

TABLE 2

SUMMARY OF BOARD ENFORCEMENT ACTIVITIES  
CALENDAR YEARS 1979 THROUGH 1982

	<u>Calendar Year 1979</u>	<u>Calendar Year 1980</u>	<u>Calendar Year 1981</u>	<u>Calendar Year 1982</u>
Monitoring and inspection reports	1,600	2,050	1,781	986
Pesticide incident investigations	390	279	269	271
Dealer/Distributor inspections	N/A	N/A	N/A	50
Experimental-use permit inspections	N/A	N/A	N/A	18
Nonagricultural inspections	N/A	N/A	N/A	25
Sample collection and preparation	N/A	N/A	N/A	129
Board hearings	-0-	12	5	7

Source: Fiscal Year 1983-84 Budget Request for the Board of Pesticide Control and other documents provided by Board staff

### Board Membership and Staff Support

By statute, the agency has a 15-member Board which includes: eight representatives from various industries affected by pesticide use (cotton, produce, dairy, feed grains, livestock, citrus, agricultural chemicals and custom pesticide application); an occupational health physician; an entomologist in public service; three public members; the director of the Department of Health Services or his representative; and the chairman of the Commission of Agriculture and Horticulture, who by statute serves as Board chairman. Board staff consists of an administrator, an assistant administrator who acts as chief investigator, an accounting clerk, a typist, one State-funded inspector and three federally funded inspectors. In addition, through a cooperative agreement up to 35 inspectors are available from the Commission of Agriculture and Horticulture to conduct inspections, monitor pesticide applications, and investigate complaints. Arizona Revised Statutes §3-372 provides that the Board shall be under the administration of the Commission of Agriculture and Horticulture; therefore, the Commission provides budgeting, personnel and accounting services to the Board.

### Sources of Funds

Originally the Board of Pesticide Control was a 90/10 agency funded by fees collected for licenses, certificates, permits and penalties. In fiscal year 1980-81 at the request of the Board, the agency became a General Fund agency. (During the previous year, the Board also received a supplemental General Fund appropriation.) Table 3 shows Board sources of funds, expenditures and FTEs for the most recent five-year period.

TABLE 3

BOARD EXPENDITURES, SOURCES OF FUNDS AND FTE POSITIONS  
FISCAL YEARS 1979-80 THROUGH 1983-84

	Actual 1979-80	Actual 1980-81	Actual 1981-82	Actual 1982-83	Approved 1983-84
Sources of funds:					
Pesticide Control Fund	45,800	-0-	-0-	-0-*	-0-
General Fund	<u>111,800</u>	<u>124,500</u>	<u>124,500</u>	<u>128,800</u>	<u>139,900</u>
Total**	<u>157,600</u>	<u>124,500</u>	<u>124,500</u>	<u>128,800</u>	<u>139,900</u>
Expenditures:					
Personal services	106,600	85,400	81,900	91,600	91,600
Employee-related expenses	20,500	16,500	17,200	20,700	17,300
Professional and outside services	2,700	700	-0-	200	6,400
Travel -					
In-State	14,400	9,800	9,500	6,600	10,500
Out-of-State	700	1,300	900	-0-	-0-
Other operating expenses	12,200	9,800	12,300	9,300	14,100
Equipment	500	1,000	2,700	400	-0-
Total	<u>157,600</u>	<u>124,500</u>	<u>124,500</u>	<u>128,800</u>	<u>139,900</u>
FTE positions					
State-funded	8	6	6	5	5
Federally funded	0	3	3.5	3	N/A

Source: State of Arizona Appropriations Reports and Board budget documents

\* The Board received approximately \$91,000 in fees during fiscal year 1982-83; however, these funds were contributed to the General Fund since the Board is no longer a 90/10 agency.

\*\* Does not include Federal grant funds; Federal funds totaled \$119,500 in Federal fiscal year 1982-83.

Scope of Audit

The purpose of our audit of the Board of Pesticide Control was to determine:

1. If the Board's regulatory authority over licensees and permittees is adequate for protecting the public from pesticide misuse;
2. If the Board's inspection program is effective in enforcing State and Federal regulations;

3. If the current agency structure hampers Board efficiency and effectiveness; and
4. If the Board's pesticide management program should be consolidated or combined with those of other State agencies.

Due to time constraints, we did not examine the Board's licensing process to determine if 1) the current licensure requirements are appropriate, 2) the license renewal process could be made more efficient using staggered or multiyear licensure, and 3) fees for licenses and permits could be increased to enable the program to pay for itself.

The Auditor General and staff express appreciation to the Board members and staff for their cooperation and assistance during the course of our audit.

## SUNSET FACTORS

In accordance with A.R.S. §41-2354, the Legislature should consider the following 11 factors in determining whether the Board of Pesticide Control should be continued or terminated.

1. Objective and purpose in establishing the Board

The purpose of the Board is to protect public health and property by regulating the sale and use of pesticides. The Board does this through 1) licensing, permit, and certification programs and 2) enforcement activities, including inspections, monitoring pesticide applications and investigating complaints.

A statement of legislative intent for the Board is contained in Session Laws 1968, Ch. 210 §1:

"It is the intent of the legislature in restructuring the existing provisions of law concerning the sale and use of pesticides to provide for the more meaningful regulation of the sale and use of pesticides within this state."

2. The effectiveness with which the Board has met its objective and purpose and the efficiency with which the Board has operated

The Board is not effectively regulating the use of pesticides. The Board's inspection program for custom/commercial applicators is deficient in several ways. In addition, although Board staff are investigating complaints in a timely and thorough manner, EPA recently criticized the Board for not taking appropriate enforcement actions against several violators. Furthermore, the unusual administrative structure for pesticide regulation appears to hinder the effectiveness and efficiency of Board operations.

As explained in Finding I (page 17), the Board's inspection program is weak because Board staff have not 1) followed up on many potential violations, 2) identified repeat violators, and 3) scheduled inspections in the most effective manner.

Board staff receive high marks for the timeliness and thoroughness of complaint investigations; however, according to the EPA, the Board has not taken sufficient enforcement action in several of these cases. In its latest annual evaluation of the Board, dated March 18, 1983, EPA said:\*

". . . The Board did not take appropriate enforcement action in cases involving major violations of Federal law. . . . Because effective enforcement action is necessary to insure compliance with pesticide regulations, we believe the Board must take more appropriate enforcement remedies."

In one particular case EPA criticized the Board for not levying a penalty "appropriate to the gravity of the violations" (see Finding II, page 31).

An unusual administrative structure hinders the Board's effectiveness and efficiency. The sharing of administrative responsibility between the Board and the Agriculture and Horticulture Commission has a negative impact on program management. In addition, the large number of Board members (15) makes decision making unwieldy (see Finding III, page 39).

3. The extent to which the Board has operated within the public interest

Although several developments in recent years appear to be in the public interest, the Board's ability to protect the public is severely restricted by the deficiencies cited in Sunset Factor #2.

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\* This evaluation covered the Federal fiscal year 1981-82 (October 1981 through September 1982).

The Board's response to public complaints has improved substantially since 1978. In that year the Board received much public criticism regarding its handling of complaints from the Scottsdale/Salt River Indian Reservation area. This criticism led to public hearings and an evaluation of the Board's operations by EPA in 1979. Subsequently the Board staff began monitoring all pesticide applications in the Scottsdale/Salt River Indian Reservation area. The responsiveness of Board staff to public complaints also improved. The latest annual EPA evaluation, dated March 18, 1983, commends the Board for the timeliness and thoroughness of complaint investigations.

The change in Board composition in 1979 appears to be in the public interest. Statutory amendments provided for the addition of two members: 1) an occupational health physician and 2) a representative of the Director of DHS. These two members, along with the existing three public board members, provide better balance between public and industry representation.\* However, this increased Board size to 15 members, making the decision-making process even more unwieldy (see Finding III, page 39).

The Board could better protect the public interest by addressing the deficiencies cited in Sunset Factor #2. Many potential enforcement cases have not been heard by the Board because its staff failed to 1) follow up on many violations reported during routine and monitoring inspections and 2) identify repeat violators (see Finding I, page 17). In addition, according to the EPA, the Board has not taken appropriate enforcement action in several cases heard by the Board (see Finding II, page 31). Finally, the Board's ability to protect the public is limited by a lack of information regarding pesticide use by noncommercial applicators (see Finding IV, page 49).

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\* The Board also includes eight industry-related members, an entomologist and the chairman of the Commission of Agriculture and Horticulture.

4. The extent to which rules and regulations promulgated by the Board are consistent with the legislative mandate

Board rules and regulations have been reviewed and approved by the Attorney General for consistency with the statutes. During our audit we found no apparent inconsistencies between the Board's regulations and its statutes or objectives.

A Board committee is currently considering revisions made necessary by statutory amendments in the 1983 legislative session.

5. The extent to which the Board has encouraged input from the public before promulgating its rules and regulations and the extent to which it has informed the public as to its actions and their expected impact on the public

The Board formed a committee in 1981 to review and propose changes to the statutes and regulations. This committee solicited input from industry associations as well as the Attorney General's Office. The committee has proposed statutory revisions, some of which became law in 1983, and is now considering changes in the rules and regulations.

Generally the Board complies with the Open Meeting Law regarding public notice of its meetings and the recording of minutes for regular board meetings. However, minutes were not taken for 12 of 16 executive sessions held between January 1979 and December 1982. According to Board staff, this was due to a lack of knowledge of Open Meeting Law requirements.

6. The extent to which the Board has been able to investigate and resolve complaints which are within its jurisdiction

In general, Board staff have investigated complaints in a timely and thorough manner. According to Board documents, in calendar years 1979 through 1982 Board staff investigated between 269 and 390 complaints annually (see Table 2, page 4). Recent EPA evaluations concluded that complaints have been investigated in a timely and thorough manner.

According to an EPA official overseeing pesticide enforcement in Arizona, the Board has taken relatively few disciplinary actions in comparison to the number of investigations conducted. Board staff investigate approximately 300 complaints and conduct about 1,000 inspections each year. However, the Board held only 33 administrative hearings between May 1979 and March 1983, resulting in only 11 disciplinary actions. See Finding II (page 31) for a discussion of the Board's enforcement record.

