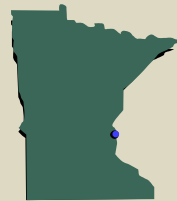




## **2011 Waste Pesticide Collection Program Legislative Report**

**Serving Minnesota Farms, Businesses and Households**



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## EXECUTIVE SUMMARY

The Minnesota Department of Agriculture (MDA) implemented a Waste Pesticide Collection Program in 1990, made possible by the Minnesota Ground Water Act, to provide farmers and agricultural businesses a disposal option for agricultural waste pesticides. To date almost 4.9 million pounds of agricultural (ag) and non-agricultural (non-ag)/household waste pesticides have been removed from Minnesota's environment through MDA's program and Minnesota County Household Hazardous Waste (HHW) facilities.

Waste pesticides, defined as a canceled pesticide, an unusable pesticide, or a usable pesticide comprise a small percentage of the total hazardous waste generated within Minnesota. Since the 1980's County HHW facilities, managed by the MN Pollution Control Agency (MPCA), historically only accepted residential or non-ag waste pesticides from households. The MDA's program therefore provided assistance to farmers and agricultural businesses with waste pesticide disposal needs.

In the mid 1990's MDA voluntarily began to pay for the disposal, supplies and transportation costs of any waste pesticides collected through county HHW facilities. The cost of disposing of the increasing volumes of non-ag waste pesticides collected through HHW facilities exceeded MDA's program budget for the next five years. For this reason MDA formed an Advisory committee with MPCA and representatives of county HHW facilities and in 2004 entered into formal Waste Pesticide Collection Agreements with HHW facilities. The MDA continued to pay for associated disposal costs of waste pesticides collected under the Agreements.

Since 2008 the MDA has provided additional reimbursement to participating counties for reasonable overhead and advertising costs for any waste pesticides collected at their HHW facilities. The MDA has also, as directed by statute, conducted both ag and non-ag waste pesticide collections in counties that have chosen not to partner with the MDA. In 2011 MDA offered additional reimbursement to participating counties that recorded the required product information using MDA's Waste Pesticide Electronic data entry system.

The volume of agricultural waste pesticides continues to decrease and accounted for only 15% of waste pesticides collected in 2011. HHW facilities that accept waste pesticides continue to provide the most cost efficient and convenient collection option over MDA stand-alone collections.

## BACKGROUND

### Milestones for the Collection of Waste Pesticides

MPCA-sponsored HHW collections, including household waste pesticide, begin.	1985
SCORE Legislation passed, established state funding for waste reduction, reuse, recycling and problem materials, including household hazardous wastes. Funding from sales tax on solid waste management services.	1986
Ag (farms and business) waste pesticide collection program established at MDA as a result of MN Ground Water Act and because HHW facilities did not accept farm/business waste pesticides. HHW facilities continued to accept household waste pesticides.	1989
Pesticide law amended, established waste pesticide account and transfer of \$600,000 from Pesticide Registration Account	1990
MDA (for first time) pays for disposal costs of household pesticide waste from HHW facilities.	1996
MDA's Waste Pesticide Program costs exceed \$600,000 (1997, 1998, 1999, 2000, 2001)	1997
Pounds of household waste pesticide collected exceeds amount of ag waste pesticides collected.	1999
MDA Program budget changed to \$300,000. MDA established Waste Pesticide Committee, comprised of representatives from involved agencies, to develop model cooperative agreements.	2003
Initial cooperative agreements with HHWs. Funds for all waste pesticides collected at county HHW events or facilities allotted based on number of farms and households per county.	2004
Waste Pesticide Task Force. MDA required to collect both nonag/household and ag waste pesticides through Agreements with counties or by MDA collections. Information required to be recorded for every product collected.	2007
The legislature establishes a \$50 surcharge on pesticide products and dedicates this money to be used by counties for the collection and disposal of pesticides.	2009
Cooperative agreements offered to counties to collect non-ag and ag waste pesticides; MDA pays supplies, transportation and disposal costs and \$0.25/lb for reasonable overhead costs. MDA offers counties an additional \$0.10/lb to record product information. MDA continues to hold separate collections in counties that do not want to partner with MDA.	Present

