This document is made available electronically by the Minnesota Legislative Reference Library as part of an ongoing digital archiving project. http://www.leg.state.mn.us/lrl/lrl.asp  $q_{5-3344}$ 



Agriculture

# Waste Pesticide **Collection Program**

90 West Plato Boulevard St. Paul, Minnesota 55107-2094 Telephone: (612) 297-7102 • 1-(800) 657-3986 (outstate) Fax: (612) 297-2271

1994 Report of Waste Pesticide Collection



SB. 970.4 .06 \$65 1995

in an alternative format upon request. Telecommunications Device for the Deaf (TDD): Twin Cities Metro (612) 297-5353 or for Greater Minnesota 1-(800) 627-3529.

cycled paper with a minimum of 10% post-consumer waste. This paper is recyclable.

Pursuant to 1993 Minn. Laws. Chap 367 Sec. 38

# **1994 Report of Waste Pesticide Collection in Minnesota**

Prepared by the

Minnesota Department of Agriculture Agronomy Services Division 90 West Plato Boulevard St. Paul, Minnesota 55107-2094 Telephone: (612) 297-7102 • 1 (800) 657-3986 • FAX: (612) 297-2271

Author.....Joseph Spitzmueller Agricultural Chemical Consultant Waste Pesticide Collection Program

for the

Minnesota Legislature

January, 1995



APR 1 3 1995

LEGISLATIVE REFERENCE LIBRARY STATE OFFICE BUILDING ST. PAUL, MN 55155



Copies of this publication are available from the Minnesota Department of Agriculture's Waste Pesticide Collection Program upon request.

;

;

,

## Table of Contents

Reporting Requirements	
Program Summary	
Background	
Introduction to Waste Pesticides	9
Waste Pesticides and Hazardous Waste Management	11
Program Scope	
Participating in the Program	
Planning a Collection	21
Collection Summary	23
Hazardous Waste Contractor	
Program Funding	29
Collection Results	
Participant Survey	
Program Information and Support	
Report Summary and Conclusion	
Appendixes	40
Appendix A:	40
<ul> <li>(1) Minnesota Statutes Section 18B.065, Waste Pesticide Collection Prog</li> <li>(2) Minnesota Statutes Section 18B.26, Pesticide Registration</li> </ul>	•
Appendix B: Rules for the Waste Pesticide Collection Program	
Appendix C:	
(1) Waste Pesticide Registration Form	
(2) Commissioner Redalen's letter to potential program participants	
Appendix D: Waste Pesticide Collection Cooperative Agreement	
Appendix E: News Release, Collected Waste Pesticide Totals Rise	
Appendix F: News Release, <i>Waste Pesticides Collected in 1994</i> Total Over 200,000 Pounds	51
Appendix G: Waste Pesticide Disposal Program - Participant Survey	
Appendix H: Waste Pesticide Collection Program - Questions and Answers	
Appendix I: About Bringing Pesticides to the Collection	
Appendix J: Disclosure for Waste Pesticide Disposal Management Plan	59

### Reporting Requirements

Laws of Minnesota 1993, Chapter 367, Section 38.

Subdivision 1. AGRICULTURAL PESTICIDE CONTAINERS. The Commissioner shall prepare a report with recommendations to the legislature by January 1, 1995, on the handling of empty agricultural pesticide containers and unused portions of agricultural pesticides used for the production of food, feed, or fiber crop use using the following criteria:

(1) the minimization of the disposal of agricultural pesticide containers and waste agricultural pesticides;

(2) the collection and recycling of agricultural pesticide containers; and

(3) the collection and disposal of waste agricultural pesticides.

<u>Subd. 2.</u> **PESTICIDE CONTAINERS.** <u>The</u> <u>commissioner shall prepare a report with recommendations to</u> <u>the legislature by January 1, 1997, on the handling of empty</u> pesticide containers and <u>waste pesticides and shall report on</u> <u>the progress made in achieving the following goals:</u>

(1) the minimization of the disposal of pesticide containers and waste pesticides;

(2) the collection and recycling of pesticide containers; and

(3) the collection and proper disposal of waste pesticides.

<u>Subd. 3.</u> **RECOMMENDATIONS.** Each report required under this section shall also include recommendations for the internalization of the management costs of waste pesticides and pesticide containers amongst pesticide manufacturers, distributors and retailers.

This report complies with the underlined reporting requirements in the above statute. The Empty Pesticide Container Collection and Recycling Program Annual Report of 1994 complies with reporting requirements not underlined in the above statute.

Laws of Minnesota 1994, Chapter 559, Section 1., states:

"A report to the legislature must contain, at the beginning of the report, the cost of preparing the report, including any cost incurred by another agency or another level of government."

The estimated cost of preparing this report is \$2,200.00.

#### Program Summary

The Minnesota Department of Agriculture (MDA) collects and disposes of waste pesticides stored on farms, at businesses, and in homes throughout Minnesota. The Ground Water Protection Act enables the Waste Pesticide Collection Program, which began collecting and destroying waste insecticides, herbicides and fungicides in 1990.

Pesticides must be carefully managed because of hazardous characteristics associated with them. Waste pesticides include herbicides, insecticides, fungicides, and other pesticides that cannot be used as originally intended. Waste pesticides are unwanted, unusable, or banned, and a special concern, requiring special disposal strategies.

An estimated 3 million pounds of waste pesticides are currently stored in Minnesota. Waste pesticides accumulate because of complex and expensive disposal procedures, which limit a holder's disposal options and opportunities. Waste pesticides retain many of the hazards associated with the original product, and therefore, pose serious human health and environmental risks unless managed carefully.

The goal of the Waste Pesticide Collection Program is pollution prevention. To collect and dispose of waste pesticides safely, before their intentional or unintentional release into the environment.



Participation in the Waste Pesticide Collection Program is strictly voluntary. Participants are encouraged to take advantage of the program, and rid themselves and our state of waste pesticides. Participation is made simple and disposal locations accessible for pesticide users.

Page 5

Waste pesticides collected total more than 430,000 pounds, since the program began. All waste pesticides are eligible for collection and disposal.

Pesticide users from every county in Minnesota have participated. Most of the 3,800 participants are from farms or other agricultural businesses, but program participants include: other businesses, households, retired applicators, and government agencies.

Participants register waste with MDA first, and then bring registered wastes to designated collection locations for disposal. Most participants dispose of waste pesticide at no cost to themselves and the disposal process requires about 15 minutes. Pesticide collection sites are accessibly located in different areas of the state each year.

Federal hazardous material lists specifically name some pesticides. Most other pesticides, though not specifically named, possess characteristics of hazardous materials: toxic, corrosive, reactive, or flammable. If a pesticide, identified as a hazardous material by name or characteristic, becomes waste, it becomes hazardous waste.

Collections ease the barriers of hazardous waste disposal for participants, while ensuring appropriate disposal of waste pesticides. A hazardous waste management contractor hired by MDA, is at all collections. The contractor handles, identifies, packages, and transports collected wastes to a licensed hazardous waste incinerator for destruction.

MDA receives helpful assistance from state and local government agencies, educators, chemical dealers, and others. This assistance is invaluable to organizing, promoting, and implementing each individual collection.

Manufacturers and distributors pay a registration fee to sell pesticides in Minnesota. A portion of these fees fund the Waste Pesticide Collection Program. MDA has spent about 1.4 million dollars on waste pesticide collection and disposal. Operating this program in an environmentally safe manner is expensive, but removing contained pesticides at waste pesticide collections is much less expensive than cleaning up a pesticide spill or release and the associated contamination and environmental damage. Information about waste pesticide issues for pesticide users and other Minnesota citizens accompanies collection efforts. Information focuses primarily on areas of hazard identification, waste reduction, disposal alternatives, personal safety, and timely use of pesticide products.

The support for the program by citizens and waste holders alike has been enthusiastic. The collection is an opportunity to safely dispose of materials that are no longer useful, and pose a danger to public health and the environment.



### Background

Agriculture is a large and important industry in Minnesota. Minnesota, with more than 80,000 farms, ranks among the leaders in the nation in the production of food and fiber. Herbicides, insecticides, fungicides, fumigants, rodenticides and other pesticides are widely used management tools in Minnesota's agricultural production.

Pesticides that can no longer be used in the manner originally intended are waste pesticides. Typically, some pesticides are carried over from one season to the next, these are not necessarily waste pesticides. Waste pesticides are generally old and unusable products.

In a recent survey, more than one-quarter of all farmers and other agricultural related businesses indicated that they store waste pesticides. Occasionally, very large quantities of waste pesticides are found at a location, however, in most instances waste pesticides are found stored in small quantities. It is the large number of pesticide users, storing relatively small quantities of waste pesticide, that result in the estimated 3 million pounds of waste pesticides stored in Minnesota.



The Comprehensive Ground Water Protection Act (M.S. § 18B.065, 1989, revised 1993) enacted by the Minnesota State Legislature, and rules adopted in 1994, authorize the Minnesota Department of Agriculture (MDA) to develop and implement the Waste Pesticide Collection Program (see Appendix A and B).

Sheet.

MDA is the lead regulatory agency for pesticides in Minnesota. The Waste Pesticide Collection Program, however, focuses on service and education. The program is designed to collect and dispose of waste pesticides from farms, businesses, and other pesticide users in Minnesota, and dispose of collected wastes in a manner safe for people and the environment.

