



# 2012 Waste Pesticide Collection Program Report

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*Serving Minnesota Farms, Businesses and Households and  
Protecting People and the Environment*



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Pursuant to Minn. Stat. § 3.197, the cost of preparing this report was approximately \$1,457.00.

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## Executive Summary

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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 unusable and out of condition waste pesticides. To date more than five (5) million pounds of waste pesticides have been removed from storage on Minnesota's landscape through MDA's program.

Waste pesticides are defined as - canceled pesticides, unusable pesticides, or unwanted pesticides. The MDA's program provides assistance to farmers and agricultural businesses as well as to households with waste pesticide disposal needs. MDA accomplishes collection results by overseeing collections of waste directly but also by implementing collections held in conjunction with county household hazardous waste (HHW) activities.

In 1990, MDA set up the first collection sites to take waste pesticides. These sites were extremely successful capturing primarily farm waste pesticide. By 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 agricultural waste pesticide and the increasing volumes of non-ag waste pesticides collected through HHW facilities threatened to exceed MDA's program budget.

In 2000, funding for waste pesticide collection became challenging. Reduced funding prompted MDA to form an advisory committee comprised of representatives of county HHW facilities and Minnesota Pollution Control Agency (MPCA) that resulted in formal Waste Pesticide Collection Agreements (Agreements) with HHW facilities in 2004. The MDA continued to pay for associated disposal costs of waste pesticides collected under the Agreements with partner counties but up to an allocated amount based on a formula calculated using the number of farms and households in the county.

In 2008, and under favorable funding, the MDA began providing additional reimbursement to HHWs for reasonable overhead and advertising costs for any waste pesticides collected at their facilities or mobile events. 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 MDA has also, as directed by statute, conducted both ag and non-ag waste pesticide collections in counties that choose not to partner with the MDA.

The 2012 legislative session amended the statute. As a result MDA is not required to organize non-ag collections in each county where a joint powers agreement with neighboring counties exists. The same session also amended the indemnification language providing identical protection for counties collecting waste pesticides as MPCA provides counties collecting hazardous wastes.

The volume of agricultural waste pesticides collected by MDA account for 18% of waste pesticides collected in 2012. HHW facilities that accept waste pesticides continue to provide the most cost efficient and convenient collection option over MDA stand-alone collections.

# Introduction

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Minnesota Statutes Chapter 18B.065, Subd. 3(b) states that the MDA must report by March 15th 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; and
- 4) Any corresponding program recommendations.

# Background

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## Milestones for the Collection of Waste Pesticides

- 1986** SCORE Legislation passed, established state funding for waste reduction, reuse, re-cycling and solid waste management services.
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- 1989** Ag (farms and business) waste pesticide collection program established at MDA as a result of MN Ground Water Act and because HHW facilities refused farm/business waste pesticides. HHW facilities continued to accept household waste pesticides.
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- 1990** Pesticide law amended, established waste pesticide account transferring \$600,000 from Pesticide Registration Account. Statewide one day collection sites setup by MDA.
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- 1996** MDA (for first time) pays disposal costs of household pesticide waste from county HHW.
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- 1997** MDA's Waste Pesticide Program costs exceed \$600,000 (1997, 1998, 1999, 2000, 2001). Volumes of ag waste pesticide collected peak and begin to decline.
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- 1999** Pounds of household waste pesticide collected exceeds amount of farm waste pesticides collected.
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- 2003** MDA Program budget changed to \$300,000. MDA established Waste Pesticide Committee, comprised of representatives from counties and other agencies, to develop model cooperative agreements.
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- 2004** Initial cooperative agreements with HHWs. Pays for all waste pesticides collected at county HHW events or facilities allotted based on number of farms and households per county.
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- 2007** Waste Pesticide Task Force. MDA required to collect both non-ag/household and ag waste pesticides through Agreements with counties or by MDA collections. Information required to be recorded for every product collected.
- 
- 2009** 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 through MDA offered cooperative agreements. MDA pays supplies, transportation and disposal costs. Also pays counties \$0.25/lb for reasonable overhead costs. MDA holds separate collections in counties that do not want to partner with MDA.
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- 2011** MDA offers counties an additional \$0.10/lb to record product information.
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- 2012** 2012 Legislative session amends statute citing MDA may not hold non-ag events in counties with Joint Powers Agreements that allow residents opportunities to dispose of hazardous waste at neighboring county facilities. Legislature also adopts MPCA hazardous waste indemnification into statute to further protect counties.
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## Refusal or Fees in 2012

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- The MDA refused no waste pesticide.
- 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.