## INTRODUCTION

### WASTE PESTICIDE COLLECTION PROGRAM REPORT

Minn. Statute Chapter 18B.065, Subd. 3(b) states that the MDA must report by March 15<sup>th</sup> each year:

- 1) Each instance of a refusal to collect waste pesticide or the assessment of a fee to a pesticide end user;
- 2) Waste pesticide collection information including a discussion of the type and quantity of waste pesticide collected by the commissioner and any entity collecting waste pesticide under “cooperative agreements” with the state during the previous calendar year;
- 3) A summary of waste pesticide collection trends;
- 4) Any corresponding program recommendations

## REFUSAL OR FEES

- The MDA refused no waste pesticide in 2011.
- MDA knows of no refusal in any county, under Cooperative Agreement or not under a Cooperative Agreement, to accept waste pesticides.
- The MDA knows of no fee having been assessed by any county to a pesticide end user who offered pesticide waste for disposal, whether or not the county was under Cooperative Agreement with the MDA. MDA did not assess such fees in 2011.

## PROGRAM EVENTS AND PARTNERSHIPS

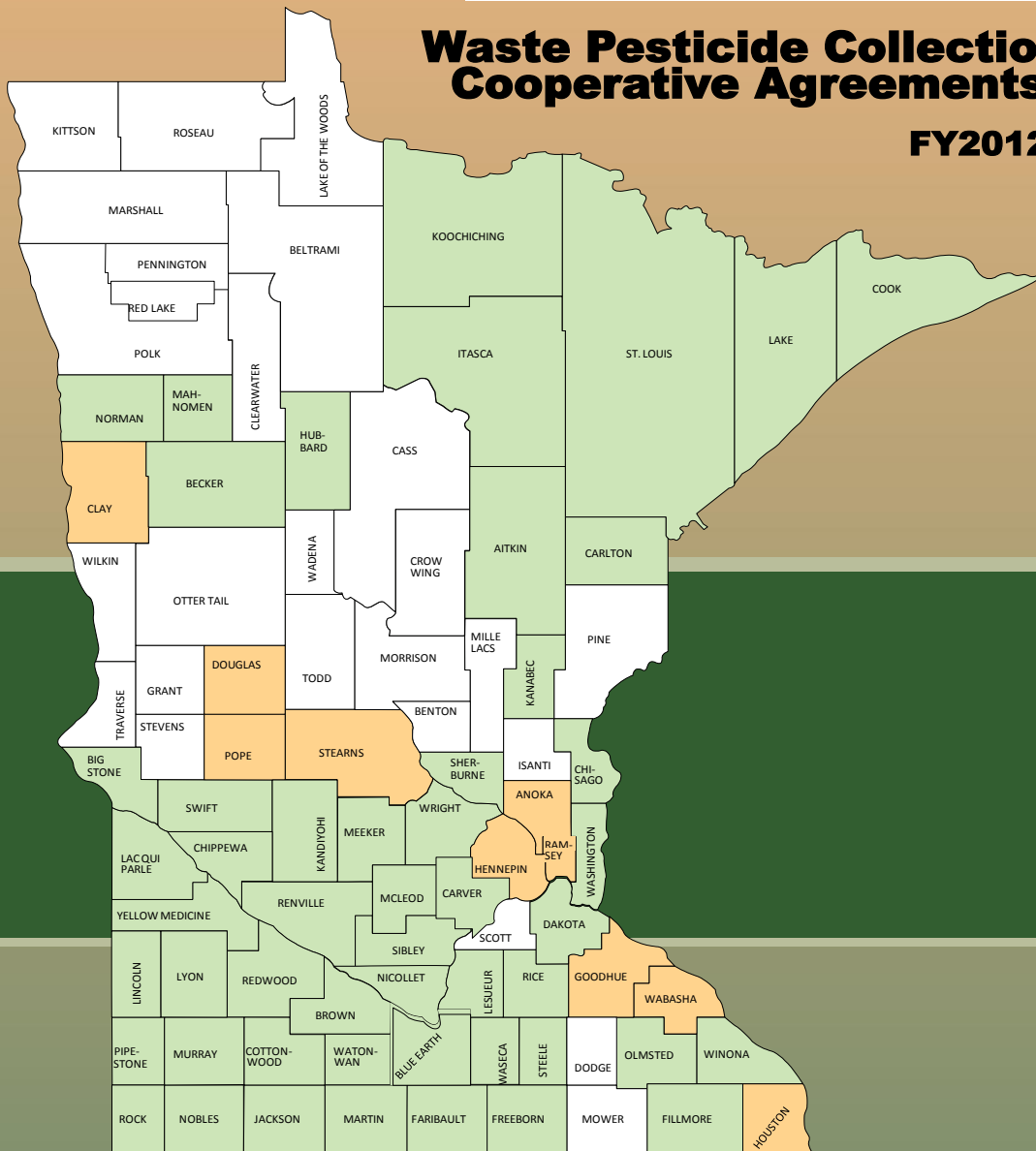
Cooperative Agreements with Minnesota Counties:

- MDA has cooperative agreements with 61 of Minnesota’s 87 counties. Fifty (51) counties collect both nonagricultural (non-ag) and agricultural (ag) waste pesticides and ten (10) counties collect only non-ag waste pesticides. (see map, page 4).
- Twenty-six (26) counties have chosen not to enter into Agreements with the MDA to date due to one or more of the following stated reasons:
  - 1) Product inventory requirement is too labor intensive.
  - 2) Safety concerns from increased product handling to obtain product information.
  - 3) Liability/indemnification language in Agreement is different from MPCA/HHW contract language.
- MDA events were held in twenty-six (26) counties to collect non-ag waste pesticide in the summer/fall of 2011 in counties that did not agree to collect non-ag waste pesticides.
- The MDA will conduct thirty-six (36) ag waste pesticide collections in 2012 in counties that have not agreed to collect ag waste pesticides.



# Waste Pesticide Collection Cooperative Agreements

**FY2012**



- Collect Both Ag and Non-Ag Waste Pesticides (51)
- Collect Only Non-Ag Waste Pesticides (10)
- No Agreement to Date (26)

February 2012

## TRENDS

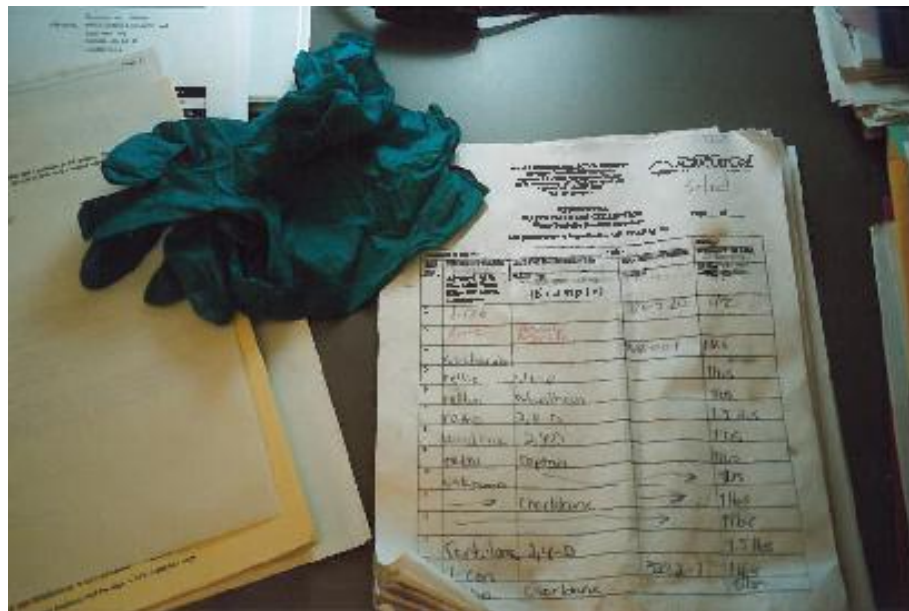
- Waste pesticides continue to comprise less than 5% of the total hazardous waste collected by Minnesota county HHW facilities.
- The amount of agricultural waste pesticides collected by both the MDA and cooperating counties continues to decline.
- The predominant type of waste pesticides collected and disposed of state-wide are non-ag/household pesticides. The majority of these pesticides are collected within the seven (7) county metro area.
- Lawn care products comprised over half (54%) of all non-ag waste pesticides, by weight, brought for disposal in 2011. This percentage is comparable to the amount of lawn care products collected and disposed of in 2010.
- Many of the lawn care products were combination Weed & Feed products that contain a high percentage of fertilizer by weight. Fertilizer is not considered a hazardous waste.
- An increasing number of pesticides brought for waste pesticide disposal are Ready-To-Use (RTU) products by homeowners that are premixed and contain a high percentage of water.
- A high percentage of non-ag waste pesticides dropped off at collections by homeowners continue to be usable products. Common responses from homeowners as to why they brought these products for disposal were: 1) they didn't need all of the product, 2) no longer wanted to store the product; or, 3) were not sure if the product was still usable.
- Non-participating counties continue to cite the additional work required to complete product inventory records, increased product handling and safety concerns and/or the indemnification language as reasons not to sign a Cooperative Agreement to collect waste pesticides.
- Participation continues to be very low at MDA stand-alone collections. MDA also continues to receive more ag waste pesticides at MDA focused non-ag/household collections than non-ag/household waste pesticides. The low participation of homeowners is due in large part to the continued lack of recognition of MDA's role in this isolated sector of household hazardous waste.
- Less ag waste pesticides are being generated due to improved product and equipment technologies, overall decrease in application rates and the high percentage of acreage planted to Round-Up Ready crops that have decreased the type and amount of ag pesticides brought for disposal.