The goals and objectives of the Waste Pesticide Collection Program include:

- □ Increase awareness about waste pesticides and their environmental impacts by providing information about waste pesticides to pesticide users and non-pesticide users in Minnesota;
- □ Reduce potential sources of contamination from the landscape of Minnesota by removing disposal barriers, encouraging participation, collecting waste pesticides, and destroying collected wastes;
- Provide safe disposal options for waste pesticides by developing program strategies that emphasize safety, hiring qualified waste handlers, and complying with all applicable regulations; and
- □ Promote practices to reduce or avoid waste pesticides generated by promoting waste reduction and minimization as a part of an overall pesticide management plan.

### Introduction to Waste Pesticides

Good pesticide management is very important, because pesticides by their nature have hazards associated with them. Application of pesticides according to label directions and proper disposal of unused portions minimize the risks of pesticide exposure for the user, environment, and general public.

Good pesticide management includes other considerations, which minimize the risks associated with pesticides. Buying pesticides in quantities needed, using in a timely manner, and storing unused portions properly are also important, because these acts reduce the amount of leftovers and minimize the creation of unusable waste, although waste is often generated despite good management practices.

Waste pesticides are generated from once usable pesticide products, and are broadly defined as products that cannot be used as originally intended. Waste pesticides are created because of: over purchase, untimely use, improper storage, and government or industry action.



It is common that small amounts of pesticide are carriedover from one season to the next, however, pesticides do not have an indefinite shelf life. Proper storage and quick use are critical to maintaining a carried-over pesticide's usefulness and efficacy. The longer pesticides remain unused, the more likely they will become waste.

Waste pesticides include banned, unusable, and unwanted pesticides. Banned pesticides are illegal to use. Government action based on environmental concerns, or industry action to remove the product from market result in a use ban. Arsenic, DDT, chlordane, mercury (seed treatments), and 2,4,5-T (brush killer) are banned pesticides. Unusable pesticides include many pesticides commonly and currently used in agricultural production in Minnesota. Unusable pesticides are old or ruined in storage, resulting in products that are difficult or impossible to use due to: loss of efficacy with age, changes in physical characteristics from weather exposure, lost or obliterated use instructions, or product contamination. Unwanted pesticides are products that no longer suit a need or fit a purpose. An unwanted pesticide typically has been replaced by a more effective one, or is held by someone no longer applying pesticides.

Getting rid of banned, unusable, or unwanted pesticides in a safe and responsible manner is a challenge. Waste pesticides retain all of the hazards originally associated with them, but the simplest and most effective disposal option of use is not available. Waste pesticides cannot be spread, according to label directions, across large areas at low dose rates and used up. Pesticide users with waste pesticides have limited disposal options.

;

#### Waste Pesticides and Hazardous Waste Management

DDT has not been used legally in Minnesota for over 20 years. Yet, significant quantities of DDT are commonly found stored on the shelves of farms, homes, and businesses throughout the state. DDT was the first pesticide banned from use by the U.S. Environmental Protection Agency (EPA) because of environmental concerns. Since the DDT ban, thousands of pesticide products have been banned.

The majority of the waste pesticides currently stored in Minnesota are banned or unusable pesticides. An approximate average age for these pesticides is 10 to 15 years old, however, finding pesticides 50 to 60 years old is not uncommon.

Most of these wastes are products of an era of different attitudes and awareness about pesticides and the environment. The hazards associated with pesticides were not as well understood then, as they are today.



Today, most pesticide users are very aware that improper use or improper disposal of waste pesticide is not only illegal, but may also have potentially dangerous impacts. Waste insecticides, herbicides, and fungicides are not just a nuisance to the holder, but a danger to public health and the environment. Many pesticides are specifically named in federal hazardous materials lists. Other pesticides, not specifically listed by name, possess hazardous waste characteristics: toxic, reactive, corrosive, or flammable. These materials are capable of posing a risk to health, safety, and the environment. When a hazardous material is determined to be waste, it becomes hazardous waste, and this is true for pesticides. As hazardous material, pesticides that are waste become hazardous wastes.

The disposal of hazardous waste is strictly governed by hazardous waste rules and regulations. Farmers, other businesses, and others generating waste pesticides must comply with these disposal regulations.



Complying with hazardous waste regulations is intimidating, and the cost of hazardous waste disposal typically far exceeds the original cost of the product. The complexities and cost of compliance, present formidable disposal barriers to persons with quantities of waste pesticides, particularly when indefinite storage of waste pesticide at farms, businesses, and homes is an easy alternative with few short-term problems. Waste pesticide accumulation in Minnesota is due largely to hazardous waste disposal barriers that limits prescribed disposal. Storing waste pesticides is legal. By storing waste pesticides, a holder does not use improper disposal techniques, like burning, burying, or discarding waste pesticides in the trash. Storage keeps harmful pesticides out of the environment, and is an acceptable short-term alternative.

When waste pesticides are stored for years and years, however, this is not an acceptable option. Long-term waste pesticide storage allows the holder to avoid prescribed disposal. As containers age, they become increasingly susceptible to deterioration and breakage. Old containers are forgotten, rust, and become weak. The risk of a spill or a leak, and the subsequent environmental contamination and damage remains, while waste pesticides are stored. These risks increase with the length of storage. Removing waste pesticides stored in Minnesota eliminates the potential for environmental contamination from stored waste pesticides.



#### Program Scope

Minnesota is a leader among states addressing the concern of accumulating quantities of pesticides. Nationally, the number of states offering comparable pesticide collection programs has grown from about 13 programs in 1990, when waste pesticide collections began in Minnesota, to more than 30 in 1994. Minnesota was among the first states to conduct such a collection program, and remains among the few to conduct regular collections on an annual basis.

MDA annually offers waste pesticide collections opportunities for all residents and businesses throughout the state (see graph below). Any pesticide end user in Minnesota can participate in the program, although farms and other agricultural businesses make up the majority of participants. More than 3,800 individuals and businesses from every county in Minnesota have participated in the program, 95% of participants dispose of waste at no cost to themselves.



Number of Participants

In nearly 5 years of pesticide collections, approximately 430,000 pounds of waste pesticides have been collected and destroyed (see graph on next page). All types of waste pesticides are eligible for disposal through the program. Solid and liquid formulations of insecticides, herbicides, fungicides, and other pesticides are accepted.



The Waste Pesticide Collection Program is not intended to be a cleanup program, or collect wastes from other waste streams. Other programs exist to assist pesticide users cleanup spills and accidental releases, and other programs collect wastes from other waste streams, like oils, paint, and industrial solvents. The Waste Pesticide Collection Program focuses on capturing contained waste pesticides currently in storage before they spill or leak into the environment, and pollute or damage our natural resources.

The collection program makes waste pesticide disposal easy and convenient. The program removes many of the barriers to hazardous waste disposal for participants. MDA secures all identification numbers and permits to comply with regulations and standards that apply to hazardous waste disposal; MDA provides funds so that most participants do not pay any disposal costs; MDA hires a hazardous waste handler to ensure collections proceed safely; and MDA assumes generator status of wastes collected. Participants just register their wastes and bring them to a designated site.

Ease of participation is an attractive incentive to participate, plus the participants know that their waste will be destroyed in the prescribed manner. The program offers an alternative to storage, disposal of waste pesticides in a manner that is safe, affordable, and accessible.

The popularity of the collection program reflects new attitudes and concerns about the pesticides we use and how we use them. In the future, these attitudes may mean that fewer pesticides become waste. In the meanwhile, a backlog of stored waste pesticides exists in Minnesota, and constitutes a significant threat. Waste pesticide collections are removing the backlog of stored waste from our state.

### Participating in the Program

Participation in the Waste Pesticide Collection Program is voluntary, although all pesticide users are encouraged and eligible to participate. Farmers are the largest group of participants, but a variety of other Minnesota businesses use pesticides and participate in the disposal program: greenhouses, nurseries, golf courses, farm cooperatives, elevators, and cemeteries.

Participants also include: retired applicators, some who no longer use pesticides, but have pesticides in storage, and homeowners and agencies of government. Some of the participants delivering pesticides, did not generate the waste. Persons, who unexpectedly find abandoned pesticides in buildings on their property or elsewhere, or who are cleaning up an estate bring wastes to MDA pesticide collections.

Most participants indicate that they originally purchased the pesticides with the intent to use them, but did not. These responses indicate not only the need for the collection program, but also for information about waste reduction and timely use.



Page 17

Participants are asked register waste pesticides prior to disposal. The registration process identifies pesticides and amounts expected at collections sites (see Appendix C). Registration helps promote safety at collection sites, enable planning of staff and equipment needs at collection sites, and budget for collection expenses. Occasionally, unregistered persons will bring waste to collections sites for disposal. MDA has always accepted pesticides brought in this manner, but continues to strongly encourage registration by participants.

Participants benefit from registration in several ways. First, participants must find wastes, which sometimes is a difficult task. Registration requires participants to examine products to determine their identity, and evaluate their usefulness. Sometimes, particularly with older products, original labels and markings are gone or obliterated, so identification is a challenge. Accurate identification is critical for proper disposal. Participants are responsible for safely transporting wastes to collections, registration alerts participants to containers unsuitable for transport, participants may stabilize the container for transport or consider alternative arrangements. In some instances, MDA may pickup waste at the storage site. The registration acts as a transport document to assist responders in the event of an emergency during transport. Finally, registration enables MDA to tell participants of unacceptable materials ahead of time, and discuss other disposal options.





To register, participants submit a written inventory to MDA. Information required for registration is: participant name, address, and phone number; and a list of waste pesticides on-hand with product names, amounts, and the size and condition of each container.