## Program Events and Partnerships in 2012

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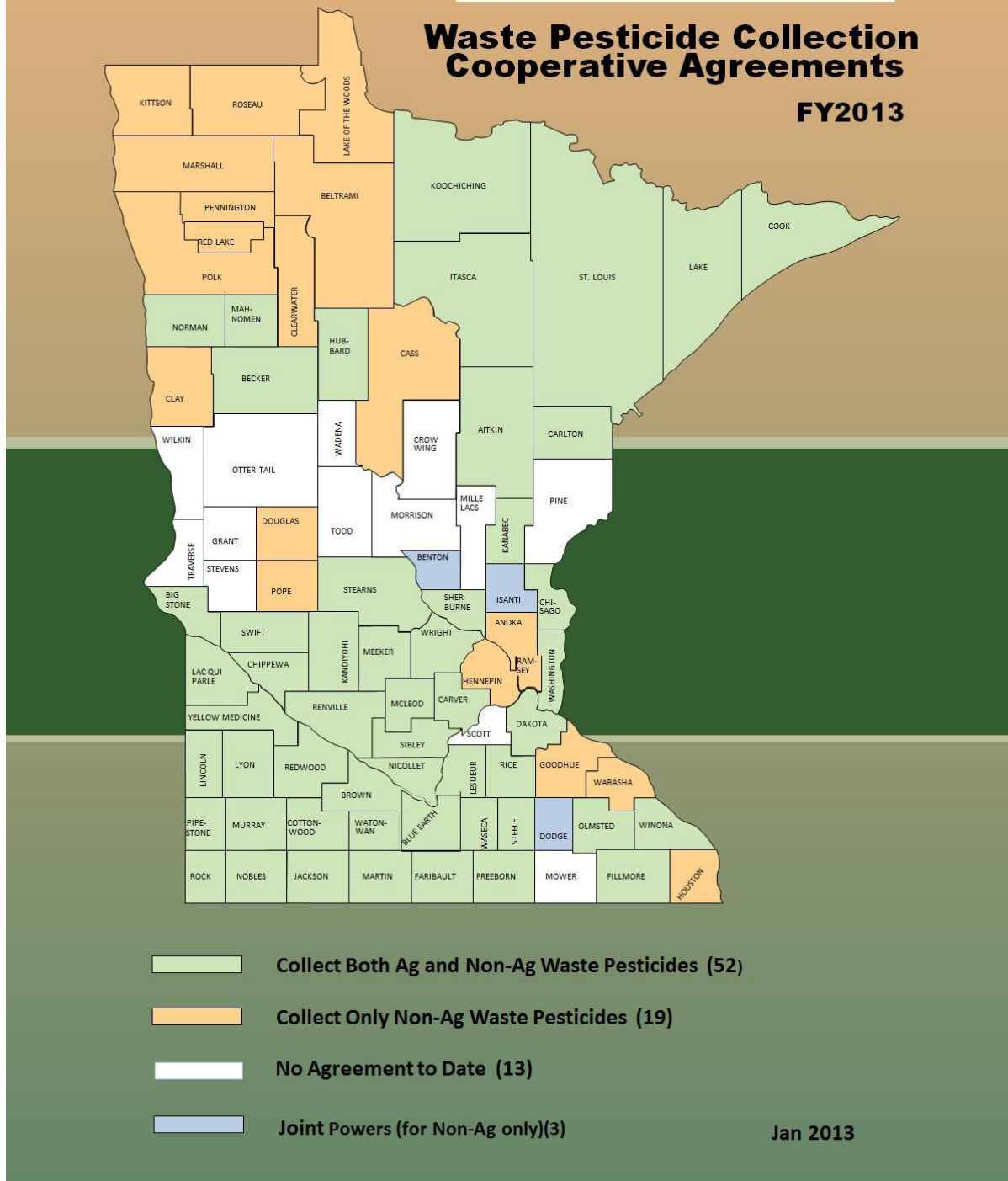
### Cooperative Agreements with Minnesota Counties:

- MDA has cooperative agreements with 71 of Minnesota's 87 counties. Fifty two (52) counties collect both nonagricultural (non-ag) and farm or agricultural (ag) waste pesticides and nineteen (19) counties collect only non-ag waste pesticides. (see map, page 6).
- Sixteen (16) 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 concerns.
- MDA sponsored events were held in thirty-five (35) counties to collect ag waste pesticide in the summer/fall of 2012 in counties that did not agree to collect ag waste pesticides.
- The MDA will conduct thirteen (13) waste pesticide collections in 2013 in counties that have not agreed to collect non-ag waste pesticides. There are three (3) counties that have joint power agreements for household hazardous waste with neighboring counties that are under agreement with MDA and therefore will not receive an MDA event.