7. The extent to which the Attorney General or any other applicable agency of State Government has the authority to prosecute actions under enabling legislation

In addition to Board action against a license, permit or certificate, the Attorney General or County Attorney can prosecute violators. A violation of Board statutes or regulations by any of the following groups is subject to criminal prosecution as a Class 3 misdemeanor: sellers, agricultural pest control advisors, growers, private applicators, custom applicators and agricultural aircraft pilots. A violation by a commercial applicator is subject to prosecution as a Class 2 misdemeanor. The Attorney General (or County Attorney) may also seek a Superior Court injunction against any person or firm violating Board statutes or regulations. As a result of 1983 legislation, the Board can impose administrative fines (i.e., without court involvement) through the hearing process for violations by

agricultural pest control advisors, custom applicators and agricultural aircraft pilots. State law already authorized the Board to impose administrative fines for violations by commercial applicators (using restricted-use pesticides).

The Board does not have sufficient statutory authority for disciplining growers, private applicators and sellers. See Finding II (page 31) for a discussion of this problem.

8. The extent to which the Board has addressed deficiencies in the enabling statutes which prevent it from fulfilling its statutory mandate

The Board proposed changes to its statutes during the 1983 legislative session. Although the primary purpose of the proposed legislation was to provide the Board with intermediate penalties against licensees and permittees, some amendments were meant to "clean up" outdated provisions. The original bill

- a. Added authority to the Board to fine licensees and permittees up to \$1,000 per violation,
- b. Added the requirement that any person (including growers) applying pesticides to agricultural land must make a written report of such application to the Board, and
- c. Deleted the requirement for a 13-member advisory committee to the Board.

The final version of the bill that became law fixed the amount of administrative fines to \$100 for a first offense and \$500 for a second offense, excluded growers and sellers from those subject to fines and excluded growers from those required to file reports of pesticide applications with the Board. The advisory committee was also abolished.

9. The extent to which changes are necessary in the laws of the Board to adequately comply with the factors listed in the Sunset Law

As explained in the findings of this report, the following statutory changes are needed to improve pesticide regulation:

- a. Board statutes should be amended to broaden the grounds for taking disciplinary action against growers and to provide for administrative fines against growers, private applicators and sellers (see Finding II, page 31).
- b. The pesticide regulatory program should be transferred completely to the Commission of Agriculture and Horticulture. In conjunction with this consolidation, the size and role of the Board should be reduced. These changes require numerous amendments to the Board's statutes as well as those governing the Commission (see Finding III, page 39).
- c. Board statutes should be amended to require growers/private applicators to keep records of all pesticide applications in a manner prescribed by the Board (see Finding IV, page 49).

10. The extent to which the termination of the Board would significantly harm the public health, safety or welfare

Regulation of agricultural pesticides is necessary for the protection of public health. Federal law also requires Arizona to have a pesticide regulatory program. However, the Board as presently established is not necessary and could be reduced in size and role if the program were transferred to the Commission of Agriculture and Horticulture.

The need for some control over the use and sale of pesticides has been well established in recent years. Pesticide pollution is ranked by many experts as the number one environmental threat today in terms of persistence, range and complexity of hazards. In the agricultural area the threat is especially great due to the large volume and high toxicity of pesticides used. In 1981, for example, more than 18

million pounds of pesticides were sold in Arizona, the majority to be used in agricultural production.

Further, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires much of the regulatory program currently administered by the Board. Thus, a regulatory program is necessary to control the sale and use of pesticides. However, Federal law does not dictate the placement or organizational structure of the program. Because the current administrative structure is not conducive to effective and efficient operations, the program should be placed fully within the Agriculture and Horticulture Commission. In conjunction with this consolidation, the Board should be reduced in size and converted to an advisory body under the Commission (see Finding III, page 39).

11. The extent to which the level of regulation exercised by the Board is appropriate and whether less or more stringent levels of regulation would be appropriate

As explained in Finding IV (see page 49), the Board does not have enough information to monitor pesticide use by growers and private applicators. Currently these groups are not subject to any statutory reporting requirements, nor are they inspected even though the potential harm that they can cause appears to be significant. Board staff should conduct some monitoring activities for these groups so the Board can determine if more stringent regulation is needed.

## FINDING I

### THE BOARD'S INSPECTION PROGRAM HAS BEEN INEFFECTIVE.

The Board's inspection program has not effectively monitored the use of pesticides. We identified three serious weaknesses in the inspection program. First, Board staff has not followed up on many potential violations which warrant further action. Second, the Board staff has not been tracking repeat violators. Third, Board inspectors are not providing the most effective coverage of pesticide applications. These deficiencies seriously impair the Board's ability to regulate pesticide applicators and thus protect public health. Upon our recommendation, Board staff have already taken several steps to address these deficiencies.

#### Types of Inspections

The Board's staff conducts four major types of inspections and investigations:

Complaint Investigations - All complaints relating to pesticide applications are investigated and receive priority over all other types of inspections. Complaints most often come from the public in areas where agricultural and residential areas interface.

Monitoring Inspections - Custom applicators participate in a voluntary monitoring program. In this program the Board designates geographical areas which warrant closer monitoring because these areas contain agricultural/urban interfaces and have a history of complaints. An applicator is to notify the Board of upcoming applications in these areas so that an inspector can be sent to observe.

Routine Inspections - The Board's policy is to routinely inspect custom applicator base operations at least once a year to assure that safety procedures comply with Environmental Protection Agency (EPA)

regulations. Many of these routine inspections occur during the off-season\* and include a discussion of past problems.

Seller Inspections - EPA regulations require that the Board inspect the records of pesticide sellers to assure that restricted-use materials are completely accounted for and were sold only to certified applicators.

Through a cooperative agreement with the Board, Commission of Agriculture and Horticulture staff also perform these inspections, particularly during the heavy spraying season. Commission personnel are located throughout the State and therefore can conduct these inspections in a more timely and efficient manner in many instances.

No Follow-up on Many  
Potential Violations

The Board staff has not followed up on all potential violations reported by field inspectors.\*\* Inspection reports have been filed in the Board office without any further review even though many of these reports identify potential violations warranting follow-up action by the staff.

Board and Commission staff complete a standard inspection report during each custom applicator inspection (voluntary monitoring inspections and routine inspections). The standard report form contains a checklist of 26 violation categories. Inspectors look for such violations as leaking equipment, inadequate protective clothing worn by pesticide handlers, improper control or disposal of pesticide containers, noncompliance with

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\* Off-season is December and January, when relatively few pesticide applications occur.

\*\* The term "potential violation" is used in this finding to refer to a deficiency or irregularity noted on an inspection/monitoring report. Many of these deficiencies are clearly violations, whereas others would require further investigation before concluding they are violations of Board statutes or rules.

label instructions and drift of pesticide to nontarget areas. Inspectors discuss the deficiencies with the applicators, give them a copy of the inspection report and then forward the report to the Board office. These reports are to be reviewed by staff in the Board office to determine what follow-up is needed. Approximately 1,000 inspection reports were filed in the Board office in calendar year 1982.

Until recently many reports filed with the Board office were not reviewed for further possible action. We reviewed a sample of 126 of the approximately 1,000 inspection reports filed with the office during 1982. A total of 26 potential violations were noted on these 126 reports. For 25 of these potential violations, there were no notations in the file showing that these deficiencies were corrected or addressed. The assistant administrator acknowledged that these reports had been filed in the Board office without review. Furthermore, upon our request he reviewed the potential violations and identified six as serious enough to warrant follow-up and possible Board review for disciplinary action.

During our audit, Agriculture and Horticulture Commission administrators indicated that the Board staff had not taken sufficient follow-up action on potential violations reported by Commission inspectors. To verify this, we reviewed all potential violations reported by Commission inspectors to the Board office in fiscal year 1981-82. Commission staff reported potential violations during 102 inspections that year.\* Upon our request, the Board administrator reviewed the reports for these inspections and acknowledged that 50 reports warranted follow-up action of some kind. However, no follow-up steps were taken in any of these cases. Some of the more serious types of potential violations overlooked are described below.

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\* A total of 191 violations were reported for these 102 inspections.

- Container control and disposal - According to the Board administrator, significant harm to persons, animals or the environment can result from improper container control and disposal. One report noted that concentrated chemicals were emptied directly into an irrigation ditch near which children were playing. Another report noted that empty containers were stacked by a fence where children were playing.\* Several other reports noted that empty containers were not properly rinsed.
- Spraying too close to residences - Two reports noted that highly toxic pesticides were applied by aircraft less than 100 feet from houses. Board rules state this is a violation unless the written permission of the owners or occupants was obtained. The reports do not indicate whether permission was obtained.
- Environmental contamination - Water, crops, persons or animals can be contaminated by a leakage or spill during mixing operations or during an application. Several reports overlooked at the Board office noted problems of this type. One report noted that a hose on the application equipment was drained on the access road. Several reports noted leaking nozzles on aircraft. In one instance the inspector advised the pilot about the leaking nozzles and was told it would be fixed; however, the nozzles were still leaking when the aircraft took off later. The same problem was noted the following day.

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\* These incidents occurred on an Indian reservation and thus were not within the Board's jurisdiction for taking corrective action. However, this fact was not known by the Board administrator at the time the reports were filed away without follow-up.

- Safety equipment/clothing - Numerous reports indicated that pesticide handlers were not wearing proper clothing and equipment during mixing and loading operations. If pesticides are being mixed and loaded in a closed system, this diminishes the potential for harm.\* However, in several instances involving highly toxic pesticides, workers were not wearing proper equipment (e.g. goggles, gloves, respirators) when leaks or breaks occurred in the closed system. Several reports also noted flaggers were not properly protected.\*\*
- Blood tests for workers - A number of reports noted that pesticide handlers or flaggers had not taken blood tests to establish their cholinesterase baseline. Cholinesterase is an enzyme which affects a person's equilibrium. Certain types of pesticides can decrease a person's cholinesterase level. A baseline test is necessary for comparison with later tests to determine the extent of poisoning which has occurred in a worker and whether he can safely have further contact with those pesticides.