After registering waste, participants bring the material, in original container or in a repackaged container, to a designated collection site. Some pesticides arrive in quantities as small as a few ounces, other pesticides arrive in 55 or 85 gallon drums. The average participant disposes of approximately 115 pounds of waste pesticides, however, individual participants have brought more than 2,000 pounds to a collection site. Formulated pesticides and containers are collected and destroyed. Paints, oil, antifreeze, and other nonpesticide materials are not collected. Any of these wastes brought to a collection site are not accepted and returned to the participant.

Most participants do not pay to dispose of waste through the collection program. The waste pesticide collection disposal cost schedule is:

- 1. Nothing for 300 pounds or less;
- 2. \$1.00 per pound for more than 300 pounds up to 1,000 pounds;
- 3. \$3.00 per pound for more than 1,000 pounds up to 2,200 pounds; and
- 4. \$4.00 per pound for local, state, and federal government agencies and/or subdivision (i.e. highway departments, city golf courses, and parks).

A revised collection plan was implemented in 1994, to make pesticide collections available statewide every other year. Collection regions were established in eight areas of the state. Collections in north and central Minnesota (light shading on map) occur during even numbered years and in southern Minnesota (dark shading on map) in odd numbered years.



Collection regions in even numbered calendar years:

- Northwest Counties: Becker, Beltrami, Clay, Clearwater, Hubbard, Kittson, Lake of the Woods, Mahnomen, Marshall, Norman, Otter Tail, Pennington, Polk, Red Lake, Roseau and Wilkin;
- Central Counties: Aitkin, Benton, Cass, Crow Wing, Morrison, Todd, Sherburne, Stearns, Wadena and Wright;
- Northeast / East Central Counties: Carlton, Chisago, Cook, Isanti, Itasca, Kanabec, Koochiching, Lake, Mille Lacs, Pine and St. Louis; and
- □ West Central Counties: Big Stone, Chippewa, Douglas, Grant, Lac qui Parle, Pope, Stevens, Swift, Traverse and Yellow Medicine.

Collection regions in *odd* numbered calendar years:

- South Central Counties: Blue Earth, Faribault, Kandiyohi, LeSueur, McLeod, Meeker, Nicollet, Renville, Sibley and Waseca;
- Southwest Counties: Brown, Cottonwood, Jackson, Lincoln, Lyon, Martin, Murray, Nobles, Pipestone, Redwood, Rock and Watonwan;
- □ Southeast Counties: Dodge, Fillmore, Freeborn, Goodhue, Houston, Mower, Olmsted, Rice, Steele, Wabasha, and Winona; and
- Metro Counties: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington.

ï

### Planning a Collection

Counties governments are very supportive of the collection program. Their support has been critical to the ability to collect waste pesticides, and the results of the program. The collection program works because of the cooperative efforts between the MDA, counties governments, state and local agencies and groups, and collection participants.

Local input is essential to pesticide collections. Counties join with MDA to develop the collection program and apply it in their area. Counties are not required to pay disposal costs for wastes collected, but often incur in-kind costs during the development and implementation of the collection project. County staff help plan collections, and collections often occur on county property. MDA and county governments may enter into a cooperative agreement to identify the roles during the collection (see Appendix D).

MDA develops each collection in conjunction with local planners including: county boards, county agencies, educators, inspectors, chemical dealers, and others who join with MDA to plan, promote, and implement waste pesticide collections. Planners decide collection dates and locations, secure the use of a collection facility, provide equipment and services at collection sites, and recruit volunteers to assist during collection implementation. Also, planners are vital to encouraging participation.

Collection days and times are generally scheduled in the early spring or fall. Most collections occur in March or April, or September, October, or November to avoid conflicts with field work. Collection participation is negatively affected when collections coincide with planting, field work, or harvesting.

The collection site must be at an accessible and convenient location. Most participants will travel only limited distances. Many collections have occurred in county highway garages, county fairgrounds, or at chemical dealer facilities. A good collection site needs a well-ventilated building with an open work area of 3,000 to 5,000 square feet and several doors for easy loading and unloading. The building needs good access, paved parking, running water, electricity, sanitary facilities, and garbage disposal. Building security is also important, as occasionally overnight storage is required. Locally recruited volunteers help maintain a safe operation at the site on the collection day. Some waste holders only reluctantly acknowledge the existence of their waste pesticides for fear of exposing themselves to liability. Generally, they fear that storing waste pesticides is illegal, although it is not. Others do not recognize the significance of the potential problems associated with waste pesticides, and do not consider proper disposal a priority. The challenge for this program is to work with potential participants and encourage them to overcome their reluctance and apathy, and take advantage of the opportunity to rid themselves of these problem materials.

Many participants are more comfortable participating in the program because local people are involved. Local planners and volunteers are people who live and work in the community, and maybe best able to encourage potential participants to overcome their reluctance and apathy. Every participant in the program means less waste pesticide in a community and in Minnesota.

Local planners promote the collection within their communities using newspaper advertising, direct mail, and radio advertising. MDA also promotes the collection with direct mail and informational activities. Local promotion of the collection is important to the collection and has two goals:

- 1. To inform potential participants of the opportunity; and
- 2. To provide pesticide users information to reduce amounts of waste pesticides generated in the future.

Most participants are very grateful for the opportunity to dispose of waste pesticide they have on-hand. Many express relief that the waste is removed. To date, however, less than 2 percent of potential participants have used the program to get rid of waste. This is only a small fraction of the estimated number of eligible participants with waste pesticides.

#### Collection Summary

The Waste Pesticide Collection Program in Minnesota began in 1990. It was patterned after a pilot program that collected 33,000 pounds of waste in six areas of the state in 1988.

Early on in the program, different styles of collections were considered and the merits of each was weighed. Initially, some collections occurred at the storage site. Hazardous materials handlers would go directly to the storage site, package the waste, and transport it to a disposal facility. On-site collections were successful at capturing waste pesticides, but travel distances between locations made on-site collections time-consuming and inefficient serving only 3 or 4 participants per day of on-site collections. On-site collections netted only about 300 to 500 pounds of pesticides per day with a full complement of staff, materials, and equipment. On-site collections made the task of providing the service statewide nearly impossible.

As an alternative, holders of waste pesticides were asked to transport wastes to a designated location. Establishing temporary sites in locations accessible to regions, or central collection sites, enabled the program to accommodate more participants faster, and operate more efficiently. This is the method currently used for waste pesticide collections, although MDA still collects pesticides on-site in situations where containers cannot be safely brought to collection sites by participants.

Central collection sites are typically established in a county garage or agricultural chemical dealership. MDA staff is on-hand at all collections to supervise collection activities. Hazardous waste staff is at collection sites to accept the waste from the participants. Participants register pesticides for disposal and bring their wastes to a designated site close to them. More than 100 participants have disposed of waste in a single day at a central collection site. Local volunteers are recruited to help control traffic flow and record information at collection sites.

A suggestion commonly offered as an alternative to incineration, is giving pesticides to someone who will use it up. Most pesticide users do not want to take the risk of using a product, when they are not certain of the product's integrity. MDA never encourages or participates in any fashion in a pesticide swap or exchange. Occasionally, participants will bring waste to a collection site and indicate that they took the product as a gift, but never used it. Collections in 1993, primarily served southern Minnesota, more than 130,000 pounds of waste pesticides were collected and destroyed (see Appendix D). Eighteen of the 27 designated waste pesticide collection sites during 1993 were located in southern Minnesota. Many of these sites were in areas hardest hit by the excessive rain and flooding of that summer.

Collections in 1994 focused on 47 counties in central and northern Minnesota including the seven county metropolitan area. Nearly 200,000 pounds of waste was collected in 1994; the largest amount of waste pesticides captured in a single year (see Appendix E). With the completion of the 1994 collection schedule, residents and businesses of all counties in Minnesota have had the opportunity to participate in the program at least one time.

For several counties, collections in 1994 were the second opportunity to participate in the collection program. The amount of waste pesticides collected at second time collections is about the same or slightly more in volume than was collected during the first collection. Estimates suggest that totals of waste pesticides stored in a particular area will begin to drop significantly only after several collections have occurred.

Date	Collection Area	Pounds	Part.	Cost
3/93	State-wide	1,450	19	\$8,146
4/93	West central area, 9 counties	28,100	421	\$137,323
6/93	Southwest area, 10 counties	31,200	352	\$137,815
6/93	Northeast area, 7 counties	4,400	65	\$30,375
7/93	Southeast area, 9 counties	31,300	340	\$123,353
11/93	South central area, 10 counties	30,200	312	\$114,101
11/93	Central area, 3 counties	6,000	77	\$29,110
3/94	Metropolitan region, 7 counties	33,500	198	\$62,483
3, 4/94	Northwest region, 16 counties	68,600	521	\$110,048
6/94	Northeast region, 13 counties	19,200	148	\$51,684
7/94	Central region, 10 counties	16,700	176	\$35,832
9/94	West central region, 10 counties	47,600	339	\$68,269
7, 8, 11/94	State-wide	12,300	89	\$32,280

Listed below is a table summarizing collections in 1993 and 1994:

Collections in 1995 are planned. In the spring, collections will occur in the southwest and south central regions of Minnesota. Twenty-two counties will participate in these collections. Fifteen one-day collection sites are planned. Collections will span a three-week period in March and April. Collections in the southeast and the seven county metropolitan area will take place in the summer or fall.



ì

#### Hazardous Waste Contractor

MDA contracts with a licensed hazardous waste management firm to collect and dispose of waste pesticides through MDA's Waste Pesticide Collection Program. The contractor is responsible for: collecting, identifying, segregating, and packing the waste at each collection site, as well as transporting collected wastes to a disposal facility, and destroying the collected waste in compliance with all applicable regulations. The hazardous waste contractor is also prepared to act as a first responder in case of an emergency at a collection site.



