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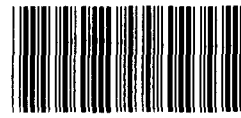

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Pesticides: EPA and State Efforts to Ensure Safe Use of Lawn Care Pesticides

Statement of
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Before the
Subcommittee on Toxic Substances, Environmental
Oversight, Research and Development
Committee on Environment and Public Works
United States Senate

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to be here today to discuss the Environmental Protection Agency's (EPA) progress in reassessing the health risks of widely used lawn care pesticides. Our testimony also addresses the notification the lawn care pesticide industry provides to customers and others when pesticides are commercially applied to residential lawns.

Last March, in our report and testimony on lawn care pesticides, we described EPA's slowness in reassessing the health and environmental risks of the most commonly used lawn care pesticides.[1] As a result of our earlier findings, you asked us to determine the current status of EPA's progress in reregistering the 34 most widely used lawn care pesticides.

In summary, we found that EPA has made limited progress in reassessing the health and environmental risks of pesticides applied to lawns. Of the most widely used pesticide products, none of those subject to reregistration has been completely reregistered.

With regard to public notice when pesticides are applied by lawn care companies, we found that only about half the states

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[1]Lawn Care Pesticides: Risks Remain Uncertain While Prohibited Safety Claims Continue (GAO/RCED-90-134, Mar. 23, 1990, and GAO/T-RCED-90-53, Mar. 28, 1990.)

require companies to provide some form of notification when applying pesticides to residential lawns. The other states do not have notification requirements currently in place. The primary notification methods are direct notification to customers and/or neighbors and posting of warning signs on treated lawns. Our forthcoming report will address reregistration and public notice.

Before I discuss these findings in more detail, let me provide some background information on lawn care pesticides.

BACKGROUND

Pesticides used for lawn care purposes are generally chemical substances designed to kill or control living organisms--unwanted species of plants, insects, and animals. Most people come into contact with pesticides when they are used in such places as gardens and parks, and on lawns and golf courses. Because lawn care pesticides are designed to destroy or control living organisms, human exposure to them can present a health risk. In addition, lawn care pesticides can result in contamination of drinking water, and, in fact, in the fall of 1990, EPA reported that this had occurred with two lawn care pesticides.

According to the most recent EPA estimates, lawn care pesticides constitute a large market. Sales of lawn care pesticides in the United States have increased to over $700

million annually; about 67 million pounds of active ingredients are applied to the almost 67 million private lawns across the country. EPA estimates that lawn care companies, treating mostly residential lawns, do a $1.5-billion annual business and serve nearly 12 percent of single-family households.

Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), EPA is required to evaluate the risks and benefits of a proposed pesticide before it is registered for use. Registrations are basically licenses for specific uses of a pesticide product that state terms, conditions, and cautions of these uses. More recently, the FIFRA Amendments of 1988 (known as FIFRA '88) imposed mandatory time frames and provided resources to help accelerate the reregistration of older pesticides, including lawn care pesticides. Reregistration, required by legislation in 1972, is the process of bringing approximately 20,000 registered pesticide products into compliance with current data requirements and scientific standards and taking appropriate regulatory action on the basis of this new knowledge.

Under FIFRA, a state may regulate the use of any pesticide in the state so long as it does not permit any sale or use prohibited by FIFRA. Neither FIFRA nor EPA regulations require commercial firms to provide any type of public notification when treating residential lawns. In the absence of federal requirements for public notifications, a number of states have enacted legislation

or promulgated regulations requiring commercial firms to provide some form of public notification when lawn care pesticides are used.

Let me now turn to EPA's reassessment of lawn care pesticides.

HEALTH RISKS OF LAWN CARE PESTICIDES HAVE NOT BEEN FULLY REASSESSED

Our March 1990 report listed 34 pesticides that EPA had identified as representing those most widely used for lawn care. Only two of these pesticides do not need reregistration because they are subject to EPA's newer standards. Last year, we reported that EPA had not completely reassessed the health risks of any major lawn care pesticides subject to reregistration. Our updated review indicated the situation has not changed substantially.