- More counties have recognized collecting ag waste pesticides requires less record keeping and provides more reimbursement (Reasonable Overhead Cost payment) because the average weight of an ag waste pesticide is higher than a non-ag waste pesticide.
- All non-participating counties that have not signed Cooperative Agreements continue to accept non-ag waste pesticides from county residents and continue to request MDA take the waste and pay for the disposal.

## KEY PROGRAM HIGHLIGHTS

- The MDA provided funding for the collection and disposal of over 292,000 pounds of waste pesticides delivered to county facilities or county mobile events. An additional 12,000+ pounds of waste pesticides was received at separate MDA collection events. Per pound collection costs for HHW facilities averaged \$1.29/pound and \$7.03/pound for MDA collections.
- 85% of waste pesticides collected by participating counties and MDA were non-ag waste pesticides and 15% were ag waste pesticides. These totals do not account for the non-ag waste pesticides that non-participating counties (currently 30%) continue to collect but do not report to the MDA.
- The MDA provided nonag/household waste pesticide collection opportunities, per statute, in all non-participating counties. No non-ag waste pesticides were received at 54% of the twenty-six (26) collections. Less than 100 pounds of non-ag waste pesticides were received at 85% of the collections.
- Ag waste pesticides were brought to 21 of the 26 MDA scheduled non-ag/household collections. The MDA accepted this waste as in previous years and thereby, by default, provides more collection opportunities for ag waste pesticides than required under statute.
- 66% of the waste pesticides collected by participating counties state-wide were collected by six (6) metro counties, including: Hennepin, Ramsey, Anoka, Washington, Dakota and Carver.
- Non-metro counties collected an average of 1,421 pounds of non-ag waste pesticides in 2011. Statewide, Hennepin County collected the highest amount of non-ag waste pesticides; 79,812 pounds.
- The cost to dispose of combination products or premixed products that contain a high percentage of fertilizer or water is the same as for a pesticide concentrate.
- Established county HHW facilities continue to provide the most economical and convenient means to collect waste pesticides verses stand-alone MDA collections. The cost of stand-alone MDA collections is routinely higher due in large part to separate contractor mobilization costs.
- A Waste Pesticide Disposal Electronic Registration System was developed to compliment the internet accessible Waste Pesticide Electronic Data Entry System implemented in 2010. The new registration system will provide participants (ag/business focus) the option to electronically submit information on waste pesticides to be disposed of which, in part, will assist both MDA and counties in managing this work.
- One non-participating HHW Region recommended MDA provide additional reimbursement to cover mileage within their Region. The MDA already pays for contractor transportation costs associated with waste pesticides. In addition, waste pesticides comprise only one type of hazardous waste (HW) and counties that transport HW between counties routinely pick-up multiple types of HW at the same time. Transportation charges therefore cannot be solely attributed to waste pesticides.