# Map-Waste Pesticide Collection Cooperative Agreements



## Waste Pesticide Collection Cooperative Agreements FY2013



## Trends

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- 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 MDA and counties agreeing to do so remains low because of diminished stockpiles statewide.
- The predominant type of waste pesticides collected and disposed of state-wide are non-ag/household pesticides (83%). The majority of these pesticides are collected within six (6) counties of the metro area (70%).
- Lawn care products comprised over half (54%) of all non-ag waste pesticides, by weight, brought for disposal in 2012. This percentage is comparable to the amount of lawn care products collected and disposed of in 2010 and 2011.
- The additional work of completing product inventory records and increased risks of product handling continue to be the reasons non-participating counties choose not to sign the Cooperative Agreement. Counties under agreement continue to cite limited staff attention for inventorying and have asked MDA to analyze the results of data gathered over the last four (4) years.
- Overall participation at MDA stand-alone collections continues to be very low. Farmers have had many opportunities to dispose of waste pesticides and most farms no longer have unwanted pesticides. Homeowners may not recognize the opportunity provided by MDA to dispose of household hazardous waste.

## Key Program Highlights in 2012

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- A ten (10) county region in the northwest signed the Cooperative Agreement for Waste Pesticide Collection after the amended indemnification became effective August 1, 2012.
- The MDA provided funding for the collection and disposal of over 324,000 pounds of waste pesticides delivered to county facilities or county mobile events. An additional 37,000 pounds of waste pesticides were received at separate MDA collection events.
- Per pound collection costs for HHW facilities averaged \$1.44/pound and is much higher (\$3.88/pound) for MDA collections.
- 82% of waste pesticides collected by all parties were non-ag waste pesticides and 18% were ag waste pesticides largely due to MDA's ag focused collections. These totals do not account for the non-ag waste pesticides that non-participating counties (13 counties) continue to collect but do not report to the MDA.
- The MDA provided combined non-ag and agricultural waste pesticide collection opportunities, per statute, in all non-participating counties. Five of these collections exceeded one ton of waste pesticides while half of the events netted 500 pounds or less. Three of the events had no participants. Slightly more than a thousand pounds total of non-ag waste pesticides were received from all thirty five (35) collections



- Non-metro counties averaged 973 pounds of non-ag waste pesticides collected through county or regional facilities in 2012 compared to 1,421 pounds in 2011. Statewide, Hennepin Co. and Washington Co. collected the highest amount of non-ag waste pesticides; 77,671 pounds and 51,046 pounds respectively.
- A Waste Pesticide Disposal Electronic Registration System was developed to compliment the internet accessible Waste Pesticide Electronic Data Entry System implemented in 2011. The new registration system, effective early 2013, 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.
- The accuracy and quality of product information received from counties that use the MDA's electronic data entry system has improved considerably. Many records submitted to MDA on forms by counties that do not use the electronic data entry 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.

## Program Recommendations

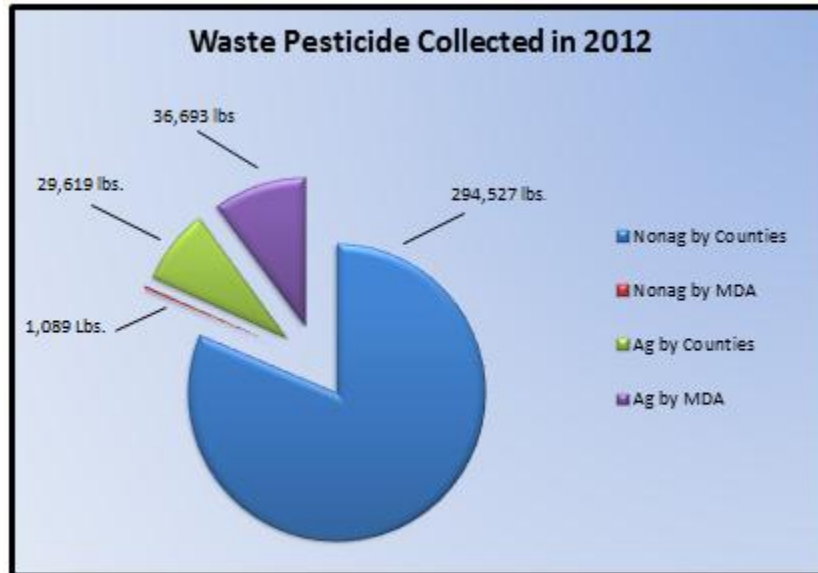
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- 1) Propose suspending the collection of recorded waste pesticide data required in statute while the agency assesses records of waste pesticide collected during the past four years.
- 2) Initiate additional discussions with the MN Pollution Control 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.
- 3) Bring Registrants and retailers into product stewardship discussions to identify ways to decrease impacts of their products delivered as waste and promote business models that generate the least amount of waste pesticides. Discuss packaging, marketing and distribution (better matching package size/product amount to consumer use), discuss modification of registration fees on Ready-to-Use pesticides that contain high volumes of nonhazardous material (water and fertilizer) but cost the same for disposal as concentrated pesticides and discuss shifting the responsibility of managing the collection and disposal of waste pesticide, or aspects of it, from state and local governments to registrants/manufacturers/retailers.
- 4) Continue seeking development of more cooperative agreements.