The Board administrator explained that the Board office was understaffed during part of fiscal year 1981-82 and that this may explain why these inspection reports were not reviewed. However, our sample of calendar year 1982 files indicates that this problem continued even after the staffing level returned to normal. Furthermore, in a report issued in March 1983, EPA criticized the Board for the same problem. The report states:

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\* A "closed system" is one in which the pesticide is prepared and loaded mechanically into the aircraft or ground application equipment, thus reducing the potential for human contact with the pesticide.

\*\* A "flagger" is a person who acts as a visual marker in the field during an aerial application.

"A problem with the reports (Pesticide Use/Inspection Report and Pesticide Incident Report Sheet) appears to be a lack of follow-up, or at least, the lack of notations in the file which show that the violations or issues noted were corrected or addressed."

The Board administrator claims that under the terms of the interagency agreement with the Commission the responsibility for inadequate follow-up should be shared with the Commission inspectors. According to him, if violations were serious enough to warrant follow-up, the Commission inspectors should have taken the initiative to further document the violations and submit additional paperwork (such as preliminary investigation reports) to the Board office. Commission administrators, however, state that this was not the understanding of their staff during the period under question (fiscal year 1981-82). According to them, during that period their inspectors were told by the Board administrator to simply report these potential violations on the inspection/monitoring report form and wait for further direction from the Board office. Regardless of whether Commission inspectors were fulfilling their responsibilities, the Board administrator or his designee should have been reviewing these reports and taking appropriate follow-up. If he found Commission inspectors were not meeting the terms of the interagency agreement and standard operating procedures, appropriate action should have been taken. We should note further that four of the six reports warranting follow-up in the calendar year 1982 sample (second paragraph, page 19) were submitted by Board inspectors. Thus, if inspectors were supposed to be taking the initiative to further document serious violations during inspection/monitoring visits, then it appears that Board as well as Commission inspectors did not meet that standard.

### No Tracking of Repeat Violators

Until recently the Board staff has not been tracking the inspection history for custom applicators. Consequently, several applicators appear to have each committed numerous serious violations without any reaction from the Board or its staff.\*

The extent of this problem is illustrated by our analysis of the 191 potential violations reported by Commission inspectors during fiscal year 1981-82 (same violations mentioned in footnote on page 19). Table 4 shows the breakdown of these potential violations by applicator and notes how many inspection reports warranted follow-up.\*\*

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\* The analysis in this section covers potential violations detected during routine and monitoring inspections. However, we also determined that Board staff were not tracking repeat violators as detected through complaint investigations.

\*\* Upon our request, Board staff reviewed these reports and noted which ones warranted follow-up.

TABLE 4

POTENTIAL VIOLATIONS PER APPLICATOR, AS REPORTED BY  
 AGRICULTURE AND HORTICULTURE COMMISSION INSPECTORS  
 IN FISCAL YEAR 1981-82

<u>Applicator</u>	<u>Number of Reports Noting Potential Violations</u>	<u>Total Number of Potential Violations</u>	<u>Number of Reports Warranting Follow-up</u>
A	20	49	11
B	9	10	5
C	6	8	5
D	5	6	5
E	16	30	4
F	4	9	4
G	16	35	3
H	10	16	3
I	3	6	2
J	2	5	2
K	1	4	1
L	1	2	1
M	1	1	1
N	1	1	1
O	1	1	1
P	1	1	1
Q	2	4	0
R	1	1	0
S	1	1	0
T	1	1	0
	<u>102</u>	<u>191</u>	<u>50</u>

As shown in Table 4, inspectors reported a total of 49 potential violations during 20 inspections of applicator "A." These potential violations occurred in just a four-month period. According to the Board administrator, 11 of these 20 inspections warranted follow-up, considering the serious nature of the deficiencies reported. However, as mentioned earlier, no follow-up was performed. All 49 potential violations are summarized below according to the categories used on the standard inspection report:

General, Preoperation

No cholinesterase baseline established	-	2
No copy of pest control advisor recommendation on hand	-	2
Containers not labeled or marked	-	2

<u>Equipment</u>		
Aircraft navigation lights not working (FAA jurisdiction)	-	2
<u>Mixing and Loading Operations</u>		
Inadequate safety equipment/protective clothing	-	18
Closed system not working properly when using chlordimeform (e.g., system leaking)	-	3
Exposure to chlordimeform	-	3
Improper container control/disposal	-	4
Not complying with labeling instructions	-	10
<u>Monitoring of Application Operations</u>		
Significant drift occurred	-	1
Environmental contamination	-	1
Overflight (FAA jurisdiction)	-	1

As shown above, this applicator appears to have repeatedly violated safety requirements which are intended to protect workers during mixing and loading operations. In at least one of these instances a worker was exposed to chlordimeform (a moderately toxic, restricted-use pesticide) when the closed system leaked. During another inspection a total of six potential violations were reported and the inspector added these comments:

- loader had received no training;
- loader had not taken a blood test to establish the cholinesterase baseline;
- closed system was not working properly;
- containers were not rinsed; and
- mixing tank ran over, spilling pesticide on the ground.

Since completion of our audit fieldwork, staff have developed a manual system for tracking each applicator's inspection history. This system should enable Board staff to determine what corrective action was taken and whether an applicator is repeatedly committing the same violations. The

EPA, in its March 1983 report recommended a "data-tracking/retrieval and management system" to help with follow-up and tracking of violations. EPA has since granted funds for the Board to purchase a computer system.

Inspection Resources Can Be  
Used More Effectively

The Board has an inadequate system for allocating inspection resources. As a result, Board staff are not providing the most effective coverage of pesticide applications.

The Board licenses approximately 100 custom applicators each calendar year. The Board's policy is to routinely inspect each of these licensees at least once a year. In addition, Board inspectors observe applications in known problem areas--that is, areas of agricultural/urban interface with a history of complaints. Applicators are supposed to notify the Board of upcoming applications in these areas. The Board has been most concerned about monitoring aerial applications because of the greater potential for harm. Commission of Agriculture and Horticulture inspectors conduct many of these routine and monitoring inspections upon request of the Board staff.

Inadequate Scheduling System - The Board's system for allocating inspection resources is inadequate. The number of inspections an applicator receives depends largely on the number of requests the applicator makes for monitoring inspections. Inspectors do not consider the number of inspections an applicator has already received nor the number and natures of violations committed in the past. In addition, until recently Board staff were not reviewing inspection records to ensure that all applicators had been inspected at least once during the year, as required by Board policy.\*

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\* Since completion of audit fieldwork, Board staff have begun reviewing records to ensure that all applicators are inspected at least once annually.

Ineffective Coverage of Pesticide Applications - Without a better system for allocating inspection resources, the Board is not providing the most effective coverage of pesticide applications. The number of inspections per applicator does not appear to bear a relationship with the number of pesticide applications made by each applicator or the number of previous violations.

Table 5 shows the distribution of Board inspections per applicator during calendar year 1982.

TABLE 5  
CUSTOM APPLICATOR INSPECTIONS  
CALENDAR YEAR 1982

Number of Applicators		Number of Inspections
Ground	Aerial	
9	9	-0-
3	12	1
5	15	2-5
1	12	6-10
1	10	11-25
-0-	7	26-73
-0-	1	178
-0-	1	203
Total number of applicators: 86*		Total number of inspections: 986

\* Nine applicators--six ground and three aerial--apparently did not apply any pesticides in calendar year 1982, as indicated by the fact that these applicators did not submit any usage reports to the Board. These applicators are excluded from this table.

There is no apparent relationship between the number of applications and the number of inspections per applicator. Table 6 displays the top five applicators with the highest number of applications (A-E) and the top six applicators with the highest number of inspections (F-K). All 11 are aerial applicators.

As shown in Table 6, Applicator A made 12 percent of all reported applications but was inspected only 7 times, or less than 1 percent of all inspections. In contrast, Applicator F made only 4 percent of all

applications but received 21 percent of the inspections. An aerial applicator not shown in Table 6 made no applications but was still inspected 3 times, whereas another aerial applicator made 233 applications but was never inspected.

The number of inspections also does not appear related to the number of previous violations per applicator. For example, Applicator B in Table 6 made 8 percent of all reported applications but received only 1.5 percent of all inspections, despite the fact that inspectors reported 49 potential violations by this applicator in just a four-month period in 1981.\*

TABLE 6  
COMPARISON OF THE NUMBER OF APPLICATIONS VERSUS  
THE NUMBER OF INSPECTIONS PER APPLICATOR  
DURING CALENDAR YEAR 1982

<u>Applicator</u>	<u>Applications in 1982</u>		<u>Inspections in 1982</u>	
	<u>Number</u>	<u>Percentage of Total*</u>	<u>Number</u>	<u>Percentage of Total**</u>
A	3,491	12.0%	7	0.7%
B	2,459	8.5	15	1.5
C	1,691	5.8	6	0.6
D	1,645	5.7	2	0.2
E	1,242	4.3	4	0.4
F	1,073	3.7	203	20.6
G	1,191	4.1	178	18.1
H	64	0.2	73	7.4
I	482	1.7	66	6.7
J	465	1.6	53	5.4
K	96	0.3	53	5.4

\* Percentages are based on a total of 29,042 application reports sent to the Board office.

\*\* Percentages are based on a total of 986 inspections by Board and Commission staff.

\* See page 24 for an analysis of potential violations by this applicator.

We agree with the Board that known problem areas (agricultural/urban interfaces) should be monitored more closely than outlying areas. However, to most effectively allocate inspection resources, other factors should be considered. Board staff should establish a record-keeping system which tracks by applicator: 1) the number of applications made,\* 2) the number and types of past violations (discovered through inspections as well as complaint investigations), and 3) the number of inspections made (routine and voluntary monitoring). Inspection frequency should then be based on an analysis of the first two factors above, with emphasis on aerial applicators, and a consideration of the particular area being sprayed. In addition, Board staff should also review inspection records annually to verify that all applicators have been inspected at least once.