- The wide variation in county HHW programs and the variable level of county participation has made it difficult to manage a consistent and cost effective state-wide waste pesticide collection program for predominantly one sector of household hazardous waste.
- Counties under Agreement with the MDA to collect waste pesticides retain the discretion as to when and how they will accept waste pesticides at their county facilities.
- Recording product information from every household waste pesticide collected takes more time and results in significantly more handling of products due to the sheer number and small size of many household products. This is in contrast to agricultural waste pesticides where fewer but larger containers are received.
- The accuracy and quality of product record information received from counties that use the MDA's electronic data entry system has improved considerably. Many of the hard copy records submitted by counties that do not, or are not able to, use the electronic system continue to be difficult to read, incomplete or inaccurate. MDA additionally needs to enter information from hard copy records into the electronic data system, resulting in increased administrative program costs.

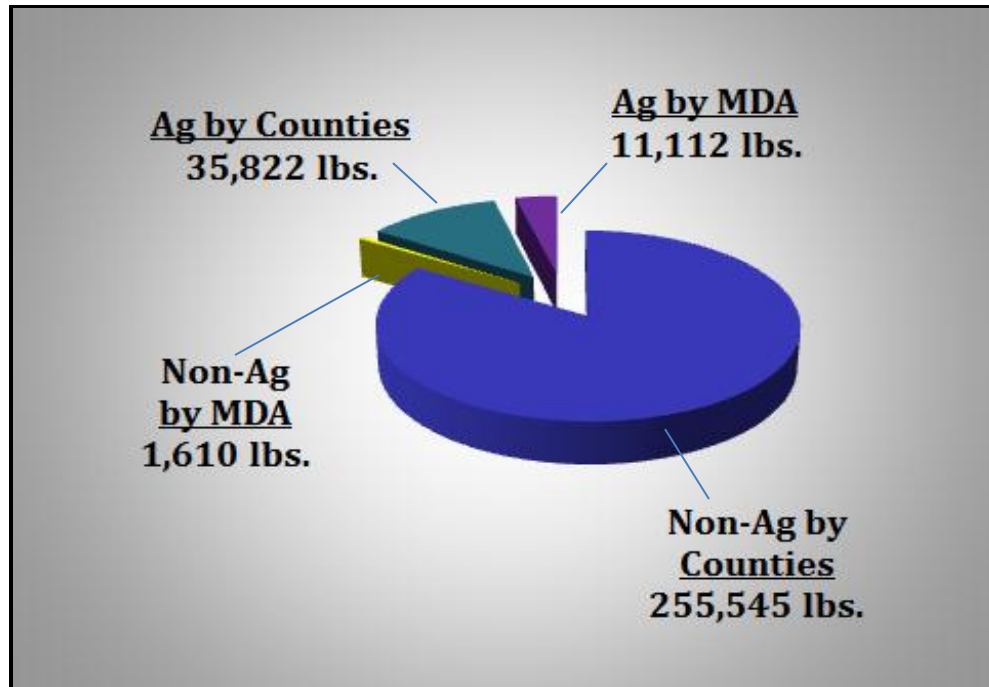


**Waste Pesticide Collection Inventory Records submitted by Counties**

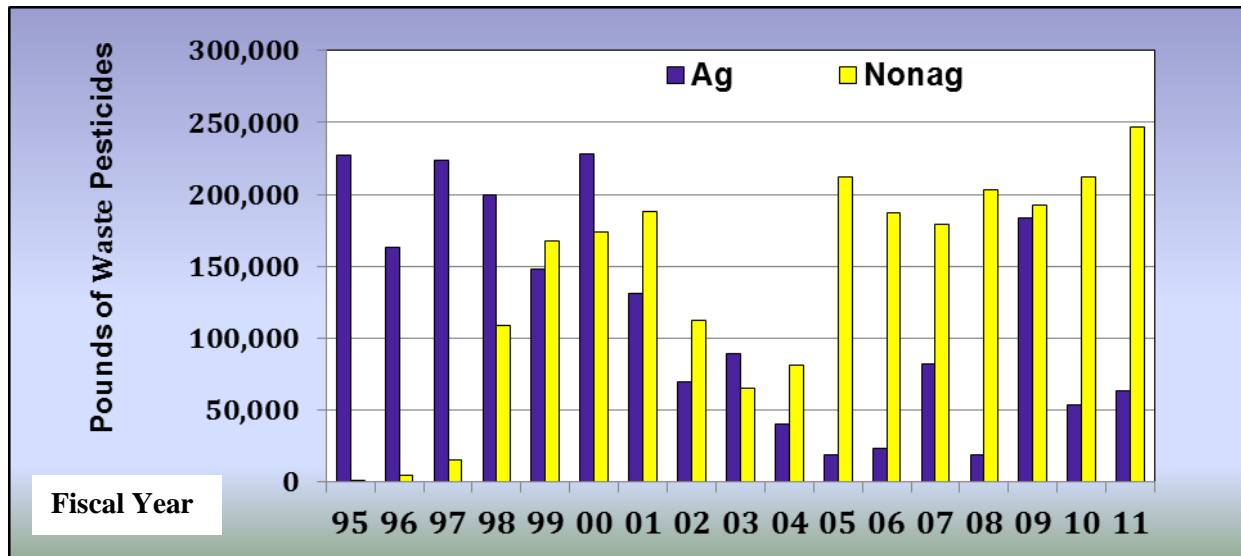
## RECOMMENDATIONS

- 1) Initiate additional discussions with the MN Pollution Control Agency to 1) evaluate waste pesticide reduction strategies for households, 2) assess and prioritize collection and educational activities in counties that continue to generate the most waste pesticides, and the greatest volumes of household hazardous wastes in general; and 3) evaluate the most cost efficient and effective collection methods for waste pesticides between HHW facilities, in coordination with other household hazardous waste materials.