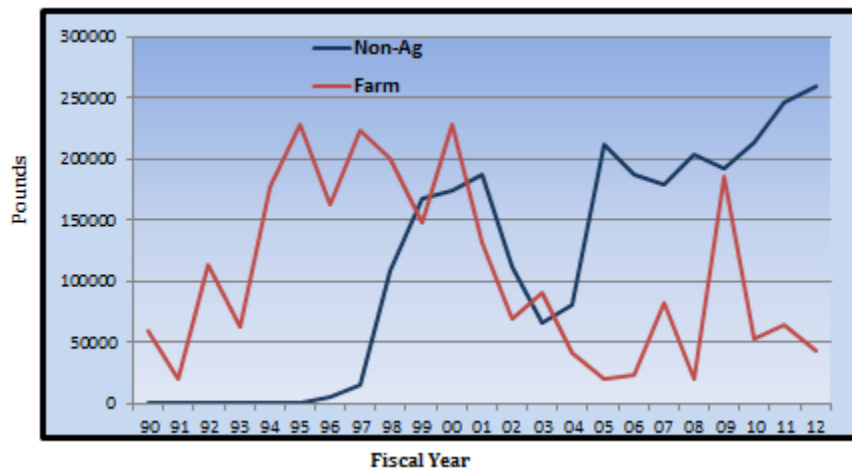
# Charts and Tables

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### Type and Amount of Waste Pesticide Collected in 2012



### Pounds of Waste Pesticides Collected and Disposed Fiscal Year 1990 to 2012



### Waste Pesticide Cooperative Agreements 2012

| Type of Waste Pesticide Collected   | Number of Counties<br>2012 | Number of Counties<br>2011 |
|---|----------------------------|----------------------------|
| Non-Ag and Farm waste pesticides  | 52                         | 51                         |
| Only Non-Ag waste pesticides  | 19                         | 10                         |
| Neither Non-Ag or Farm waste pesticides; declined MDA Cooperative Agreement Offer | 16                         | 26                         |

### Type and Amount of Waste Pesticide Collected 2012

| Collected by HHW or MDA              | Non-Ag         | Farm          | Total pounds<br>2012 | Total pounds<br>2011 |
|--------------------------------------|----------------|---------------|----------------------|----------------------|
| Collected by Counties or HHW Regions | 294,471        | 29,619        | <b>324,090</b>       | <b>291,367</b>       |
| Collected by MDA                     | 1,193          | 36,589        | <b>37,782</b>        | <b>12,722</b>        |
| <b>Total pounds</b>                  | <b>295,664</b> | <b>66,208</b> | <b>361,872</b>       | <b>304,089</b>       |

### Collection Costs 2012

| Cost         | Counties under<br>Cooperative<br>Agreements | MDA Events       | Total 2012       | Total 2011       |
|--------------|---|------------------|------------------|------------------|
| Disposal     | \$375,499                                   | \$61,315         | <b>\$436,814</b> | <b>\$327,876</b> |
| Advertising  | \$1,350                                     | \$6,330          | <b>\$7,680</b>   | <b>\$3,589</b>   |
| Overhead     | \$90,672                                    | \$78,840         | <b>\$169,512</b> | <b>\$133,772</b> |
| <b>Total</b> | <b>\$467,521</b>                            | <b>\$146,485</b> | <b>\$614,006</b> | <b>\$465,237</b> |