Board's Regulatory Ability  
Seriously Impaired

These deficiencies seriously impair the Board's ability to regulate pesticide applicators and thus protect public health. None of the enforcement cases considered by the Board over the last four years resulted from routine or voluntary monitoring inspections.\*\* In light of the number and seriousness of potential violations reported from these sources, it is reasonable to conclude that a number of applicators should have been subjected to Board review. Although inspectors have been discussing violations with the applicator, this provides little incentive compared to the threat of disciplinary action by the Board or the courts. In its October 1981 report entitled Stronger Enforcement Needed Against Misuse of Pesticides, the U.S. General Accounting Office stated:

". . . pesticide enforcement is a key factor in assuring that the public and the environment are not unnecessarily exposed to hazardous pesticides. While

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\* State law requires each custom applicator to send the Board a written report of each pesticide application.

\*\* The Board has held an average of only nine hearings annually for the past four years. All of these cases were initiated by complaints or other referrals.

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." (emphasis added)

The extent to which inspections have been poorly scheduled and not followed up also represents an inefficient use of program resources.

#### CONCLUSION

The Board's inspection program is not effectively monitoring pesticide use. Board staff have not followed up on most reported violations or tracked repeat violators. In addition, inspections are not being scheduled most effectively.

#### RECOMMENDATIONS

1. Board staff should review inspection reports submitted by Board and Commission inspectors. Potential violations noted on reports should be compared to established criteria and disposed of by a) further investigation, b) referral to Board for disciplinary action, or c) notation of inspector comments/advice to applicator.
2. Board staff should track repeat violators and take appropriate action, including recommending Board discipline.
3. To most effectively allocate inspection resources, Board staff should establish a record-keeping system which tracks by applicator: 1) the number of applications made, 2) the number and types of past violations, and 3) the number of inspections made (routine and voluntary monitoring). Inspection frequency should then be based on an analysis of the first two factors above, with emphasis on aerial applicators, and a consideration of the particular area being sprayed. In addition, Board staff should also annually review inspection records to verify that all applicators have been inspected at least once.

## FINDING II

### THE BOARD HAS TAKEN FEW DISCIPLINARY ACTIONS.

The Board has taken relatively few disciplinary actions and is perceived as a weak enforcement body by outside sources. The major reasons for the Board's apparently weak disciplinary record appear to be 1) an inadequate inspection/surveillance program by Board staff and 2) insufficient statutory authority for taking action against violators. In addition, according to the EPA, the Board has not taken appropriate actions in several cases.

#### Weak Enforcement Image

The Board has been perceived as a weak enforcement body, according to our contacts during the audit. This criticism comes from many sources, including the Federal government, the industry and to some extent Board members themselves.

According to an EPA official responsible for overseeing the enforcement of Federal pesticide laws in Arizona, the Board has taken relatively few disciplinary actions in comparison with the number of investigations conducted by staff. Board staff investigate approximately 300 complaints and conduct about 1,000 inspections each year.\* However, the Board has held only 33 administrative hearings between May 1979 and March 1983. Disciplinary action was taken in only 11 of these cases, as shown in Table 7.

\* Commission of Agriculture and Horticulture inspectors perform many of these investigations and inspections.

Industry sources and several Board members also expressed disappointment with the Board's enforcement actions. Numerous reasons were cited for the Board's apparently weak disciplinary record, including insufficient support from the Attorney General's Office.\* However, the major reasons appear to be 1) an inadequate inspection/surveillance program by Board staff as discussed previously in Finding I and 2) insufficient statutory authority for taking action against violators.

TABLE 7  
RESULTS OF BOARD HEARINGS BETWEEN  
MAY 1979 AND MARCH 1983

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Disciplinary action taken:		
License revoked	-	3
License suspended	-	1
Placed on probation	-	2
Warning letter issued	-	5
Referred to another agency	-	1
Cases dismissed due to:		
Insufficient evidence	-	7
First offense	-	2
Rule unclear	-	3
Violator not licensed by Board	-	2
Miscellaneous reasons	-	<u>7</u>
Total hearings		<u>33</u>

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\* Two Board members interviewed expressed dissatisfaction with the support from the Attorney General's Office, particularly regarding enforcement matters. The Board's Attorney General representative is also assigned to several other agencies and therefore cannot give full-time assistance to the Board.

Insufficient Authority  
to Take Action

The Board's enforcement efforts have been hampered by insufficient statutory authority for disciplining violators. Until recently, the Board had relatively few options for disciplining violators without using the courts. This deficiency has been corrected for some groups the Board regulates. However, the statutes governing growers, private applicators and sellers are still weak and limit the Board's ability to discipline violators in these groups.

Recent Legislation Corrected Some Deficiencies - Legislation in 1983 gave the Board additional options for administratively disciplining pest control advisors, custom applicators and agricultural aircraft pilots. Prior to these changes, the Board was limited to the traditional administrative sanctions of 1) warnings or 2) action against the license (revocation, suspension or probation). Board members complained that these options did not include an intermediate penalty, thus forcing them to choose between a weak sanction (warning) which may be ineffective or a harsh penalty (restriction of license) which could destroy a person's livelihood.

The traditional disciplinary avenue of prosecution through the courts has also been available to the Board; however, the Board has been disappointed when it attempted to use this avenue. According to the Board administrator, at least five cases have been referred to county attorneys in recent years. Apparently the attorneys did not consider these to be priority cases because no action was taken.

As a result of 1983 legislation, the Board can now fine pest control advisors, custom applicators and agricultural aircraft pilots up to \$100 for a first offense and up to \$500 for a subsequent similar violation. Board members believe these penalty options will enable them to take more meaningful action.

Other Statutory Changes Are Still Needed - The Board's statutory authority for taking action against growers, private applicators and sellers is still weak. In particular, 1) the grounds for taking action against growers are too restrictive; and 2) the Board does not have a viable range of administrative sanctions to use against growers, private applicators and sellers.

The Board does not have sufficient statutory grounds for taking action against growers. A.R.S. §3-386 is the only provision which gives the Board authority to take administrative action against a grower. A.R.S. §3-386 states, in part:

"A. Any person aggrieved by an application of pesticides by either ground equipment or aircraft may petition the board in writing setting forth the grievance, and if the board finds after a hearing that pesticides have been used in a negligent or wilfully negligent manner, the board may suspend for not to exceed six months the license of the operator or the permit of the person against whom complaint has been made.

"B. The hearing shall be conducted by the board consisting of not less than eight of its members, and shall include the chairman or vice-chairman, or may include both. The complainant shall sign the petition, under oath, and file it with the board which shall cause a true copy of the petition and a summons to be served upon the person mentioned therein. . . ." (emphasis added)

According to the Board's attorney general representative, this statute allows the Board to suspend the grower's permit only if the violation was reported to the Board via a written, notarized complaint from an aggrieved person. Thus, grower violations detected through staff inspections or other sources could not be acted upon by the Board. Two cases heard by the Board in June 1983 illustrate this problem. In each case the Board's investigation established that the grower was guilty of misusing pesticides on vegetable crops. One case came to the Board's attention from a complaint over the telephone. The other case was referred to the

Board by the FDA. Since neither case involved a written, notarized complaint, the Board could not take action against either grower's permit. Instead, both cases were referred to the 1) county attorney for possible prosecution as misdemeanors and 2) EPA for possible action under Federal law.

The statutes do not give the Board a viable range of sanctions to impose on growers, private applicators and sellers. The Board can seek prosecution in the courts for violations by persons in these categories.\* However, here again the Board must rely on the county attorney, which has not been a viable alternative in the past. Beyond this, the Board can take the following administrative actions on its own:

<u>Category</u>	<u>Authorized Administrative Action</u>
Grower	Suspend permit for up to six months
Private Applicator	Refuse, revoke or suspend certification
Seller	None

Thus, the Board has no authority to fine violators in these categories and has no authority to restrict a seller's permit. A case heard by the Board in June 1983 illustrates how this hinders the Board's effectiveness. In this case a seller violated both State and Federal laws by selling a restricted-use pesticide to a noncertified person. Although the violation was clearly proven, the Board could not impose a penalty. Instead it had to refer the case to the EPA and the county attorney.

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\* On the basis of A.R.S. §§3-389 and 3-397.

During the 1983 legislative session the Board sought statutory changes which would have given them sufficient penalties for disciplining growers, sellers and all licensees. However, the amendments relating to growers and sellers were not adopted. To improve the Board's enforcement powers, similar amendments should be sought again in the next legislative session.

#### EPA Critical of Board Decisions

The EPA recently criticized the Board for not taking appropriate actions in several cases. In one case the Board appears to have imposed a relatively weak penalty. In two other cases the Board required a higher standard of evidence than required by the EPA.

Under the terms of the current cooperative agreement with EPA, the Board is responsible for enforcing Federal pesticide laws (FIFRA) within Arizona. The Board receives an annual grant from EPA to help support the enforcement program. As a grant condition, the EPA evaluates the Board's performance twice a year. This includes a review of all investigative files and all administrative hearings during the year under review.

In its evaluation reports for Federal fiscal year 1981-82, EPA criticized the Board's decisions in two of the six cases heard by the Board during that year. One case involved numerous applications of restricted-use pesticides without the supervision of a certified applicator. The Board had authority to fine the applicator up to \$1,000 per violation but instead placed him on probation. For this case the EPA concluded that "the Board did not levy a penalty appropriate to the gravity of the violations."

In reviewing another case (involving drift onto nontarget areas), EPA noted that the Board's standard of evidence appeared to be more stringent than necessary for prosecution of FIFRA violations. The EPA officer reviewing this case reported:

"Apparently the Board felt that the State did not have sufficient evidence to document a violation. It is my opinion that the Board may be using the standard that the evidence establish that beyond a reasonable doubt that a violation occurred, rather than using the standard that a preponderance of evidence document that a violation occurred. By applying the more stringent evidence burden, the Board staff must gather substantially more evidence than would be required for a civil case under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended."

EPA also mentioned a similar drift case from the previous year in which the Board required a higher standard of evidence than necessary. EPA concluded that the Board may never be able to take action in drift cases if they continue to require this unusual standard of evidence.

#### CONCLUSION

The Board has taken few disciplinary actions. Several factors account for this record. First, many potential enforcement cases have not even reached the Board because of an inadequate inspection program. In addition, the Board does not have sufficient statutory authority for taking action against growers, private applicators and sellers. Finally, according to the EPA the Board has not taken appropriate actions in several disciplinary cases.