- 2) Identify and promote business models that generate the least amount of waste pesticides. Evaluate if charging businesses and local governments for a portion of waste pesticide disposal would provide additional incentive to modify business practices.
- 3) Assess the applicability of Extended Producer Responsibility (EPR) requirements that would: 1) place greater responsibility on registrants / manufacturers to decrease potential environmental impacts of products distributed in MN, through packaging, marketing and distribution; i.e. more closely match package size/product amount to consumer use, and 2) shift the responsibility of managing the collection and disposal of waste pesticide, or aspects of it, from state and local governments to registrants / manufacturers.
- 4) Examine the feasibility of counties resuming collection of non-ag/household waste pesticides as part of their household hazardous waste program activities required under MN Statute 115A.96, and in cooperation with MDA.
- 5) Discuss modification of 18B.065, Subd. 2a (a) and 2a (b) to provide MDA the discretion to schedule waste pesticide collections based on specific criteria.
- 6) Discuss modification of MN Statute 18B.065, Subd. 2(a) (d) to require information only be recorded for agricultural waste pesticides and pesticides that are considered persistent, bio-accumulative toxic compounds.
- 7) Discuss the assessment of a surcharge to registrants of Ready-to-Use pesticides and pesticides that contain a high percentage (by weight) of fertilizer to account for the additional cost incurred to dispose of these products as hazardous waste.