Collected wastes are destroyed through Resource Conservation Recovery Act approved high temperature incineration. No hazardous waste incinerators are located in Minnesota, therefore, all waste pesticides are transported to incinerators elsewhere. Most commonly used incinerators include: Trade Waste Incineration, Sauget, Illinois and Chemical Waste Management, Inc., Port Arthur, Texas.

Facilities are permitted to incinerate based on their capacity to destroy specific materials. Some incinerators are permitted to incinerate certain materials that other incinerators are not able to destroy. This is part of the reason more than one incinerator has been used.

Incineration is more expensive than other hazardous waste disposal techniques, but is generally recognized as a preferred disposal method. Incineration virtually eliminates the hazard, the need for further storage, and meets land disposal restrictions required for disposal of some hazardous wastes. Incinerator performance and emissions are closely monitored by on-site staff and regulatory personnel. In many instances, sensors monitoring emissions at incineration facilities are linked directly to regulating agencies, allowing for real time monitoring of emissions.

High temperature incineration is a multi-stage process. Waste pesticides are initially burned in a primary combustion chamber (kiln) at 1700° F for between 30 and 60 minutes. Volatilized gas and vapors are then consumed in the secondary combustion chamber at temperatures of 2200° to 2300° F for several seconds.

Air, vapor, and particulates passing through the secondary combustion chamber are "scrubbed" with a water and/or lime slurry filtration process. Any remnant ash in the kiln or remains of the scrub are tested for content and pretreated before placed into a hazardous waste landfill.



In 1993, the first incinerator to burn dioxin bearing wastes was permitted. Although dioxin itself is not a pesticide, many pesticides contain dioxins. Dioxin is a carcinogen. Dioxins in pesticides are impurities from the manufacturing process. Pesticides with dioxins, specifically: 2,4,5-T, 2,4,5-TP, and pentachlorophenol, have been banned from use for many years. Some pesticides with dioxins have been stored for more than three decades, waiting for an approved disposal method. A new *Pesticide Waste: Packing, Transportation, and Disposal Contract* was written in early 1994 and awarded to Chemical Waste Management, Inc. (CWM) in March of 1994. CWM held the previous contract awarded in 1990.

CWM was one of several hazardous waste contractors bidding on MDA's disposal contract. Many qualified bids were received from qualifying Minnesota companies and from companies in other states. The bids were very competitive. The new contract resulted in a large decrease in hazardous waste collection and disposal costs.

Declines in disposal prices result from excess capacity at hazardous waste incinerators throughout the country. The cost of collection and disposal of waste collected in 1994 was \$1.80 per pound, cost in prior years was approximately \$4.75 per pound.



### Program Funding

State statute, revised in 1993, directs MDA to make at least \$600,000 from the Pesticide Registration Account available annually for the program. Waste pesticide collection and disposal costs total more than \$1.3 million through fiscal year 1994 (see chart below).



#### Collection and Disposal Costs per Fiscal Year

Collection and disposal costs for fiscal year 1995 are based year-to-date expenses, additional expenses will be incurred. Salaries of MDA staff and other administrative program costs equal about \$550,000 from 1990 through June 1994, and are not included in collection and disposal costs.

The Waste Pesticide Collection Program receives the majority of it's funding from the Pesticide Registration Account (PRA), totaling about \$1.2 million. The program receives additional revenue from other sources: participants who pay some disposal costs; U.S. Environmental Protection Agency (EPA) grants; and Environmental Response, Compensation, and Compliance Fund (Fund) (see chart on next page).

Waste pesticide disposal is free for 95% of all participants, through the collection program. Since the program began, about 160 of the 3,800 total participants have paid average disposal costs of \$600 each. Participants required to pay disposal costs, usually have large quantities of waste or represent a government agency or political subdivision. In fact, because these participants pay only a portion of the actual disposal cost, the collection program remains an attractive disposal option, because the program's disposal costs are usually less than the disposal cost participants can negotiate individually.



EPA has provided limited grant opportunities, totaling about \$100,000 in Minnesota, to conduct agricultural pesticide collections in specific areas and target specific waste. EPA grants funded 12 waste pesticide collections in the Lake Superior drainage basin area of northeast Minnesota. Other EPA funds supplemented MDA pesticide collections targeting pesticides damaged by water during the rain and floods of 1993 for collection and disposal.

The Minnesota Environmental Response and Liability Act of 1983 (MERLA) established the Fund, which MDA can access to cleanup incidents involving agricultural chemicals. Among other MERLA activities, MDA uses Fund money to collect and remove above ground caches of arsenic based pesticides. Some of these arsenic based pesticides were mixed with a bait and used to kill grasshoppers in the 1930's. More recently, arsenic based pesticides were used as a fungicide on turf grass. Most uses of arsenic based pesticides have been banned since mid-1980.



### Collection Results

A wide array of pesticides arrive at collection sites for disposal, more than 15,000 individual containers have been collected. About 58% of the products are liquid formulations, weighing about 10 pounds per each gallon, most of the remainder of the collected pesticides are solid in formulation. A small portion of the pesticides collected are in vapor or aerosol form.

Herbicides comprise approximately 46% of all pounds collected at MDA collections and are the most common type of pesticide collected. Herbicides kill or control weeds, a common pest in agricultural production. Insecticides equal about 37% of all pounds collected. Fungicides, disinfectants, fumigants, rodenticides, and growth regulators account for the remainder of collected wastes.

Most of the pesticides delivered to collection sites are very old. Nearly 60% by weight of the pesticides collected are banned from use, approximately 40% of pesticides are unusable or unwanted pesticides.

The oldest material delivered to a collection site was an arsenic based insecticide thought to be 60 years old. The product was delivered in a wooden keg to a collection site in northwest Minnesota by a man whose father used it for grasshopper control in the 1930's. MDA collections have collected nearly 7 tons of banned arsenic based products.



Pesticides with different product names, may share the same active ingredient. The active ingredient of a pesticide, is the chemical that causes the desired effect on the target pest; an example is atrazine. Atrazine is an active ingredient found in many different herbicide products. Although each product has a unique name, they share atrazine as the same active ingredient. Some active ingredients are found in thousands of different pesticide products.

DDT is an active ingredient found in many products and is commonly delivered to MDA collections for disposal. DDT is found in both liquid and solid forms, and sometimes as an aerosol. Nearly 15% by weight of all pesticides collected at MDA collections contains DDT. DDT was banned from use by EPA in the early 1970's because of environmental concerns, but remains the most commonly collected active ingredient at MDA collections.

Many caches of DDT and arsenic totaling hundreds of pounds or more have been removed from Minnesota. Banned pesticides collected through the program represent remnants of thousands of products that at one time were sold for use in Minnesota. Most of these products were used up, but significant quantities remain stored throughout Minnesota. Other banned pesticides commonly collected are: chlordane, dieldrin, dinoseb, mercury, and toxaphene. Pesticides users continue to store these products and keep them out of the environment until a disposal opportunity becomes available.

The reasons that DDT and other old pesticides continue to be stored and found in such large quantities varies, but a common reason is that pesticides were purchased in large quantities. Pesticide users buy pesticides for less money with large purchases. In the past, farmers often would purchase two or more seasons worth of pesticides at once to save money. It is far less common today for pesticides to be purchased for more than one growing season. The majority of unusable or unwanted pesticides collected are more than two years old. Many are well recognized. The two most common explanations for pesticides becoming unusable waste are: efficacy loss and freezing. It is impossible to know how long a product on the shelf remains effective, and pesticide users cannot afford to apply products that may not work. In our climate, it is very common for unprotected pesticides carried over the winter to freeze. Freezing can turn a liquid pesticide into sludge, making application impossible or reducing it's efficacy. Other pesticides become unusable because portions or all of the label instructions become lost or obliterated in storage. Finally, it is very common for pesticide users to deliver unwanted pesticides and indicate that they changed practices and hire out all pesticide applications.

Many of the factors that led to the backlog of waste pesticide in Minnesota are practices of the past, and not of today. The Waste Pesticide Collection Program is removing that backlog. MDA expects that waste pesticide creation will continue in the future, but at a slower rate and at reduced amounts. MDA estimates that the backlog of waste stored has been reduced by about 10% through waste pesticide collections. Many collection opportunities will be required to remove more substantial volumes of waste.

#### Estimation of Waste Pesticide to be Collected vs Pesticide Collected



The science and technology of agricultural production is changing. Pesticides and pesticide application are different today then just a few years ago: more powerful products mean less chemical applied, users-friendly formulations, and better application tools. All of these advances, plus increased awareness, minimization and reduction strategies exercised by pesticide users will result in less amounts of waste pesticide created and stored in Minnesota.

### Participant Survey

Participants are asked to anonymously complete a survey when they come to MDA collection sites. Their answers to the survey provide some information about program participants and their waste. The purpose of the survey is to obtain information that can be used to plan and develop future pesticide collections, and to identify trends that pertain to waste pesticides.

Approximately 3,000 participants have completed surveys At MDA waste pesticide collection sites. The survey was developed by MDA and consists of 14 multiple choice questions, plus the survey allows room for comments (see Appendix D). Listed below is a summary of participant responses to some of the survey questions.

#### **Given Survey question 1:**

Participants describe themselves (see pie chart below).

Most participants in the Waste Pesticide Collection Program bring waste pesticides from farms or from other agricultural businesses. Other businesses and homeowners also represent a large number of participants.



**Collection Program Participants** 

#### Survey question 2: How far participants travel to the collection site.

Most participants indicate that they traveled 25 miles or less to the collection site, although almost one-quarter indicated they traveled up to 50 miles. When planning sites, a conscious effort is made to site collection locations to minimize travel distances to encourage maximum participation. A few participants gladly travel very far distance to participate and rid themselves of waste.