Of the 32 pesticides subject to reregistration, only 1 has been completely assessed. No products containing the pesticide have been reregistered. EPA's reregistration process is falling behind schedule on 7 out of the 32 lawn care pesticides (about 22 percent) because EPA's data collection activities for these pesticides will not be completed before the pesticides are scheduled for reregistration.

In April 1990, EPA reported to you its schedule for reregistration. EPA anticipated reregistering two pesticides in fiscal year 1991. Both of these pesticides needed additional data collected, and the data are not expected to arrive until 1995 in one case and mid-1992 in the other. We also identified five other pesticides whose date for completion of data collection is later that EPA's anticipated reregistration date. For these seven pesticides, EPA will clearly not meet its anticipated reregistration dates. Attachment I compares EPA's anticipated reregistration dates with the collection dates for the data needed to evaluate each pesticide.

In addition to these seven, other pesticides might also miss their targeted reregistration dates. Once a pesticide is completely assessed, the manufacturer can submit data to EPA for approval of its products. EPA will then review the data, and if the data meet EPA's standards, EPA will reregister the pesticide. This process usually takes about another year.

We also determined that six pesticides were subjected to Special Review because of concerns about their chronic health and environmental effects. Special Review is EPA's evaluation of the risks and benefits of pesticides of particular concern to determine whether regulatory action is needed. Two of these pesticides,

diazinon and 2,4-D, are the most widely used pesticides for residential lawn care.[2]

EPA subjected diazinon to its Special Review process in 1986 when it found that it was killing waterfowl and other bird species. As a result, EPA canceled uses of diazinon on golf courses and sod farms but imposed labeling requirements in order to provide information and protection to homeowners. It has also restricted diazinon's commercial outdoor uses on agricultural crops by, for example, allowing only certified applicators or persons under their direct supervision to apply the pesticide. This restriction, however, does not apply to commercial lawn care companies.

EPA has called for additional toxicity data of diazinon's effect on human health. It is scheduled to receive these data in July 1992. Until then, diazinon's use on lawns will raise uncertainties about its risks to humans.

Another pesticide, 2,4-D, is a weed killer used in more than 1,500 pesticide products. It has been used extensively by farmers and home gardeners for over 40 years. Because farmers handling similar types of herbicides face increasing cancer risks, EPA has been considering, since 1986, whether to place 2,4-D in Special Review. A decision on whether to place 2,4-D in Special Review

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[2]The other four pesticides are DDVP (dichlorvos), maneb (EBDC), benomyl, and pronamide.

because of possible cancer risk will not be made until late 1991 when one remaining epidemiological study is completed and the entire human and animal cancer study undergoes extensive peer review. Last year EPA estimated that a Special Review decision would not be made until late summer 1990.

Furthermore, as part of the reregistration of 2,4-D, EPA has also called for additional laboratory testing for birth defects and other potential long-term effects for which adequate data are currently unavailable. It will be some time before EPA will make a determination on 2,4-D because these tests are not scheduled to be completed until October 1993--almost a year after EPA's initial estimate.

Given the continuing uncertainty of the health risks of lawn care pesticides and EPA's particular concerns about the six pesticides in Special Review, we believe it is all the more important that the public is notified when pesticides are applied by commercial applicators to residential lawns.

Let's now look at how the notification process works.

SOME STATES REQUIRE INFORMATION TO BE PROVIDED WHEN PESTICIDES ARE APPLIED

We contacted regulatory officials in all 50 states and the District of Columbia to determine what notification, if any, they require commercial applicators to provide customers and others when applying lawn care pesticides on residential sites. We found that 23 states[3] now have notification programs, most of which were instituted within the past 5 years. Six additional states are considering requiring notification. We did not determine to what extent local governments have notification ordinances.

Notification requirements fall into three broad categories--direct notification of the customer and/or neighbors, posting of treated lawns with a warning sign, and notification of individuals who qualify for placement on state-maintained registries. We found that the specific notification requirements vary to a considerable degree in terms of whom should be provided information, when the information should be provided, and what information should be provided. For example, most states require customer notification, while less than half provide for neighbor notification. Some of these states also require posting when the lawn is treated. Attachment II lists the notification requirements used in the 23

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[3]An additional four states, Hawaii, Montana, North Dakota, and South Carolina, have notification requirements that apply only to restricted use/highly toxic pesticides or in limited circumstances.

states that require commercial firms to provide some form of notification when treating residential lawns.