## Type and Amount of Waste Pesticides Collected in 2011



## Pounds of Waste Pesticides Collected and Disposed Fiscal Year 1995 to 2011



## Waste Pesticide Cooperative Agreements

Type of Waste Pesticide Collected	Number of Counties
Non-Ag and Ag waste pesticides	51
Only Non-Ag waste pesticides	10
Neither Non-Ag or Ag waste pesticides; declined MDA Cooperative Agreement Offer	26

## Type and Amount of Waste Pesticide Collected

Collected by HHW or MDA	Non-Ag	Ag	Total pounds
Collected by Counties or HHW Regions	255,545	35,822	291,367
Collected by MDA	1,610	11,112	12,722
<b>Total pounds</b>	<b>257,155</b>	<b>46,934</b>	<b>304,089</b>

## Collection Costs

Cost	Counties under Cooperative Agreements	MDA Events	<i>Total</i>
<b>Disposal</b>	\$299,954	\$27,922	<b>\$327,876</b>
<b>Advertising</b>	\$1,196	\$2,393	<b>\$3,589</b>
<b>Overhead</b>	\$74,662	\$59,110	<b>\$133,772</b>
<b>Total</b>	<b>\$375,812</b>	<b>\$89,425</b>	<b>\$465,237</b>

## HHW Regions/Counties under Cooperative Agreement in 2011

### Type and Amount of Waste Pesticide collected and ROC paid

Region/County Program	Counties in Region	Pounds Ag Waste Pesticides	Pounds Non-Ag Waste Pesticides	Reasonable Overhead Costs Paid
Becker	Becker, Norman, Hubbard, Mahnoman	2,292	3,746	\$1,503.25
Blue Earth	Blue Earth, Watonwan	3,071	5,443	\$1,315.75
Brown	Brown	676	1,042	\$429.50
Chisago	Chisago	214	2,215	\$762.10
Clay*	Clay	0	0	\$0.00
Mower/Freeborn	Freeborn	1,410	1,092	\$614.25
Kanabec	Kanabec	0	210	\$52.50
Kandiyohi	Kandiyohi, Meeker, Renville, Chippewa, Swift, Big Stone, Lac Qui Parle	5,045	5,001	\$2,511.50
Lyon	Lyon, Lincoln, Redwood, Murray, Rock, Cottonwood, Nobles, Pipestone, Jackson, Yellow Medicine	10,943	2,548	\$3,372.75
McLeod	McLeod	1,024	2,921	\$950.25
Olmsted	Olmsted, Goodhue*, Wabasha*	1,968	4,784	\$2,158.50
Pope/Douglas*	Pope, Douglas	222	1,597	\$454.75
PrairieLand	Martin, Faribault	844	752	\$399.00
Rice	Rice, Steele, Waseca	2,113	5,107	\$2,403.70
Sherburne	Sherburne	91	2,211	\$575.50
Tricounty N*	Stearns, Benton <sup>1</sup> , Sherburne	100	2,358	\$614.50
Tricounty S	Sibley, Nicollet, LeSueur	1,267	2,087	\$838.50
Winona	Winona, Fillmore, Houston*	2,517	2,880	\$1,519.85
WLSSD	St. Louis, Koochiching, Itasca, Aitkin, Carlton, Lake, Cook	1,223	14,759	\$4,638.45
Wright	Wright	0	2,180	\$644.40
Anoka*	Anoka	0	15,098	\$3,774.50
Carver	Carver	880	8,681	\$2,359.50
Dakota	Dakota	551	24,427	\$6,102.00
Hennepin*	Hennepin	0	79,812	\$19,290.00
Ramsey*	Ramsey	0	38,412	\$9,315.75
Washington	Washington	72	28,554	\$8,061.95
<b>Total</b>		<b>36,522 lbs</b>	<b>257,917 lbs<sup>2</sup></b>	<b>\$74,662.70</b>