#### **Survey question 4:**

#### Are participants transporting waste other than their own.

Almost 75% of participants indicate they transported their own waste alone. A few participants transport their own and one other persons waste pesticide. MDA is very cautious about the volumes in transport to collection sites. MDA recommends that participants limit the volumes they carry to easily managed amounts.

#### **Survey question 5:**

Participants describe how often pesticide collection should occur (see graph below).

Collections are currently schedule in all areas of the state at least every two years. About 56% of participants feel that waste pesticide collections should occur on a yearly basis, 39% respond that collections should occur every 2 to 5 years.



#### **Survey question 6:**

Participants indicate if proper disposal of pesticides is important (see graph on next page).

Almost unanimously, participants indicate that disposing of pesticides properly is important. Proper pesticide disposal is an important environmental concern of pesticide users.

;


## Importance of Proper Disposal

## **Survey question 7:**

Participants describe how they obtained waste pesticides (see graph below).

Most participants about 75% indicate that they originally purchased the pesticides with the intention of using them, but that the pesticides were not used. A few participants indicate that they accepted the pesticides as a gift, but did not use them. About 13% indicate that they did not want the pesticides, but found them in old buildings or abandoned elsewhere. The remainder did not know how they got the pesticides.



How Participants Obtained Waste Pesticides

### Survey questions 8 and 9:

Participants indicate whether pesticide users need more training and information and in what areas.

Responses indicate that pesticide users need additional information and/or training to manage pesticides properly and avoid creating waste. Waste minimization and reduction are specific areas indicated.

## **Survey question 14.**

Participants indicate how they would manage pesticide waste if the collection program did not exist (see graph below).

About 64% of respondents indicated they would continue to store. About 9% indicated they would burn, bury, or put the pesticide in the trash. A large portion of the responses indicated that they were uncertain as to what they would do.



#### Manage Waste Pesticides

# **Program** Information and Support

MDA has developed various information and support documents. The purpose of these written materials is to collect and disseminate information about waste pesticides and the collection program to potential participants, citizens of the state, and other interested persons.

Waste Pesticide Collection Program -- Questions and Answers is a four page brochure (see Appendix H). This informational piece contains answers to commonly asked questions about waste pesticides and the collection program, this document describes each in great detail. Tens-ofthousands of copies of this brochure have been distributed. It is an effective informational tool to interest individuals in the program and encourages participation.

About Bringing Pesticide to the Collection...is a one page document about safe handling and transporting tips for participants (see Appendix I). Prior to collections every registered participant receives several pieces of information: a descriptive letter indicating times and locations of collection sites; the one-page safe handling and transport piece; and a transport document listing materials to be transported as a reference to emergency responders in the event of an emergency during transport.

Disclosure for Waste Pesticide Disposal Management Plan is a one page document used at collection sites to record waste brought for disposal (see Appendix J). Information recorded on this document at collection sites provides MDA with a very accurate description of the waste collected. The information collected is the foundation of a database developed to maintain information about the collections. The information in the database can provide trends about collections and is invaluable as a planning tool. Each participant is asked to identify themselves on the form. This identification is in lieu of each participant obtaining an EPA Generator ID Number. Participants are given a copy of the form as they leave the collection site.

MDA staff also make presentations to thousands of pesticide users each year. These presentations are made to commercial, non-commercial, and private pesticide applicators at training sessions and other similar meetings throughout the state.

# Report Summary and Conclusion

There are significant quantities of waste pesticide currently stored in Minnesota, most of the are very old. Many of these stored pesticides represent a significant threat to public health and the environment. The MDA has developed and implemented a program to collect and destroy these wastes.

All pesticide users are eligible to participate, however participation in the collection program is voluntary. All types of pesticides are collected. Without this assistance farms, businesses, and other pesticide users would continue to store the waste indefinitely.

Incentives encourage participation by pesticide users. Participants dispose of waste at no or low cost. MDA secures all necessary permits, assumes generator status, and hires a hazardous waste management company to perform collection tasks.

MDA provides leadership in planning and implementing the program, but county officials, agencies, and interested individuals work with the MDA to achieve maximum participation. Each plays a significant role in the process.

Each year large volumes of waste pesticides are removed from Minnesota. Ridding our landscape of these pesticides is making Minnesota a cleaner and safer place. The results of the program are due to the coordinated efforts of the MDA, state and local agencies, groups, and individuals.

The Waste Pesticide Collection Program has been received enthusiastically throughout the state. The Waste Pesticide Collection Program has directed tons of hazardous waste into appropriate waste streams. The support for the program continues to increase, as more pesticide users become aware of it and participate.

## Appendix A(1)



Minnesota Department of Agriculture • Agronomy Services Division 90 West Plato Boulevard • St. Paul, Minnesota 55107 Telephone: (612) 297-7102 • FAX (612) 297-2271

## **MINNESOTA STATUTES § 18B.065**

as amended by

## Laws of Minnesota 1993 Chapter 367, Section 3

### **18B.065 WASTE PESTICIDE COLLECTION PROGRAM.**

**Subdivision 1. [COLLECTION AND DISPOSAL.]** The commissioner of agriculture shall establish and operate a program to collect waste pesticides. The program shall be made available to pesticide end users whose waste generating activity occurs in this state.

**Subd. 2. [IMPLEMENTATION.] (a)** The commissioner may obtain a United States Environmental Protection Agency hazardous waste identification number to manage the waste pesticides collected.

(b) The commissioner may limit the type and quantity of waste pesticides accepted for collection and may assess pesticide end users for portions of the costs incurred.

**Subd. 2a.** [DISPOSAL SITE REQUIREMENT.] The commissioner must designate a place that is available at least every other year for the residents of each county in the state to dispose of unused portions of pesticides.

**Subd. 3. [INFORMATION AND EDUCATION.]** The commissioner shall provide informational and educational materials regarding waste pesticides and the proper management of waste pesticides to the public.

**Subd. 4.** [CONSULTATION WITH POLLUTION CONTROL AGENCY.] The commissioner shall develop the program in this section in consultation and cooperation with the pollution control agency.

**Subd. 5. [WASTE PESTICIDE COLLECTION ACCOUNT.]** A waste pesticide account is established in the state treasury. Assessments collected under subdivision 2 shall be deposited in the state treasury and credited to the waste pesticide account. Money in the account is appropriated to the commissioner to pay for costs incurred to implement the waste pesticide collection program.

Subd. 6. [RULES.] The commissioner may adopt rules to administer this section.

**Subd. 7.** [COOPERATIVE AGREEMENTS.] The commissioner may enter into cooperative agreements with state agencies and local units of government for administration of the waste pesticide collection program.

-OVER-

# Appendix A(2)

# MINNESOTA STATUTES § 18B.26 as amended by Laws of Minnesota 1993 Chapter 367, Section 7

# 18B.26 PESTICIDE REGISTRATION.

**Subd. 3.** [APPLICATION FEE.] (a)...after calendar year 1990, <u>at least</u> \$600,000 per fiscal year must be credited to the waste pesticide account under section 18B.065, subdivision 5.

ï

## Appendix B

1/24/94

## 1509.0010 AUTHORITY.

Parts 1509.0010 to 1509.0050 govern the waste pesticide collection program pursuant to Minnesota Statutes, section 18B.065. Parts 1509.0010 to 1509.0050 establish a process for: (1) assessment schedule and payment; (2) cosponsor selection; and (3) cooperative agreement.

#### 1509.0020 **DEFINITIONS.**

Subpart 1. Scope. The definitions in this part apply to parts 1509.0010 to 1509.0050

Subp. 2. Collection site. "Collection site" means a permanent or temporary designated location with scheduled hours for authorized collections where pesticide end-users may bring their waste pesticide.

Subp. 3. Commissioner. "Commissioner" means the commissioner of agriculture or an agent authorized by the commissioner.

Subp. 4. Container. "Container" means a package, can, bottle, bag, barrel, drum, or other container device used to enclose a pesticide formulation for storage, transport, or other handling.

Subp. 5. Cosponsor. "Cosponsor" means the state or local unit of government selected to enter into a cooperative agreement with the commissioner to administer a waste pesticide collection program.

Subp. 6. Pesticide end-user. "Pesticide end-user" means a farmer or other person who uses, intends to use, or owns a pesticide. Pesticide end-user does not include a dealer, manufacturer, formulator, or packager.

Subp., 7. Pesticide formulation. "Pesticide formulation" means a substance or mixture of one or more active ingredients and inerts that is used to mitigate or control pests.

Subp. 8. Waste pesticide. "Waste pesticide" means a pesticide that the pesticide end user considers a waste. A waste pesticide can be a canceled pesticide, an unusable pesticide, or a usable pesticide.

## 1509.0030 ASSESSMENT SCHEDULE AND PAYMENT.

Subpart 1. Assessment schedule. A pesticide end-user voluntarily participating in a collection authorized under Minnesota Statutes, section 18B.065, may be assessed a

portion of the disposal costs based on net weight in pounds of the pesticide formulation and container collected, up to a maximum of 2,200 pounds. A net weight includes the weight of the pesticide formulation and its container. The assessment of individual pesticide end-users must be based on costs described in the current hazardous pesticide waste packaging, transportation and disposal service contract and invoiced at the rates determined under items A to C.

A. Agencies of government or their representatives must be assessed costs equal to 125 percent of the disposal price, but not less than \$4 per net pound to participate in a waste pesticide collection.