There are, however, some common characteristics concerning the types of notification requirements. Twenty-one of the 23 states require customer notification either prior to the treatment or at time of treatment.[4] Eighteen of these 21 states specify that precautionary information for the applicable pesticides be provided to the customer. This required information is typically what appears on the pesticide label. For example, New York requires that health or environmental warnings appearing on the label of pesticides to be applied must be given in writing to the customer prior to application.

In the 17 states that provide for advance notification of either the customer and/or neighbor, the burden of obtaining such notification is frequently theirs. Customers must request advance notification of a treatment in over half the states that provide for such notification. Neighbors must request notification in all states that provide for advance neighbor notification. These states frequently do not require that health and environmental warning precautions be provided to neighbors. They most often require that the date of treatment be provided. For example, Rhode Island requires applicators to provide neighbors with 48 hours advance notice of an application, if requested. Illinois requires

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[4]Maine and Pennsylvania do not require customer notification.

applicators to provide neighbors notice of an application the day before it is scheduled, if requested.

Sixteen of the 23 states with direct notification requirements also require posting when the lawn is treated. The purpose of the sign is to notify the customer, the customer's neighbors and the general public that a pesticide has been applied. The signs often contain warning statements such as PESTICIDE APPLICATION, THIS AREA CHEMICALLY TREATED, or STAY OFF, and the name and telephone number of the company that applied the pesticide. The signs frequently contain directions to the customers for how long to leave the sign posted. Most states with posting requirements require the signs to remain in place for 24 hours after the treatment occurs.

Four states also maintain registries of certain individuals that firms must notify when applying pesticides within prescribed distances of their homes. In three states, Colorado, Florida, and Maryland, physicians must certify that an individual is sensitive to pesticides to qualify. Connecticut allows anyone to be placed on its registry upon request. Although Pennsylvania maintains a register of physician-certified individuals, notification by firms is voluntary. These states periodically provide lists of registered individuals' addresses to licensed lawn care firms for notification purposes.

The Professional Lawn Care Association of America, a trade organization representing the industry, favors (1) providing prior notification of pesticide applications to customers and adjacent property owners if requested, (2) providing information to customers at the time of treatment, and (3) posting warning signs at the time of pesticide application. Additionally, five of the leading lawn care firms told us they support this position. Several have internal policies that provide for such notification even if it is not required by a state. In addition, one firm has prepared model legislation containing similar provisions and distributed it to state governments for their consideration.

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In summary, Mr. Chairman, we expect to issue a report within the next several months detailing further both the status of EPA's efforts to reregister the most widely used lawn care pesticides and state programs that require public notification when commercial firms apply pesticides to residential lawns. In the meantime, we would like to share with you some of our preliminary thoughts on these matters.

Because of the uncertainties concerning risks from exposure to these pesticides and because these products are inherently toxic, we could see EPA's working with the states and lawn care industry to look at the value of ongoing public notification efforts and the

desirability of encouraging additional states to adopt such requirements.

Such requirements could have commercial lawn care firms (1) provide essential pesticide health and environmental safety information, such as that required by federal statute to be on pesticide product labels, to customers when services are rendered; (2) provide prior notification to customers and their neighbors of planned pesticide applications and related safety information; and (3) post treated lawns with warning signs containing sufficient information for interested parties to make inquires or complaints to the firm or state.

In addition, these minimum requirements could provide that the state maintain a registry of individuals certified by physicians as being adversely affected by lawn care products and for commercial firms to notify such individuals of planned pesticide applications to adjacent property.

Mr. Chairman, this concludes my prepared statement. I will be glad to respond to any questions that you or Members of the Subcommittee may have.