\* Collects only Non-ag waste pesticides

<sup>1</sup> Accepts waste pesticide from county but holds no mobile events within county

<sup>2</sup> Volume reflects gross weight of aerosol lab packs paid by MDA per contract pricing

## Top Ten Active Ingredients of Waste Pesticides Collected By Counties under Cooperative Agreements

TOP 10 NON-AG PRODUCTS		TOP 10 AG PRODUCTS	
Active Ingredient	Pounds	Active Ingredient	Pounds
2,4-D	49,020	Atrazine	5,106
MCPPP-P	33,072	2,4-D	3,579
Dicamba	23,294	Potassium 3,6-Dichloro-0-Anisate	2,881
Glyphosate	19,450	Phostebupirim	2,009
Mecoprop	10,413	Trifluralin	1,346
Diazinon	8,885	Alachlor	1,343
Difenthrin	8,437	Sodium Bentazon	1,072
Permethrin	7,546	Dicamba	1,065
Nonanoic Acid	6,860	Sodium 5-(2-chloro-4-(trifluoromethyl) Phenoxy)-2-nitrobenzoate	906
Carbaryl	6,600	Glyphosate	888

### Minnesota Household Hazardous Waste Facility and Collection



## MDA Sponsored Non-Ag Focused Waste Pesticide Collections in Non-participating Counties

County	Event Date	Ag Waste Pesticides (lbs)	Non-Ag Waste Pesticides (lbs)	Total (lbs)
1.Crow Wing	August 9	145	705	850
2.Morrison	August 9	582	108	690
3. Benton	August 10	226	0	226
4. Mille Lacs	August 10	464	41	505
5. Todd	August 16	320	179	499
6. Otter Tail	August 16	2,722	0	2,722
7. Wilkin	August 17	5	12	17
8.Traverse	August 17	2,867	29	2,896
9. Stevens	August 18	0	0	0
10. Grant	August 18	0	0	0
11. Dodge	September 13	229	0	229
12. Mower	September 13	0	16	16
13. Isanti	September 20	151	0	151
14. Pine	September 20	125	83	208
15. Scott	September 21	0	28	28
16. Cass	October 4	878	306	1,184
17. Beltrami	October 4	0	96	96
18. Lake of the Woods	October 5	300	0	300
19. Roseau	October 5	1,114	0	1,114
20. Kittson	October 6	8	0	8
21. Marshall	October 6	176	7	183
22. Wadena	October 11	5	0	5
23. Polk	October 12	430	0	430
24. Pennington	October 12	80	0	80
25. Red Lake	October 13	55	0	55
26. Clearwater	October 13	230	0	230
<b>Total</b>		<b>11,112</b>	<b>1,610</b>	<b>12,722</b>

## Top Ten Active Ingredients of Waste Pesticides Collected at MDA Events

TOP 10 NON-AG PRODUCTS		TOP 10 AG PRODUCTS	
Active Ingredient	Pounds	Active Ingredient	Pounds
2,4-D	97.5	Trifluralin	2,488
Carbaryl	83	Pendimethalin	1,083
Piperonyl Butoxide	53.5	Triethylammonium Triclopyr	755
Diazinon	47.5	2,4-D	707
Chlorpyrifos	45	Glyphosate	571
Pyrethrins	40	Metolachlor	383
Captan	39	Atrazine	341
Malathion	36	7-oxabicyclo(2.2.1)Heptane-2,3-Dicarboxylic Acid	275
N-octyl Bicycloheptene Dicarboximide	34	Thiram	243
Permethrin	34	5,6-dihydro-2-methyl-1,4-oxathin-3-carboxanilide	242

### Minnesota Department of Agriculture Stand alone Waste Pesticide Collection