B. Assessments for other participants must be based on amounts for disposal at the following rate:

(1) no cost for disposal of 300 net pounds or less;

(2) costs equal to 25 percent of the disposal process, but not less than \$1 per net pound for quantities greater than 300 pounds, up to 1,000 pounds; or

(3) costs equal to 50 percent of the disposal price, but not less than \$3 per net pound for quantities greater than 1,000 pounds, up to a maximum of 2,200 pounds.

C. Assessments must be made based on the cumulative poundage of pesticide formulation and its container collected from each participant disposing of waste pesticides.

Subp. 2 Payment. The commissioner shall invoice participants promptly for disposal costs based on the assessment schedule in subpart 1.

# 1509.0040 PROGRAM OPERATION AND ADMINISTRATION.

Subpart 1. Cosponsor selection. A potential cosponsor seeking sole or joint participation in the operation and administration of a collection authorized under Minnesota Statutes, section 18B.065, shall complete and return an application form provided by the commissioner. Cosponsor selection must be based on the following criteria:

A. a completed application;

B. willingness to commit financial, physical, and other resources to collection;

C. proposed collection site; and

D. collection service area.

Subpart 2. Cooperative agreement. The commissioner and cosponsor must agree to the terms of the cooperative collection and sign a cooperative agreement defining responsibilities and conditions of each party in conducting a waste pesticide collection. Cosponsor roles and responsibilities may include:

A. providing funds for local administration and on-site operation;

B. obtaining a United States Environmental Protection Agency hazardous waste generator identification number;

C. supplying necessary physical and human resource for on-site operation;

D. reimbursing the commissioner for disposal costs; and

E. other described responsibilities and conditions agreed upon by the commissioner and cosponsor in the cooperative agreement.

1509.0050 **DEPOSIT OF FUNDS.** 

Assessments collected under parts 1509.0030 and 1509.0040 must be deposited in the state treasury and credited to the waste pesticide collection account according to Minnesota Statutes, section 18B.065. subdivision 5.

#### \_\_\_\_\_

	TELEPHONE	OULEVARD • ST. PAUI : 612/297-7102 • FACS	L, MINNESOTA 55 Imile: 612/297-2	107-2094 271	N	OFFICE US	E ONLY
	WASTE F	Minn. Stat. § 18B.		ON	i		
TRUCTIONS: Plute of Contact Pers	case type or use pen and complete	all sections	Title		Date		
	(, , , , , , , , , , , , , , , , , , ,				T a law h an	- NI	
ipany Name (if ap	plicable)	•			, i elepnon	e NO. (Includ	lə Area Code)
ing Address (Stree	et, Rural Route, Box No.)	· · ·	County	City	State	Zip	Code
ess where waste	is stored, if different (Street, Rural F	Route, Box No.)	_i	City	State	Zip	Code
ck one:				i		İ	
C Farm	4 <b>b</b>	Non-farm business		D Hous			
Farm-related	proviness	Government Agency	e or missing li		r (Specify)	aut the r	roduct
sticides inclu	de herbicides, insecticides,	fungicides, and rode	nticides. Use	and attach ac	iditional sheets if	necessa	Iry.
	ctive Ingredient, Brand Na d/or EPA Registration Nun	•	Container Si		temaining Quantity	Can co be trans	
EXAMPI	LE: Arsenic Paris Green		1 gal.	/(lbs)	5 gal. /(lbs.)	(Y)	N
EXAMP	LE: Unknown; yellow liqu		-	$\bigcirc$	2 gal.)/ lbs.	$\widecheck{\mathbf{v}}$	N
1.			gal.	/ Ibs.	gal. / Ibs.	Y	N
				. / Ibs.		Y	N
3			gal.	/ Ibs	gal. / Ibs.	٠Y	N
4		<u> </u>	gai	/ lbs.	gal. / lbs.	Y	N
			gal.	/ Ibs.	gal. / Ibs.	Y	N
5							
5 6	·			. / Ibs	gal, / Ibs.	Y	Ν
6			gal				N N
6 7			gal.	. / Ibs	gal. / Ibs.	Y	
6 7 8			gal gal gal	. / lbs . / lbs . / lbs	gal. / Ibs. gal. / Ibs.	Y Y	N
6 7 8 9			gal gal gal gal	. / lbs . / lbs . / lbs	gal, / Ibs, gal, / Ibs, gal, / Ibs,	Y Y Y	N N
6 7 8 9 10			gal gal gal gal gal	. / Ibs . / Ibs . / Ibs	gal. / Ibs. gal. / Ibs. gal. / Ibs. gal. / Ibs.	Y Y Y Y	N N N

,

Page 45

### **APPENDIX C(2)**



# **Minnesota Department of Agriculture**

Dear Pesticide User:

You have an opportunity to help rid your property and our state of unwanted, outdated, or banned pesticides. The WASTE PESTICIDE COLLECTION PROGRAM helps people safely dispose of unusable and unwanted *herbicides, fungicides, insecticides, and other pesticides*.

Since the program began in July 1990, Minnesota Department of Agriculture (MDA) collections have removed and destroyed hundreds of tons of waste pesticide. Thousands of farmers, small businesses, home owners, and other pesticide users have participated.

Unusable pesticides pose safety and health hazards to people and our environment. We are working to provide a disposal program that eliminates waste pesticides and is convenient, affordable, and sensible.

To participate in the Waste Pesticide Collection Program, **complete and return the Waste Pesticide Registration Form on the reverse side**. Your response through registration will help plan this program.

If you have questions or comments about the Waste Pesticide Collection Program, please contact the MDA at 1 (800)657-3986 (greater Minnesota) or (612)297-7102 (metro).

I strongly urge you to help us protect our environment through the removal of unusable pesticides from Minnesota.

Sincerely,

R. Redalen

Elton R. Redalen, Commissioner Minnesota Department of Agriculture

90 West Plato Boulevard • Saint Paul, Minnesota 55107-2094 • (612) 297-6121 • TDD (612) 297-5353/1-(800) 627-3529 •
 An equal opportunity employer

### **APPENDIX D**

## STATE OF MINNESOTA - DEPARTMENT OF AGRICULTURE WASTE PESTICIDE COLLECTION COOPERATIVE AGREEMENT

Cooperative Agreement with	
Agreement No	Agreement Period:to
Agreement Date:	Agreement Amount:
Cosponsor Contact Name: Title: Phone (612)	Title:
Mailing Address: Street: City: State: Zip Code:	City

### I. Cooperative Agreement Provisions

This Agreement between the State of Minnesota, Department of Agriculture, Agronomy Services Division, hereafter the "Commissioner, and hereafter the "cosponsor", is for the purpose of funding and implementing the Waste Pesticide Collection Program, hereafter the "collection".

The Commissioner will contract with a hazardous waste service company, hereafter the "contractor", for the purpose of packaging, transportation and disposal of the waste pesticides collected in conjunction with this described event. The Commissioner will pay the contractor for invoiced services established under M-Contract.

The Commissioner will invoice the cosponsor for any portion of the contractor's total charge to the Commissioner in excess of \$\_\_\_\_\_\_ for services provided under this agreement. The cosponsor's amount will not exceed \$\_\_\_\_\_\_ per year.

### II. General Conditions.

The Commissioner and the cosponsor, in mutual consideration of the provisions of this document, do hereby agree as follows.

 The Commissioner shall: provide the necessary technical, organizational, and supervisory support to conduct a collection; cooperate with the cosponsor in the selection of the collection date(s) and site(s); provide training for cosponsor's volunteers selected to work at the collection; and provide the contractor to collect waste pesticide during the collection event. Cooperative Agreement Number\_\_\_\_\_ Page 2

- 2. The cosponsor shall: cooperate with the Commissioner in the selection of the participants in the collection; provide a suitable collection site(s); publicize and promote the collection in the target area; recruit volunteers to perform work on the day(s) of the collection event; and observe other instructions described in the <u>Operations Manual</u>.
- 3. Amendments. Any amendments to this agreement shall be in writing, and shall be executed by the same parties who executed the original agreement, or their successors in the office.
- 4. State Audits. The books, records, documents, and accounting procedures and practices of the cosponsor relevant to this agreement shall be subject to examination by the Department of Agriculture and the Legislative Auditor.
- 5. The cosponsor or its employees or agents are not employees or agents of the Commissioner for any purpose including worker's compensation.
- III. Site Provision.

The cosponsor shall secure and provide an adequate site to conduct the waste pesticide collection event under the direction of the Commissioner. This cooperative agreement permits the commissioner use of the state site for the duration of the waste pesticide collection event.

The Commissioner will clean-up and restore the premise to the original condition as prior to use.

Site Name:			
Site Address:			
City	State:	Zip Code:	
Phone Number			
Date(s) of Authorized Us	e:		
Contact Name:			

## IV. Liability/Claims of Damage

Each party agrees that it will be responsible for its own acts and omissions or results thereof to the extent authorized by law and shall not be responsible for the acts of the other parties and the results thereof. The state's liability shall be governed by provisions of the Minnesota Tort Claims Act, MN Statute § 3.736 and other applicable law. The cosponsor's liability shall be limited by the provisions of the Municipal Tort Claims Act, Minnesota Statute Chapter 466 and other applicable law.

Cooperative Agreement Number\_\_\_\_\_ Page 3

V. Other Provisions. (Attached additional page if necessary):

VI. Duration and Termination.

This Cooperative Agreement is authorized under MN Statutes § 18B.065, subd. 7, [Cooperative Agreements] and Minnesota Rule 1509.0010, and may be amended in writing as required by mutual agreement of the Commissioner and cosponsor.

This Cooperative Agreement will be in effect as of the date it has been executive by the following representatives whose signatures affirm their authority to sign, amend, or terminate the Agreement on behalf of their respective agencies.