#### RECOMMENDATIONS

1. Board staff should improve the inspection program as recommended in Finding I.
2. The Legislature should amend Board statutes to give the Board sufficient grounds and penalties for disciplining growers, private applicators and sellers, including the use of administrative fines.

### FINDING III

#### THE BOARD SHOULD BE CONSOLIDATED WITH THE COMMISSION OF AGRICULTURE AND HORTICULTURE.

The current administrative structure hinders the effective and efficient management of the pesticide regulatory program. Responsibility for administrative functions is currently shared between the Commission of Agriculture and Horticulture and the Board of Pesticide Control. The relationship between these agencies is unclear and has inherent weaknesses affecting program administration. To eliminate administrative confusion and improve program management, the pesticide program should be placed fully within the Commission of Agriculture and Horticulture. As a part of this move, the Board of Pesticide Control should be reduced in size and limited to advising the Commission on the adoption of rules and regulations.

#### Background

The Commission of Agriculture and Horticulture first became involved in pesticide regulation in the late 1960s when it agreed to use its own field inspectors to investigate pesticide-related complaints. At this time the Board had only one inspector of its own. By 1972 this cooperation ended and the Board began conducting all field activities with its own staff. In 1978 the Legislature amended the Commission and Board statutes to require cooperation between these two agencies (amendments described in next section). As a result, each year since then staff from both agencies have been involved in the field-inspection function. Since 1980 this cooperation has been formalized through an interagency agreement.

In its budget request for fiscal year 1980-81, the Board requested six additional FTEs for enforcement activities. However, the Board could not support an expanded program with its own revenues and therefore requested the Legislature support the Board through general funds. The Legislature agreed to convert the Board from a 90/10 agency to a General Fund agency.

However, instead of giving six additional FTEs to the Board, the Legislature gave these positions to the Commission and transferred two existing positions from the Board to the Commission with the understanding that the Commission would use these additional resources for pesticide enforcement activities. Although eight FTEs were given to the Commission, no Commission employees are used full-time for the pesticide program. Instead, the Commission provides up to 35 inspectors during the heavy spraying season to monitor pesticide applications and investigate complaints.\*

Intended Relationship Between  
Agencies Is Not Clear

Legislative intent regarding administrative responsibility for the pesticide program is not clear in the statutes. Three statutory changes in 1978 defined the relationship between the two agencies. A.R.S. §3-103 was amended to state:

"The Commission of Agriculture and Horticulture may: . . . Promulgate such rules and regulations as are necessary to administer the board of pesticide control."

A.R.S. §3-372 was also amended to state:

"A. There shall be a board of pesticide control under the administration of the Commission of Agriculture and Horticulture."

Finally, a new provision was added to Board statutes as follows:

"The commission of agriculture and horticulture and the board of pesticide control shall, by mutual agreement, provide for the sharing of professional and clerical support personnel and equipment for the purpose of effective and efficient management of the operations of this article." (A.R.S. §3-372.02)

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\* During calendar year 1982 the Board office received inspection reports from 27 Commission inspectors.

The Board subsequently requested an Attorney General opinion regarding the interpretation of these provisions. In an opinion dated December 17, 1980, the Attorney General states:

"The intent of the Legislature in giving the Commission specific authority only to promulgate rules and regulations to administer the Board in A.R.S. §3-103, paragraph 9, but at the same time making a general reference to the Board's being under the administration of the Commission in A.R.S. §3.372.A. is not clear. The reference to administration in A.R.S. §3-372.A. could be interpreted to give the Commission authority over the Board greater than merely that of the promulgation of rules and regulations." (emphasis added)

The Attorney General attempted to define the boundaries of each agency's authority and finally concluded as follows:

"In summary, it is our opinion that A.R.S. §3-103 authorizes the Commission of Agriculture and Horticulture to promulgate rules and regulations necessary for the management or conduct of the Board of Pesticide Control. The Commission does not have authority, however, to make administrative decisions for the Board or to veto or override Board actions."

While providing some guidance regarding the finality of Board actions, this opinion does not specifically define the roles of each agency in administrative matters, including budgeting, accounting and personnel administration.

Sharing of Administrative Responsibility  
Has Inherent Weaknesses

The administrative relationship between the two agencies appears to be unique in Arizona State Government and has inherent weaknesses affecting program management. More specifically, directors of both agencies believe they have been given the responsibility for the pesticide program without sufficient statutory authority or control over program resources. This condition appears to hinder both the effectiveness and efficiency of the program.

According to the Board administrator, the Commission's involvement in administrative areas restricts his ability to manage the pesticide program most effectively. He cites two examples from the budgeting and personnel areas as evidence of this. First, although he prepares the Board's annual budget request, once he submits it to Commission staff he is involved very little in decisions affecting the Board's budget. At that point the Board's budget becomes part of the Commission's budget, and Commission staff--not the Board administrator--represent the Board's budget in discussions with the executive and legislative budget staffs and before legislative committees. Second, in the personnel area the Commission included Board employees in the overall framework of the Commission to determine which employees would be discharged during a reduction in force in 1981. Consequently, a Board inspector was replaced by a Commission inspector with more tenure. However, according to the Board administrator, the tenured Commission inspector did not have the required knowledge of pesticides and thus had to be trained in this area.

On the other hand, the Commission director mentioned the difficulty of planning traditional Commission activities and managing resources when there is an uncontrolled use of Commission personnel for pesticide-related activities. He believes that the current arrangement puts unnecessary pressures on his personnel because they have, in effect, two bosses during the heavy spraying season. Furthermore, Commission personnel feel much of their time spent in pesticide-related activities is wasted because Board staff have not followed up on violations reported to the Board office.\*

Again from the perspective of the Board administrator, he believes that he has inadequate control over the quality of work done by Commission inspectors for the Board. For example, when he wants to correct the performance of a Commission inspector, he must go through management personnel within the Commission.

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\* See Finding I for a discussion of this problem.

From our viewpoint, the conditions stated above collectively have a serious negative impact on program effectiveness.

Consolidate Board  
with the Commission

Placing the pesticide program fully within the Commission of Agriculture and Horticulture would eliminate administrative confusion and improve program management. Although traditional goals of state agriculture departments may not appear compatible with pesticide regulation, we found overriding reasons supporting consolidation. As part of this move, the size and role of the Board should also be reduced.

Compatibility of Program Goals - According to some sources, the traditional goals of state agriculture departments may not be compatible with the goal of pesticide regulation. All Board members interviewed by audit staff\* objected to a consolidation for this reason. However, several members acknowledged the problems associated with the current relationship and said a consolidation might improve overall administration. The U.S. General Accounting Office, in a report entitled Stronger Enforcement Needed Against Misuses of Pesticide (October 1981), describes this potential conflict of interest:

"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."

The report also notes that Congress has not expressed a preference as to which state agencies should enforce Federal pesticide law:

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\* We interviewed seven Board members, including two public members and the DHS representative.

"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."

Thirty-nine of the fifty states have placed the pesticide program in the agriculture department. Several states have organizationally separated the agriculture promotion and pesticide enforcement programs within the agency (i.e., separate divisions) or have used a hearing officer as a way to insulate enforcement decisions from biased agricultural interests.

According to an EPA official,\* placement of the program is not important as long as the agency has the authority and power necessary for an effective regulatory program. This official cited Hawaii, for example, as having a strong pesticide program (including enforcement capabilities) even though the program is within the agriculture department.

Finally, in the case of Arizona, transferring responsibility for pesticide regulation to the Commission would not significantly increase industry influence in this area. The agricultural industry is already heavily represented in the current regulatory structure in that 1) the Board chairman is also chairman of the Commission of Agriculture and Horticulture, and 2) eight of the Board members represent industries affected by pesticide use (cotton, produce, dairy, feed grains, livestock, citrus, agricultural chemicals and custom pesticide application).

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\* Chief of Pesticides and Toxics Section, Toxics and Waste Management Division, EPA Region IX.

Reasons for Consolidating with the Commission - Despite the concern over goal compatibility, we found overriding reasons for placing the pesticide program under the Commission of Agriculture and Horticulture. These reasons include eliminating the problems associated with the current administrative relationship. More importantly, though, the Commission appears to be the only agency which can efficiently supply all the manpower needed for an effective enforcement program. In addition, we have no reason to believe that Commission staff would not aggressively enforce pesticide laws and regulations.

Because of the seasonal nature of the work load and the need for inspectors throughout the State, the Board could not conduct an effective or efficient enforcement program as a completely independent agency. Most pesticide spraying occurs during the months of July through October. Therefore, most monitoring and complaint investigation activities occur during this same period. The Commission has field personnel in all major agricultural areas of the State. During the spraying season, these employees perform pesticide-related work in conjunction with their normal assignments. As many as 35 Commission inspectors are available during this period. During fiscal year 1981-82, Commission personnel logged approximately 9,600 hours in pesticide enforcement activities.\*

According to our analysis, the Board would need at least another 10 FTEs to provide the same coverage now occurring if it were made a completely independent agency responsible for all monitoring and investigation activities. This estimate is based on an analysis of employee time records for the 12-week period July 1, 1981, through September 19, 1981,

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\* This represents 56 percent of all pesticide-related work performed by either the Board or the Commission. Of these 9,600 hours, approximately 2,900 were logged by Commission personnel located outside the Phoenix area (Tucson, Yuma, Mohave Valley, etc.). This accounts for 98 percent of all pesticide enforcement work done by either the Board or the Commission outside the Phoenix area.

which falls within the peak season mentioned earlier (July-October).  
 Commission employees logged 4,300 hours in pesticide enforcement activities during these 12 weeks. The estimate of 10 additional FTEs assumes that the 4,300 hours were spread evenly over this period. However, since work load is not evenly distributed during the peak period, 10 additional inspectors still may not enable the Board to provide coverage as effectively as is now provided by the 35 Commission inspectors. Furthermore, these additional 10 inspectors would not be needed during the rest of the year because of the drastic drop in work load. Seasonal employees are not a feasible solution; it is unlikely the Board could hire seasonal employees with the expertise needed for such specialized work. Thus, the Board could not operate efficiently or effectively as an independent agency without assistance from the Commission.