ATTACHMENT I

EPA'S LIST OF 34 MAJOR LAWN CARE PESTICIDES AND THEIR REREGISTRATION STATUS

Pesticide	Type	EPA's estimated reregistration date as of April 1990	Data due for analysis as of March 1991	
2,4-D	Herbicide	FY93	10/31/93	b
Acephate	Insecticide	FY91	1/31/95	b
Atrazine	Herbicide	FY95	10/31/93	
Balan	Herbicide	FY94	3/06/95	b
Bayleton	Fungicide	FY94	4/04/95	b
Bendiocarb	Insecticide	FY93	10/31/91	
Benomyl	Fungicide	FY96	9/30/92	
Betasan	Herbicide	FY94	3/11/95	b
Carbaryl	Insecticide	FY96	2/28/95	
Chlorothalonil	Fungicide	FY96		d
Chlorpyrifos	Insecticide	FY93		c
DDVP	Insecticide	FY96		c
DSMA	Herbicide	FY94		d
Dacthal	Herbicide	FY93	8/31/92	
Diazinon	Insecticide	FY93	7/31/92	
Dicamba	Herbicide	FY96		c
Diphenamid	Fungicide	FY92	8/31/91	
Endothall	Herbicide	FY94		d
Glphosate	Herbicide	FY91	8/31/92	b
Isoxaben	Herbicide	a		a
MCPA	Herbicide	FY93	11/30/91	
MCPP	Herbicide	FY92	4/30/92	
MSMA	Herbicide	FY94		d
Malathion	Insecticide	FY96	2/28/94	
Maneb	Fungicide	FY95	12/31/92	
Methoxychlor	Insecticide	FY93	5/31/92	
Oftanol	Insecticide	FY94	5/28/92	
PCNB	Fungicide	FY96	9/30/94	
Pronamide	Herbicide	FY92	10/30/92	b
Siduron	Herbicide	FY94		f
Sulfur	Fungicide	Ready	2/91	e
Trichlorfon	Insecticide	FY96		d
Triumph	Insecticide	a		a
Ziram	Fungicide	FY94		d

Note: Those pesticides in bold type are those 7 that may not meet anticipated reregistration dates.

[a]Pesticide was registered after Nov. 1, 1984; therefore, reregistration is not required.

[b]Chemical's data collection date falls after EPA's anticipated reregistration date.

[c]Additional data needed on chemical. New data collection instrument is being developed by EPA.

[d]EPA is either in the process of developing a data collection instrument or waiting for OMB approval of the paperwork for the chemical.

[e]EPA has completed assessment.

[f]EPA has not started to develop a data collection instrument on this chemical.

Source: GAO analysis of EPA data.

ATTACHMENT II

STATES REQUIRING COMMERCIAL FIRMS TO PROVIDE NOTIFICATION WHEN APPLYING PESTICIDES TO RESIDENTIAL LAWNS

	Direct Notification				Posting	Registry
	Advance		When applied			
State	Customer	Neighbor	Customer	Neighbor		
AZ			X			
CO			X		X	X
CT	X	X[a]			X	X[b]
DE	X[a]	X[a]	X[a]	X[a]		
FL	X[a]		X[a]		X	X
IL		X[a]	X	X[a]	X	
IN			X		X	
IA	X[a]	X[a]	X[a]	X[a]	X	
KS			X			
KY	X	X[a]	X	X[a]	X	
ME		X[a]			X	
MD	X[a]		X		X	X
MA	X[a]		X		X	
MN			X		[c]	
NH	X					
NJ	X	X[a]			X	
NM			X[a]			
NY	X				X	
OH		X[a]	X	X[a]	X	
PA		X[a]				[d]
RI	X	X[a]	X	X[a]	X	
VT	X[a]	X[a]	X	X[a]	X	
WI	X[a]		X		X[e]	

Note: Montana and South Carolina require notification for restricted-use pesticides. Hawaii may require posting when highly toxic pesticides are used. North Dakota requires posting if required by label or if reentry period is 48 hours or more.

[a]Notification provided upon request.

[b]All individuals on the registry including but not limited to chemically sensitive.

[c]State statute allows home rule cities to pass posting ordances.

[d]Participation by commercial firms is voluntary.

[e]When pesticide label prescribes time interval for safe reenty into treated area.

Source: State regulatory officials.