;

### APPENDIX E

Minnesota Department of Agriculture 90 West Plato Boulevard Saint Paul, Minnesota 55107 612/297-1629

# **News Release**

FOR IMMEDIATE RELEASE: Monday, October 25, 1993

CONTACT: Jackie Renner, Communications Director, 612/297-1629, Beeper: 612/649-8866 or Joe Spitzmueller, Agricultural Chemical Consultant, 612/297-5296

#### COLLECTED WASTE PESTICIDE TOTALS RISE

St. Paul -- The Minnesota Department of Agriculture (MDA) collected 123,000 pounds of unusable herbicides, insecticides, and other pesticides from 1,100 farmers and others this year.

"More waste pesticides were collected and destroyed in 1993 than in any year since waste pesticide collections began," said MDA Commissioner Elton R. Redalen. "We applaud the efforts of farmers and others to rid farms, businesses, and homes of unusable pesticides, and dispose of them safely and properly."

This year the program concentrated on collecting waste pesticides stored on farms in southern Minnesota. As a result, thousands of pounds of poisons and other hazardous wastes were removed from the flood-plagued Minnesota River basin.

Northern and metro counties are targets for collections in 1994.

Since 1990, 235,000 pounds of waste pesticides have been captured. Pesticides collected were typically 10 years old. The program assists pesticide users in removing and disposing of waste pesticides properly, eliminating the potential danger waste pesticides pose to public health or the environment.

MDA hires a licensed hazardous waste handler to package and transport collected wastes to a licensed hazardous waste incinerator for destruction. Most participants dispose of pesticides at no cost to themselves. Pesticide registration fees paid by companies selling pesticides in Minnesota fund the program.

For additional information, contact Joe Spitzmueller, Minnesota Department of Agriculture, 90 West Plato Blvd., St. Paul, MN, (612) 297-5296.

-30-

Broadcaster--Actuality available by calling 1-800-967-AGRI(2474) outside the metro area and 296-5174 within the metro.

#### APPENDIX F

Minnesota Department of Agriculture 90 West Plato Boulevard Saint Paul, Minnesota 55107 612/297-1629

# News Release

FOR IMMEDIATE RELEASE: Monday, November 21, 1994

CONTACT: Jackie Renner, Communications Director, 612/297-1629 Beeper: 612/649-8866 or Joe Spitzmueller, Agricultural Chemical Consultant, 612/297-5296

#### WASTE PESTICIDES COLLECTED IN 1994 TOTAL OVER 200,000 POUNDS

St. Paul -- Minnesota Department of Agriculture collections netted a record of more than 100 tons of waste pesticide during 1994. This total represents more pounds collected and destroyed than in any previous year since the program began in 1990.

Almost 1,600 participants brought waste pesticides to collections sites that served areas generally west and north of the Twin Cities during 1994. All Minnesota farmers and other pesticide users have had at least one opportunity to participate in the waste pesticide collection program. The waste pesticide collection program's goal is to remove old and unusable pesticides from the land.

"Minnesota's agricultural community is very concerned about our environment, and their efforts demonstrate their concern," said Minnesota Department of Agriculture Commissioner Elton R. Redalen. "The MDA works with pesticide users to provide for safe and proper disposal of waste pesticides, and to help keep our environment clean."

In 1994 the program's pace was accelerated to provide all Minnesota farmers and other pesticide users an opportunity to participate in the pesticide collection program every other year. Next year's collections will generally take place in southern Minnesota.

More than 430,000 pounds of waste pesticides have been destroyed since the program began in 1990. Many of these collected pesticides are decades old, and were originally purchased, but never used. It is estimated that many, many tons of old and unusable pesticides remain stored in Minnesota.

For additional information, contact Joe Spitzmueller, Minnesota Department of Agriculture, 90 West Plato Blvd., St. Paul, MN, (612) 297-5296.

-30-

Broadcaster--Actuality available by calling 1-800-967-AGRI(2474) or 297-5174 (metro).

# APPENDIX G

# MINNESOTA DEPARTMENT OF AGRICULTURE WASTE PESTICIDE DISPOSAL PROGRAM

# **PARTICIPANT SURVEY**

Pa	rticipants please indicate the answer that best o	lescribes your situation.	
1.	Waste pesticides brought for disposal come fro 1. Farm 2. Farm-related business 3. Non-farm related business	om a: 4. Home 5. Government agency 6. Other(specify)	
2.	Distance traveled one-way to this collection sit 1. 1 to 25 miles 2. 25 to 50 miles	e was: 3. More than 50 miles 4. Not applicable	
3.	<ul><li>Became aware of the waste pesticide collection</li><li>1. Radio</li><li>2. Newspaper</li><li>3. Direct mail contact</li></ul>	n program through: 4. Word of mouth 5. Agency(specify) 6. Other(specify)	
4.	The number of waste generators (including set1. One2. Two3. Three4. Four or		
5.	Pesticide collections should be available to per 1. One time per person 2. Every year	sticide users: 3. Every two to five years 4. Other(specify)	
6.	Properly disposing of pesticides is: 1. Important 2. Undecided 3. Not imp	portant	
7.	In general, the pesticides brought for disposal 1. Purchase 2. Accepted as a gift	were obtained through: 3. Received unwillingly 4. Don't know	
8.	To manage pesticides properly and avoid was 1. Need more information 2. Need more training	tes, pesticide users: 3. Need more of 1 and 2 4. Know enough already	

PLEASE TURN TO OTHER SIDE

ï

- 9. Pesticide users need management information and/or training about:
  - 1. Selection of product
  - 2. Safe handling and use
  - 3. Minimizing pesticide waste

- 4. Disposal of pesticide waste
- 5. Other \_\_\_\_\_(specify)
- 6. None needed

10. In general, information about pesticide management and disposal is obtained through:

- 1. MN Extension Service
- 2. Pesticide dealer or seller
- 3. Manufacturer or label
- 4. Others in same profession

- 5. MN Department of Agriculture
- 6. Pesticide applicator training
- 7. Other \_\_\_\_\_(specify)
- 8. Information not readily available

11. If a disposal cost of \$3.00 for each pound were charged, participation in this program would:

- 1. Increase
- 2. Decrease

- 3. Remain the same
- 4. Do not know
- 12. To dispose of waste pesticides, pesticide users will pay (1 gallon equals 10 pounds):
  - 1. \$ 1.00 per pound
  - 2. \$ 3.00 per pound

- 3. \$ 6.00 per pound
- 4. Nothing

13. More pesticide users do not participate in this program because:

- 1. Lack of convenience
- 2. Not aware program exists
- 3. Concerned about liability

- 4. Irregular collection schedule
- 5. Waste pesticides not a problem
- 6. Other \_\_\_\_\_(specify)
- 14. Without this collection the waste pesticides in this load would be:
  - 1. Stored
  - 2. Returned to dealer
  - 3. Buried
  - 4. Burned

- 5. Applied
- 6. Taken to landfill
- 7. Other \_\_\_\_\_(specify)
- 8. Not certain

Additional comments:

## **APPENDIX H**



# Waste Pesticide Collection Program

THE MINNESOTA DEPARTMENT OF AGRICULTURE'S Waste Pesticide Collection Program helps farmers, small businesses, and other pesticide users dispose of waste pesticides safely, economically, and conveniently.

Thousands of people have voluntarily participated in the program by bringing their waste pesticides to designated collection sites, ultimately making Minnesota a cleaner and safer place to live and work.

The goals of the collection program include:

- □ Increase awareness about waste pesticides and their environmental impact;
- Provide safe disposal options for banned, unwanted, or unusable pesticides;
- **Remove potential sources of contamination** from the landscape of Minnesota; and
- **Promote practices to reduce** or avoid waste pesticides.

Below are listed answers to some of the most frequently asked questions about the Waste Pesticide Collection Program to help you learn more about it.

# What are waste pesticides?

Waste pesticides are insecticides, herbicides, fungicides, and other types of pesticides that are banned, unwanted or unusable.

# What is the Waste Pesticide Collection Program?

The Waste Pesticide Collection Program provides an opportunity for pesticide users to dispose of waste pesticides in an environmentally safe manner. This program is available to pesticide users through collection sites scheduled throughout Minnesota. The placement of waste pesticide collection sites makes the program accessible to residents of each county at least once every other year.

Since July 1990, hundreds of thousands of pounds of pesticides have been collected and destroyed through this program.

# What pesticides are collected?

All banned, unwanted, and unusable waste pesticides are eligible for collection through the Waste Pesticide Collection Program. Banned pesticides such as aldrin, arsenicals, chlordane, DDT, dinoseb, toxaphene, and 2,4,5-T are examples of waste pesticides frequently collected through this program. Unusable and unwanted waste pesticides commonly collected include: 2,4-D, alachlor, atrazine, malathion, and root worm insecticides.



Fertilizers, waste oils, batteries, paints, pesticide contaminated soil or lumber, and any other non-pesticide chemicals are *NOT* eligible for disposal.

Compressed gas cylinders (not including aerosols) will be reviewed on a case-by-case basis. Compressed gas cylinders that are prohibited from transportation are *NOT* eligible for disposal (i.e., unknown or unlabeled cylinders, unapproved or corroded valve mechanism).

# Who can participate?

**Participation in the waste pesticide collection program is strictly voluntary.** All pesticide users in Minnesota may participate, but farmers are the program's primary clientele. Many commercial pesticide applicators, greenhouse and golf course operators, and homeowners also use this opportunity to properly dispose of waste pesticides.