As an alternative to consolidation with the Commission of Agriculture and Horticulture, we considered the possibility of placing the pesticide program within the Department of Health Services (DHS). The goal of the pesticide program is compatible with the goals of other regulatory programs within DHS. A review of the State's environmental plan--required by EPA--shows that five of the six program areas already fall under DHS.\*\* The only environmental program outside of DHS is pesticide management. DHS has two regional offices--in Flagstaff and Tucson--staffed

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- \* 10 FTEs were determined as follows:
- 1) Total number of paid hours per employee per year = 2,080
  - 2) Total number of hours per employee per year available for work (i.e., adjusted for vacations, holidays and sick leave) = 1,800
  - 3) Total number of available hours per employee in a 12-week period  $\frac{12 \times 1,800}{52}$  = 415
  - 4) Total work load by Commission employees during period July 1 through September 19, 1981 = 4,300
  - 5) Number of employees needed to perform work load during period July 1 through September 19, 1981  $\frac{4,300}{415}$  = 10.4

\*\* These five program areas are: water pollution control, drinking water, hazardous waste, air pollution and toxic substances.

with field inspectors who take air, water and ground samples. These inspectors could possibly be cross-trained to perform pesticide enforcement activities. Thus, it may seem reasonable to place the pesticide program under DHS. However, to provide adequate coverage during the heavy spraying season, DHS would either have to rely on the Commission as is now done or hire many additional inspectors. The latter option is not practical, for the same reasons explained earlier.

Despite the philosophical arguments about goal compatibility, evidence indicates that enforcement would not suffer if the pesticide program were placed fully within the Commission. As explained in Finding I, Commission administrators have criticized the lack of follow-up by the Board staff on potential violations reported by Commission personnel. Commission inspectors have received the same pesticide-related training which Board inspectors have received. All Commission inspectors performing pesticide-related work also must pass the licensing exams given by the Board. In addition, Commission administrators have insisted that their inspectors carefully follow the standard operating procedures for investigations and inspections so that enforcement cases are properly developed.

Board Size and Role - As part of the consolidation under the Commission, the Board of Pesticide Control should be reduced in size and limited to an advisory role. The Board as presently constituted is too large even for its current role. With its 15 members the Board is the largest of 27 Arizona occupational boards that we surveyed.\* According to the Board's former and current Attorney General representatives, the size of the Board renders it unwieldy for decision making, particularly during administrative hearings. As a practical matter, the Board sometimes has trouble getting a

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\* 22 of these 27 boards have 7 members or fewer.

quorum of eight members present in order to conduct business.\* The most effective role for the Board under the proposed consolidation is to advise the Commission on the adoption of rules and regulations. This requires technical expertise which the Commission may not possess--at least as presently constituted. Thus, the advisory board should have several industry-related members, a public health expert (such as the director of DHS or his designee) and a public member. A hearing officer could be used to minimize the number of pesticide cases which come before the Commission.

#### CONCLUSION

The Board and the Commission both share responsibility for administration of the pesticide regulatory program. The administrative relationship between these two agencies, however, is not well defined and has inherent weaknesses affecting program management. In addition, the Board is too large for its decision-making role.

#### RECOMMENDATIONS

1. The Legislature should consider placing the pesticide program fully within the Commission of Agriculture and Horticulture. As a part of this move, the Board of Pesticide Control should be reduced in size and limited to advising the Commission on the adoption of rules and regulations.
2. To address Board concerns that the goal of protecting public health may be subordinated by the Commission's traditional goal of protecting agriculture, the Legislature should consider a) amending the Commission's statutes to clearly reflect this two-fold responsibility and b) requesting an evaluation of the Commission's enforcement record in approximately three to four years.

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\* This is partially attributed to the fact that one or more positions have been vacant over the past two years. For example, during a four-month period in 1983, three positions were vacant and two other Board members were serving expired terms.

#### FINDING IV

##### THE BOARD SHOULD MONITOR PESTICIDE USE BY GROWERS AND PRIVATE APPLICATORS.

The Board does not have enough information to monitor pesticide use by growers and private applicators. Compared to other regulated users, these groups operate with relatively little oversight by the Board. These groups are not subject to any statutory reporting requirements, nor are they inspected by the Board's staff. Although the extent of pesticide misuse by these groups is unknown, the potential for harm appears to be substantial. Therefore, the Board should be given authority to require limited reporting of pesticide use by these groups to determine if more stringent regulation is needed.

The Board annually licenses, permits or certifies four groups of agricultural pesticide users: custom applicators, commercial applicators, growers and private applicators.\* "Custom applicators" are persons or firms which apply pesticides for hire or apply pesticides by aircraft (whether or not for hire). Custom applicators must also be certified as "commercial applicators" to apply or supervise the use of restricted-use pesticides. A "grower" is any person who commercially grows or produces any agricultural commodity. Growers must obtain a permit "to purchase, dispense or use pesticides, or make or have application of pesticides made. . . ." A "private applicator" is a person who uses or supervises the use of restricted-use pesticides on property owned or rented by him or his employer.

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\* The Board also licenses or permits: aircraft and ground equipment used in custom applications, agricultural aircraft pilots, sellers of pesticides and pest control advisors.

## Controls Over Pesticide Users

The Board's regulatory program focuses largely on the commercial users of agricultural pesticides (i.e. custom and commercial applicators). In addition to passing the initial licensing exam, these groups are subject to reporting requirements, inspections, complaint investigations and a variety of enforcement penalties. By contrast, the Board has relatively little oversight of pesticide use by growers and private applicators.

Regulation of Custom/Commercial Applicators - The Board has a comprehensive program to regulate custom and commercial applicators. Before being licensed, custom applicators must pass an examination

"to demonstrate a familiarity of insects and pesticides and knowledge concerning the application of pesticides, the dangers involved, precautions to be taken and the hazards to adjacent property owners and hazards inherent in the application to the health and property of persons in the neighborhood of the application."  
(A.R.S §3-379.D.)

All custom applicators must also be reexamined at least once every three years and must register each piece of equipment to be used in pesticide applications. Custom applicators who wish to be certified to use restricted-use products must take another exam for that purpose. Board statutes and rules also require that all custom applications be reported to the Board in writing. The written report must include any pest control advisor recommendations or grower instructions to the applicator, exact location, date and time of application, wind conditions and type and quantity of pesticide used.\* Custom applicators are subject to routine inspections of their base operations by inspectors from the Board or the

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\* These reports are known as "1080s" because they are required by Board Rule 3-10-80. The Board received approximately 30,000 of these reports in calendar year 1982.

Commission of Agriculture and Horticulture. Custom applicators also participate in a voluntary monitoring program; they are to notify the Board before they make a pesticide application in a "sensitive" area (urban/agricultural interface areas such as Scottsdale/Salt River Indian Reservation) so that an inspector may observe the application. Any violations noted during these routine and monitoring inspections are reported to the Board office for appropriate follow-up. Board and Commission staff also investigate all pesticide-related complaints involving custom applicators.

The Board has a wide range of enforcement penalties it can consider to discipline a custom applicator. The Board can revoke, suspend or refuse to renew the license or can administratively (without court involvement) fine the applicator \$100 for a first offense and \$500 for a second offense.\* The Board can also seek court action in the form of an injunction or a Class 3 misdemeanor. If the offender is a commercial applicator who violated the laws or rules governing restricted-use pesticides, then the Board can impose a fine of up to \$1,000 per violation or can seek prosecution in court as a Class 2 misdemeanor.

Little Oversight of Growers/Private Applicators - The Board has relatively little oversight of pesticide use by growers and private applicators. The statutes allow a grower to obtain a permit by merely paying a \$20 annual fee and completing the prescribed form;\*\* no exam is required to test the grower's knowledge of pesticide dangers, precautions, etc. The grower can become certified as a private applicator by paying \$15 (\$10 for annual

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\* This authority to fine was added by statutory amendment in 1983.

\*\* This form asks for size of farm, legal description of location, etc.

renewal) and either 1) attending a half-day training session or 2) passing a written exam (75 percent minimum passing grade).<sup>\*</sup> Unlike custom applicators, there are no reporting requirements for either growers or private applicators, nor are these groups subject to routine or monitoring inspections. These groups are inspected only in response to complaints. The Board also has fewer options for disciplining growers and private applicators; in particular, the Board has no authority to impose administrative fines.

#### Potential Harm by Unregulated Users

The potential for harm from pesticide misuse by growers and private applicators appears to be substantial. However, due to the absence of information in this area, we could not determine whether these groups should be subjected to increased controls similar to those exercised over custom and commercial applicators.

Pesticide Use Information Is Not Available - We could not determine the volume of pesticides used by growers/private applicators nor the extent of misuse by these groups. Unlike custom applicators, these groups do not report pesticide applications to the Board office. We contacted several sources to estimate the volume of pesticides used by growers/private applicators in comparison with custom applicators; but no estimates were available. Due to the manner in which complaint records are filed at the Board office, we also could not determine the number of complaints made against growers and private applicators as compared to custom applicators. Even if this could be done, the number of incidents reported probably does not indicate the extent of misuse actually occurring.

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\* Board Rule R3-10-55 states, in part: "Private applicators unable to understand the information offered in the training sessions or unable to read the written exams, may elect to take an oral examination." According to the Board administrator, this option was provided to accommodate persons who do not speak English.

According to authoritative literature, most victims of pesticide poisoning are farm workers, who are the least likely to report their illnesses. According to a study conducted in Tulare County, California, fewer than 1 percent of field worker poisonings actually showed up in official reports of the number of annual pesticide poisonings.

Potential Harm Appears to Be Substantial - Some evidence indicates that the potential for harm by these unregulated groups is substantial. One industry source told us that although the volume of pesticides applied by these groups might be relatively minimal, these groups could be making twice as many applications as custom applicators. Some of these private applications occur in geographically sensitive areas (i.e., urban/agricultural interface). According to Board staff, even though these applications are made by ground equipment,\* substantial harm can still occur. An overdose could leave a harmful residue in the soil or crops and the possibility of drift from ground spraying still exists. It seems reasonable to assume that a grower can do as much damage by pesticide misuse on a large farm as can a custom applicator. In fact, the potential for misuse by a grower may be even greater because he does not have to pass a Board examination testing his knowledge of pesticides.

Two cases recently heard by the Board further illustrate the potential for harm from growers. Both cases involved growers who used pesticides inconsistent with the product label. In one case the USDA discovered pesticide residue in radishes sampled at the packing shed. According to the product label, this particular pesticide was not to be used on radishes. The grower voluntarily destroyed the crop, valued at \$20,000. In the second case, a person complained of illness and odor from pesticides applied to a nearby lettuce crop. The investigator discovered the product was not labeled for use on lettuce in Arizona. The grower admitted he had not read the product label but had seen the product used by other lettuce growers in the area.

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\* Board statutes require that an applicator who applies pesticides by aircraft must obtain a custom applicator license, whether he is applying pesticides on his own property or for hire.

Board Should Monitor  
Pesticide Use

The Board should take limited steps to monitor pesticide use by growers and private applicators. The Board should be given authority to require limited reporting of pesticide use by these groups. In conjunction with this requirement, the Board should conduct occasional inspections of these users. This would give the Board the information it needs to determine if more stringent regulation is warranted. In addition, this information would enhance the Board's ability to discipline violators.

Monitoring Pesticide Use - This could include two activities: reporting requirements and inspections. The Director of the Arizona Farm Bureau Federation, a growers association, stated the association has opposed reporting requirements because the volume of paperwork would be a burden for persons operating small farms. Therefore, rather than requiring reports from growers/private applicators, the Board could require them to maintain a log of their pesticide applications which could be reviewed by inspectors during a regular inspection or as part of a complaint investigation. The log could be issued to each grower when permits are issued or renewed. The Board could determine what basic information is most necessary for enforcement purposes and design a logbook to include only that relevant information. This system would be easier for the Board to administer and the farmers to comply with than a requirement for 1080 reports.

Board staff could inspect a limited number of growers on a random or spot-check basis. This inspection could include a review of the pesticide use log (mentioned above), a review of safety practices, and a general discussion of potential problem areas. In order to use its limited resources most effectively, the Board could establish criteria for determining which growers to inspect. For example, the Board may wish to focus on growers with large operations or who use restricted-use pesticides. Perhaps private applicators using restricted-use pesticides in sensitive geographical areas should be required to participate in the monitoring program already established.

The impact of grower inspections on Board staffing would depend on the number and nature of inspections performed. However, if the Board better allocates its inspection resources as recommended in Finding I, it may be able to perform limited inspections of grower operations without increasing its staff. As is now done with custom applicator inspections, Agriculture and Horticulture Commission staff could also help with grower inspections.

The activities above would give the Board a better understanding of the extent of pesticide misuse by growers and private applicators. The Board could then determine if more stringent controls are needed over these groups.

Disciplining Violators - A requirement that growers keep a written record of pesticide applications--as mentioned above--would also enhance the Board's overall enforcement capability. Grower records could help investigators resolve drift cases in areas where both growers and custom applicators are using pesticides. When investigating such cases, Board staff rely heavily on the written reports which custom applicators and pest control advisors routinely send to the Board office. However, the investigator also needs information on applications by growers/private applicators in the geographical area under investigation. Since growers and private applicators currently do not have to report or keep records of pesticide use, the information needed to develop a sound case may be missing.

#### CONCLUSION

The Board receives very little information regarding pesticide use by growers and private applicators. As a result, it cannot determine the extent of pesticide misuse by these groups nor whether more stringent regulatory controls are needed. Because the potential for harm appears to be substantial, the Board should begin monitoring these pesticide users.

## RECOMMENDATIONS

1. The Legislature should consider amending Board statutes to require growers to maintain records of pesticide use as prescribed by the Board. The Board should subsequently adopt rules prescribing the type of information to be recorded by these groups and the manner in which it should be recorded. The Board should consider issuing standard forms for this purpose when issuing annual permits to growers.
2. Board staff should inspect a limited number of growers on a random or spot-check basis. These inspections should include a review of pesticide use records as well as other areas normally reviewed in custom applicator inspections.
3. Based on pesticide use information obtained through grower inspections, the Board should determine if more stringent regulations are needed.

**BOARD MEMBERS**

LYNN ANDERSON  
CHAIRMAN

ARTHUR DE CABOOTER  
VICE CHAIRMAN

HERBERT ABRAMS  
EHUD ARIAV  
LESLIE DAVIS  
CARMEN DOLNY  
EUGENE HALBACH  
DONALD MATHIS  
WILLIAM McGIBBON  
LEON MOORE  
JAMES PALMER  
JOHN SAKATA  
BARBARA SHERLOCK  
BILL STRICKLAND



STATE OF ARIZONA

**BOARD OF PESTICIDE CONTROL**

1624 WEST ADAMS, SUITE 103  
PHOENIX, ARIZONA 85007

TELEPHONE 255-3578

R. W. SWEET  
ADMINISTRATOR



September 13, 1983

Douglas R. Norton, C.P.A.  
Auditor General  
111 West Monroe, Suite 600  
Phoenix, AZ 85003

Dear Mr. Norton:

Attached to this letter are the written comments of the Board of Pesticide Control in response to the revised preliminary report draft of the Performance Audit of the Board of Pesticide Control.

It is the understanding of the Board that these comments will be included in the text of the final, published report.

Sincerely,

A handwritten signature in cursive script, appearing to read "R. W. Sweet".

R. W. Sweet  
Administrator

RWS:ar  
Enc.

c.c. E.W. Thomson w/ attachment



STATE OF ARIZONA  
**BOARD OF PESTICIDE CONTROL**

1624 WEST ADAMS, SUITE 103  
PHOENIX, ARIZONA 85007

TELEPHONE 255-3578

September 12, 1983

RESPONSE TO AUDIT REPORT OF THE OFFICE OF THE AUDITOR GENERAL

INTRODUCTION

As provided for in the State Statutes the following is the response of the State of Arizona Board of Pesticide Control to the Audit Report of the Office of the Auditor General pursuant to ARS 41-2351 through 41-2379.

OVERVIEW

The State Board of Pesticide Control has met for several hours to review the report from the Auditor General's Office in reference to the State Board of Pesticide Control. Subsequent to these meetings, an ad hoc study and writing committee of the Board was established to prepare this written response which accompanies the Auditor General's Report.

The response from the Board of Pesticide is that the Auditor General's Report misses the mark in that it does not reflect a clear understanding of the mission of the Board and reviews only isolated programs and often only fragments of them. This is evidenced by the fact that several major areas

of responsibility of the Board are not included in the Report or, at best, are casually referenced. The following would be included in this listing:

- A) The certification and licensing activities of the Board are not substantially included in the Report. Yet these programs are significant and are in the interest of public health. To the credit of the Board, diligence in these areas result in very few pesticide incidents in the State. These positive and preventive programs of the Board are most important and achieve their end as shown by the records of Arizona relative to pesticide incidents.
- B) The Report does not consider the educational activities of the Board and does not take into consideration that these educational activities are seasonal in nature. They are intensified by the Board staff when there is less activity in the field during spraying and application times. The educational functions would include the education of pest control advisors, pilots, applicators, and the general public.
- C) The scope of the Report is also lacking in that it does not consider the financing of the Board and the fees that are assessed by the Board for its several activities. The Report does not address how the fees might augment the Board's budget even though it is a general fund agency. These fees could provide more funds to the State and, thus, to the Board. This omission in the Report is paradoxical given the emphasis the Report places on financing in some sections of the Report.
- D) Several enforcement activities of the Board are not considered in the Report. These include the inspection of experimental use pesticides, the inspection of pesticide dealers and distributors, and the inspection and review of non-agricultural pesticide applications. These are important functions of the Board and illustrate the apparent lack of understanding of the staff from the Auditor General's Office regarding the complete array of programmatic responsibilities of the Board.

The Board is also concerned that the Report does not clearly distinguish between investigations resulting from complaints and monitoring inspections of the Board. While the Report gives the Board high marks for its follow-up of complaints, the content of the Report demonstrates a lack of understanding regarding the important ongoing monitoring inspections of the Board.

The Board is also disturbed regarding the method that was used in compiling the Report. No personal interviews were conducted with any members of the Board. Only about half of the Board received unscheduled telephone calls from the Auditor General's office and in some cases the Board members perceived that the Auditor General's staff was asking leading questions.

The Board is concerned that there was a complete (100%) turnover in the staff from the Auditor General's Office who began the Audit and the staff who completed the Audit. Perhaps this explains, to some extent, the several major misunderstandings and mistakes in the Report.

The Board was taken aback and distressed that there were major modifications between the Report of the Auditor General's staff in the exit interview versus the written draft report which was mailed to the Board members.

The Board is also perplexed regarding the confidentiality of the draft report. Personnel from industry related areas were aware of the four findings of the draft report as reflected in their comments and telephone calls.

The Board is concerned about the short timeline within which it had an opportunity to respond to the draft report. There were extremely long delays in getting the draft report to the Board members but a requirement from the Auditor General's staff was that the Board act upon the draft in a one to two week period.

Finally, the Board notes that the four findings of fact are often based upon unfounded generalizations and comments that serve only to support the conclusions of the staff of the Office of the Auditor General.

In short, while this type of activity may have some merit for the State of Arizona and the Citizens it serves, hopefully, other reports are more substantive and comprehensive.

The State Board of Pesticide Control is not in agreement with the Audit Report from the Office of the Auditor General. Some specific disagreements are contained in the remainder of this reponse.

#### EFFECTIVENESS OF THE STATE BOARD OF PESTICIDE CONTROL

The Report alleges that the Board's inspection program is perceived as ineffective. It may well be true that it is perceived by some to be ineffective. However, effectiveness should be judged on results rather than upon the perceptions of unnamed people. Over 30,000 pesticide applications are made annually in the State and a minimum, if any, number of

people have suffered any consequences from a misuse of pesticides.