# What is the cost to participate?

Most participants dispose of waste pesticides at no cost to themselves. Some participants are assessed for portions of the disposal cost based on the weight (in pounds) of the waste pesticide and container. See the following schedule for details:

No cost for disposal of 300 pounds or less.
\$1.00 per pound for quantities greater than 300 pounds, up to 1,000 pounds.
\$3.00 per pound for quantities greater than 1,000 pounds, up to a maximum of 2,200 pounds.
Federal, state, or local government agencies will be assessed \$4.00 for each pound.

# **Examples:**

- A participant with 20 gallons of liquid and 75 pounds of solid pays nothing for disposal. {20 gal. X 10 lbs. per gal. = 200 lbs.; 200 + 75 = 275 lbs. total}
- A participant with 30 gallons of liquid and 75 pounds of solid pay nothing for the first 300 pounds and \$1.00 per pound for any additional pounds up to 1,000 pounds. {30 gal. X 10 lbs. per gal = 300 lbs.; 300 + 75 = 375 lbs. total} Participant pays \$75 for disposal.
- □ A government agency with 5 gallons liquid and 75 pounds solid pays \$4.00 per pound for disposal. {5 gal. X 10 lbs. per gal. = 50 lbs.; 50 + 75 = 125 lbs. total; 125 lbs. X \$4 per lbs. = \$500} Government participant pays \$500 for disposal.

(NOTE: Liquid pesticides usually weigh about 10 pounds per gallon.)

# Where are waste pesticides found?

Waste pesticides are found at farms, businesses, and homes. Check barns, warehouse, basements, garages, or other storage areas. Waste pesticides often are very old and accumulate in out-of-the-way places.

# What if I have waste pesticides?

# **Handle containers carefully**

When looking for waste pesticides, move containers only after careful inspection. Torn bags, fragile glass, brittle plastic, and rusty metal containers are opportunities for spills or leaks. **REMEMBER**, protect yourself from possible exposure--wear protective clothing (chemical resistant gloves, long sleeve shirt and pants, and protective eye wear).

# **Identify waste pesticides**

Identify a pesticide by reviewing the label; if unlabeled, ask persons who might know the contents. If you cannot determine the contents, and believe it's a pesticide, register the material and bring it to the collection site. (See question and answer below.)

# **Register waste pesticides**

Complete and return the *Waste Pesticide Registration* form. Registration is important for a safe and efficient waste pesticide collection program. The form requests basic information about the waste pesticides including: brand name, containers size, remaining quantity, and if container can be transported without leaks or spills.

# **Transport pesticides safely**

Each participant will receive information from the MDA about how to safely transport pesticides to the collection site. This information instructs participants to pack pesticide containers so they will not move, break open, or spill during transport. If waste pesticide containers cannot be moved due to safety concerns, contact the MDA for assistance.

# What if I have unlabeled or unknown pesticides?

Unlabeled or unknown waste pesticides be brought to the collection site if quantities of individual containers are less than 5 gallons or 50 pounds. For unknown waste pesticides in excess of these amounts, contact the MDA for assistance.











# How are waste pesticides destroyed?

Waste pesticides collected at MDA waste pesticide collection sites are managed as hazardous waste, and are destroyed by high temperature incineration at a licensed hazardous waste treatment facility.

# How are waste pesticides minimized or reduced?

The solution to eliminating waste pesticides is careful pesticide management. Often, waste pesticides begin as leftover or unwanted chemicals at the end of the growing/application season, or damaged because of poor storage conditions. To reduce the amount of waste pesticides in the future, buy only quantities of pesticides you can use in one season, and store all leftover pesticide products according to directions on the label, and use leftovers as soon as possible.



# Act Now!

The accumulation of unwanted pesticides poses a serious threat to our ground water, our environment, and our health. Use this opportunity to dispose of waste pesticides properly. Request your *Waste Pesticide Registration* form and remove the threat. Participate in the Waste Pesticide Collection Program.

This publication was developed and produced by the Minnesota Department of Agriculture, Agronomy Services Division, 90 West Plato Boulevard, St. Paul, MN 55107-2094.

For more information about waste pesticide management and disposal, contact the Minnesota Department of Agriculture at:

 Telephone:
 (612) 297-7102 or 1(800) 657-3986

 Fax:
 (612) 297-2271

An equal opportunity employer In accordance with the Americans With Disabilities Act, an alternative format of this publication is available upon request. TDD: (612) 297-5353 or 1(800) 627-3529.

#### APPENDIX

# Transporting Pesticides Safely

# DO

Avoid spills- be sure containers are secure

About Bringing Pesticides to the Collection....

- Protect containers from moisture and wind
- Separate pesticides from other items ۰ being transported
- Drive with exfreme caution

# DON'T

- Leave pesticides unattended
- Transport pesticides in the passenger compartment Stack higher than the sides of a truck bed
- ٠

Waste Pesticide Collection Program Minnesota Department of Agriculture

# Handling Pesticides

Wear protective clothing as instructed by the label or as the situation requires

You may need to wear nitrile rubber gloves, non-absorptive coveralls, rubber boots, goggles, and a respirator

Use proper lifting techniques- lift using your knees, not your back

Don't eat, drink, or smoke around pesticides

Wash your hands when finished handling pesticides



# What about Damaged Containers?

Damaged or leaky containers require special care when handling and transporting to a collection!

Keep pesticides in their original containers, if possible. Place dusts, granular, or other non-liquid pesticides inside a double plastic bag. Put liquid containers inside a bucket, drum or sturdy container, and pack ground corn cobs, sawdust or other absorbent material around the damaged pesticide container. Seal the bag or container. Label with the pesticide name, manufacturer. EPA registration number, and date of transfer.

If a container is badly damaged and cannot be moved safely, call the Minnesota Department of Agriculture at (612) 297-7102.

Remember.... Be Prepared! Whenever you transport pesticides, carry protective clothing and safety equipment in your vehicle.

If a spill occurs... Secure the area, put your safety equipment on, and if possible, stop the leak without endangering yourself or others. Notify local authorities and the Minnesota Department of Emergency Services at 1(800) 422-0798.

# **APPENDIX J**

			DE DISPOSA (ARD • ST. 1 NE: 612/297	L PROGRAI PAUL, MN 55 7 <b>-7102</b>	M 5107-2094			(Office Use Only) COOPERATOR NO.
	RUCTIONS: Please type or us		ll sections	•		i -		
Name	of Contact Person		Title			Date		
Compa	ny Name (if applicable)	an a				Telep	hone No. (In	ciude Area Code)
Mailing	Address (Street, Rural Route, Box	No.)	Cou	nty	City	State		Zip Code
Addres	s where waste is stored, if different	t (Street, Rural Route, Box	(No.)		City	State		Zip Code
Check	one:							
	Farm	D Non-f	arm busines	s		] Household		
	Farm-related business	Gover	rnment Agei	ъсу		Other (Sp	becify)	
ITEM NO.	PESTICIDE IDENTIFIC EPA REGISTRATIO		CONTAINER NO./TYPE	CONTAINER SIZE	QUANTITY REMAINING	LIQUID SOLID	QUANTITY IN POUNDS	(Office Use Only) INVENTORY SHEET NO.
						1		
						10110117 - 10110		
	SUBTOTAL POUNDS (Continue e	ntering on Page 2)				NDS		
h serves	TMENT OF AGRICULTURE'S CO	ST: \$ CO	~ 이상 분명	R'S COST: \$			RATOR WIL J YES	L BE INVOICED
I hereby generat	r certify that the information contain ed through activities in Minnesota.	ed in this disclosure is tru	ue and corre	ct and that th	ne waste pestici	des prese	nted for disp	osal were
	(Print or Type)	SIGNATURE			TITLE	No. New York		DATE

COPIES: Original - Minnesota Department of Agriculture • Copy - Cooperator In accordance with the Americans With Disabilities Act, an alternative form of communication is available upon request. TDD: 612/297-5353 • 1-800/627-3529

,

AG-01203-01 (6/93)

PRINTED ON RECYCLED PAPER

			IDE DISPOSA VARD • ST. F ONE: 612/297	L PROGRAM PAUL, MN 551 - <b>7102</b>	107-2094			mice Use Only) OPERATOR NO.
INSTR	UCTIONS: Please type or us	e pen and complete	all sections				9 <u>1.4.9</u> 1.00	
ITEM NO.	PESTICIDE IDENTIFIC EPA REGISTRATIO	ATION -	CONTAINER NO./TYPE	CONTAINER SIZE	QUANTITY REMAINING	LIQUID SOLID	QUANTITY IN POUNDS	(Office Use Only) INVENTORY
		<u> </u>						SHEET NO.
		<u>a.</u>						
		nate						
		- Annonin - ann an ann an Anna Anna Anna Anna An						
	ξe <sup>2</sup>							
		<u></u>						
	an an ann an Arraigh ann an							
				~ <sup>1</sup>				
					n in 1			
		,						
		,						
9 <b>0</b>	SUBTOTAL POUNDS (Continue e				TOTAL POL	JNDS		
	TMENT OF AGRICULTURE'S CO	ST: \$ C	Office Use Oni	R'S COST: \$_		C	YES	BE INVOICED
generate	ed through activities in Minnesota.					idea hiesel		
NAME (i	Print or Type)	SIGNATURE			TITLE			DATE
		I OPIES: Original - Minnesota		L			L	

COPIES: Original - Minnesota Department of Agriculture • Copy - Cooperator In accordance with the Americans With Disabilities Act, an alternative form of communication is available upon request. TDD: 612/297-5353 • 1-800/627-3529

AG-01203-01 (6/93)

PRINTED ON RECYCLED PAPER

Page \_\_\_\_