The Board has a staff of only five full-time-equivalent persons to conduct monitorings and yet the Board receives high marks from the Environmental Protection Agency for timeliness in monitoring these applications and the follow-up of any resulting complaints. The shared staff from the Commission of Agriculture and Horticulture certainly assists with this prompt and effective program. As is shown by actions at recent Administrative Hearings, the quality of investigations and the substantive evidence provided to the Board has improved considerably in the last eighteen (18) months.

While the Report indicates some may perceive the Board as a weak enforcer, it can be argued that, in fact, the Board is achieving the objective of protecting the public health and the citizens of Arizona. Weak enforcement is, in fact, a misperception on the part of the staff of the Auditor General's Office given the fact that the State Board of Pesticide Control achieves its goal of protecting the citizens and the health of the citizens of Arizona as is reflected by a record of excellence.

The Board would agree that the comments in the report relative to potential violations bear further study. This problem deals with action from the inspectors in the field or follow-up in the Board office. This will be addressed by the Board.

There is also concurrence from the Board regarding the tracking of repeat violators and the Board already has a program in place to accomplish this.

DISCIPLINARY ACTIONS TAKEN BY THE STATE BOARD OF PESTICIDE CONTROL

The Report from the Auditor General's Office alleges that few disciplinary actions have been taken by the Board. Enforcement should not be judged solely on the basis of the penalties, the lack of penalties, or the severity of penalties assessed by the Board. Following an Administrative Hearing it is at the discretion of the Board to judge and discipline appropriately. It may be that a letter of reprimand is deemed just as appropriate and effective as a monetary fine. The bottom line for enforcement is not just penalties assessed. Enforcement should be judged by the excellent and responsive track record of the Board in preserving a solid pesticide program in Arizona.

Examples of this responsive and proactive approach by the Board is its attentiveness to sensitive areas of the State. Very positive results have come from this approach as evidenced by the joint agreements reached by pest control advisors, applicators, growers, and the State Board in relation to such things as which pesticides will be used, which types of aircraft will be flown, and the times during which applications will be made.

Agreements have also been reached by the Board during

the last two years to provide, in conjunction with the aerial applications, pesticide "hot lines" throughout the State for the benefit of the citizens to inform them as to who is applying what, where, and when.

Another example of providing an effective pesticide program is the case of the sensitive area near Pima Road. In this area, as well as in other sensitive areas identified by the Board throughout the State, there is a cooperative arrangement with the pesticide control advisors and applicators which insures that an inspector from the Board is present at every application. In addition, the Board held public hearings at Scottsdale Community College in response to the Pima Road concerns. Most recently the Board has entered into an agreement with the College and the applicators to provide on a twenty-four hour a day basis and seven days a week full information for the citizens near Pima Road of what is being applied, by whom, when, and where.

Another example of the Board's responsiveness is the hearing conducted in the Mohave Valley area to review the concerns of the citizens in that part of the State. Following these hearings, special resources and personnel of the Board were assigned to that sensitive area to insure that adequate monitoring and enforcement took place. This program continues.

Yuma is another example of the Board responding through visits and participation in public forums to the concerns expressed by the citizens in this part of the State. Again,

resources and personnel are being dedicated to this sensitive area of the State.

In all three of these examples, the Board is working in conjunction with the Department of Health Services to attempt to provide substantive evidence to show to the citizens and the Board what health effects, if any, are being identified in these areas.

The types of efforts illustrated above are judged by the Board to be effective and responsive and are not properly conveyed by the general figures used by the Auditor General's staff in their analysis. It is naive to assume that numbers have any relation to the quality of the inspections. Again, it must not be overlooked that for the past twenty-four (24) months the average size of the Board's inspection and investigation staff for the entire State and over 30,000 applications has been five (5) full-time-equivalent positions. Granted, additional personnel are available from the Commission of Agriculture and Horticulture. Nonetheless, this is an immense workload for the few people to whom it is assigned.

In short, it is the posture of the Board that an effective pesticide program in the State of Arizona is not predicated on how many and how harsh disciplinary actions may be. An effective program should be judged by its results.

The Report from the Auditor General's Office illustrates that this staff misunderstands the role of enforcement. This one function of the Board's activities is there only to serve

the total mission of the Board which is to protect the health of the citizens of Arizona.

Another indicator of the effective and responsive program of the Board is the fact that there have been substantially fewer complaints over the past five years. In 1978 there were 900 complaints and in 1982 there were 264 complaints made to the Board's office. This is a significant reduction.

THE BOARD SHOULD MONITOR THE PESTICIDE USE BY GROWERS AND PRIVATE APPLICATORS

The Board was successful in the 1983 Legislative session in having a number of its recommendations passed by the Legislature and signed by the Governor. These provide the Board with stronger disciplinary authority. Now that these have been signed into law the Board will, undoubtedly, seriously consider utilizing them in future administrative hearings. The Board was proactive in 1981 and in 1982 in having a major committee of the Board review every statute of the Board and every rule and regulation of the Board to bring before the Board, as a whole, recommendations that could insure that it continue to be one of the most effective Boards in Arizona. The Board is appreciative that the Legislature recognized this during its most recent session and granted the Board additional authority in terms of disciplinary action.

While the Auditor General gives considerable attention

in the Report to the monitoring of pesticide use by growers and private applicators, the current statutes of the Board, as well as the rules and regulations of the Board, provide some redress. However, in order to clarify the responsibility and authority of the Board in this area, the Legislative committee referenced above, recommended appropriate legislative action relative to growers and private applicators to the 1983 session of the Legislature. This action was not passed by the Legislature at that time and, therefore, the Auditor General is offering a proposal that would be generally agreed to by the Board given its previous stance and support for this legislation.

CONSOLIDATION OF THE BOARD OF PESTICIDE CONTROL AND THE COMMISSION OF AGRICULTURE AND HORTICULTURE

A proposal in the Report from the Auditor General's Office is that the Board of Pesticide Control and the Commission of Agriculture and Horticulture should be consolidated. The Board of Pesticide Control is on record as being unanimously opposed to this consolidation. The Report does not accurately reflect the Board's understanding of its relationship with the Commission of Agriculture and Horticulture. Lacking the development of rules and regulations by the Commission to administer the Board functions, the Board has proceeded to cooperate and consult with the Commission staff with regard to administrative matters, such as preparation of budgets, accounting, fiscal controls, and other functions

which may efficiently be carried out with the Commission's assistance.

The Report does not acknowledge the mechanisms utilized jointly by the Board and Commission in cooperatively discharging pesticide enforcement functions. The Board and Commission in 1980 developed an Inter-Agency Agreement to provide for the sharing of personnel and equipment, pursuant to ARS 3-103 and 3-372.02. This Agreement defines the relative roles and responsibilities of the two agencies in conducting pesticide related work. This Agreement provides that when pesticide work is done by the Commission staff, they are in the capacity of agents of the Board. Further direction is given to the Commission staff through the Commission Administrative Policy #52, Standard Operating Procedure for Handling Pesticide Incident Reports, which was a joint product of the Board and the Commission.

The recommendation to consolidate these two agencies to remedy perceived administrative problems and provide stronger enforcement is inappropriate. Protection of the citizens of Arizona from pesticide misuse or other related hazards necessitates an independent process devoted to this goal with specialized staff and Board members.

In terms of more stringent enforcement by the Commission, the Auditor General's Report does not indicate a predisposition to more stringent enforcement action by the Commission staff.

Consolidation with the Commission, which already

possesses a variety of regulatory responsibilities, may result in a lower priority for pesticide related issues. This would not be in the best interest of the citizens. A variety of mechanism exist, short of consolidation, to streamline administrative processes, including the promulgation of Commission regulations for administration of the Board, amendments to the Inter-Agency Agreement, revisions to the Standard Operation Procedure and changes in the State Statutes.

A significant fact that should not be overlooked is that while there is some confusion resulting from the Statutes, the Board of Pesticide Control did request and receive an opinion from the Attorney General relative to its relationship with the Commission of Agriculture and Horticulture. In addition, a very close relationship exists between the Board and the Commission in that the same person serves as chairperson of these two bodies.

While there have been some areas of disagreement between the staffs of the two agencies, this does not appear in any way to have negatively impacted the accomplishments of the Board in fulfilling its mission. It is inconceivable to the Board how the Director of the Commission of Agriculture and Horticulture could consider himself responsible for the Board. This is certainly not supported by the statutes. It does point up a staff problem that needs to be addressed.

The Auditor General's Report is also rather simplistic in assuming that there are plenty of people in the Commission

who can perform the work of the Board. If this is the case, the Commission must be overstaffed and/or utilizing their staff poorly now. A more realistic expectation would be that additional staff and finances would be needed to meet the mission of the Board of Pesticide Control if the consolidation took place. A simple assumption of this mission is naive at best.

The Auditor General's Report, as pointed out earlier in this response, misses the mark in understanding the total mission of the State Board of Pesticide Control in that it presumes that the Commission of Agriculture and Horticulture could assume the enforcement and monitoring responsibilities of the Board. In short, the entire scope of the mission of the Board would be prohibitive for another agency to assume. The majority of the justification by the Auditor General for consolidation is based upon financial consideration rather than upon sound programmatic consideration. While the Auditor General's Report illustrates a lack of understanding of the mission of the State Board of Pesticide Control, this is aggravated even more by the apparent lack of understanding of the mission of the Commission of Agriculture and Horticulture.

As is evidenced in the past actions of the State Board of Pesticide Control and the Commission of Agriculture and Horticulture several efforts have been undertaken to provide for clarity in the relationship of the two agencies and to assist each in meeting statutory responsibilities. The

State Board of Pesticide Control does not believe that the Auditor General's Report reaches a rational conclusion with the recommendation that the two agencies be consolidated. A better approach would be to clarify the statutes for both agencies.

CONCLUDING STATEMENT

The State Board of Pesticide Control has a record of excellence in service to the citizens of Arizona. The Board takes pride in the accomplishments brought about by its aggressive action in fulfilling its mission. The Board finds the Auditor General's Report lacking and somewhat superficial. Nonetheless, it has provided the Board with an opportunity to closely review itself and recognize its significant accomplishments as well as identify areas that should be addressed to insure a continued record of excellence.