**HHW Regions/Counties under Cooperative Agreement in 2012  
Type and Amount of Waste Pesticide collected and ROC paid**

| <b>Region/County Program</b> | <b>Counties in Region</b>   | <b>Pounds Ag Waste Pesticides</b> | <b>Pounds Non-Ag Waste Pesticides</b> | <b>Reasonable Overhead Costs (ROC) Paid</b> |
|------------------------------|---|-----------------------------------|---------------------------------------|---|
| Becker                       | Becker, Norman, Hubbard, Mahnoman   | 2,700                             | 1,565                                 | \$1,066.25                                  |
| Blue Earth                   | Blue Earth, Watonwan  | 762                               | 2,517                                 | \$819.75                                    |
| Brown                        | Brown   | 451                               | 1,085                                 | \$384.00                                    |
| Chisago                      | Chisago/Isanti <sup>1</sup>   | 1,124                             | 2,904                                 | \$1,362.60                                  |
| Clay*                        | Clay  | 255                               | 1,887                                 | \$535.50                                    |
| Mower/Freeborn               | Freeborn  | 1,078                             | 671                                   | \$437.25                                    |
| Kanabec                      | Kanabec   | 25                                | 35                                    | \$15.00                                     |
| Kandiyohi                    | Kandiyohi, Meeker, Renville, Chippewa, Swift, Big Stone, Lac Qui Parle                        | 3,515                             | 2,870                                 | \$1,597.25                                  |
| Lyon                         | Lyon, Lincoln, Redwood, Murray, Rock, Cottonwood, Nobles, Pipestone, Jackson, Yellow Medicine | 3,695                             | 4,084                                 | \$1,944.75                                  |
| McLeod                       | McLeod  | 1,069                             | 3,386                                 | \$1,558.65                                  |
| Olmsted                      | Olmsted, Goodhue*, Wabasha* Dodge* <sup>1</sup>   | 3,508                             | 5,122                                 | \$3,020.50                                  |
| Pope/Douglas*                | Pope, Douglas   | 362                               | 2,276                                 | \$913.30                                    |
| Prairieland                  | Martin, Faribault   | 720                               | 513                                   | \$308.25                                    |
| Rice                         | Rice, Steele, Waseca  | 2,832                             | 3,285                                 | \$2,140.95                                  |
| Sherburne                    | Sherburne   | 520                               | 3,046                                 | \$891.50                                    |
| Stearns/Tricounty North      | Stearns, Benton <sup>1</sup> , Sherburne  | 2,818                             | 6,744                                 | \$2390.50                                   |
| Tricounty S                  | Sibley, Nicollet, LeSueur   | 3,165                             | 1,404                                 | \$1,142.25                                  |
| Winona                       | Winona, Fillmore, Houston*  | 1,948                             | 2,174                                 | \$1,442.35                                  |
| WLSSD                        | St. Louis, Koochiching, Itasca, Aitkin, Carlton, Lake, Cook                                   | 177                               | 16,421                                | \$5,417.70                                  |
| Wright                       | Wright  | 598                               | 3,845                                 | \$1555.05                                   |
| Anoka*                       | Anoka   | 0                                 | 20,968                                | \$5,242.00                                  |
| Carver                       | Carver  | 0                                 | 10,550                                | \$2,637.50                                  |
| Dakota                       | Dakota  | 0                                 | 27,744                                | \$6,936.00                                  |
| Hennepin*                    | Hennepin  | 0                                 | 77,671                                | \$19,417.75                                 |
| Ramsey*                      | Ramsey  | 0                                 | 37,420                                | \$9,236.00                                  |
| Washington                   | Washington  | 0                                 | 51,046                                | \$17,866.10                                 |
| <b>Total</b>                 |   | <b>29,468 lbs</b>                 | <b>294,470 lbs</b>                    | <b>\$90,672.15</b>                          |

\* Collects only Non-ag waste pesticides

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

## Top Ten Active Ingredients in Waste Pesticide Products Collected by Counties under Cooperative Agreements in 2012

**Top 10 HHW Products\***

| Active Ingredient | Pounds** |
|-------------------|----------|
| 2,4-D             | 47,809   |
| MCPPP-P           | 30,704   |
| Dicamba           | 25,586   |
| Glyphosate        | 20,367   |
| Diazinon          | 9,950    |
| Carbaryl          | 8,624    |
| Bifenthrin        | 8,338    |
| Pelargonic Acid   | 8,238    |
| Permethrin        | 7,883    |
| Pyrethrins        | 7,399    |

**Top 10 Farm Products\***

| Active Ingredient | Pounds** |
|-------------------|----------|
| 2,4-D             | 2,619    |
| Atrazine          | 2,056    |
| Glyphosate        | 1,674    |
| Dicamba           | 998      |
| Phostebupirim     | 819      |
| MCPPP-P           | 805      |
| Alachlor          | 761      |
| Tebuthiuron       | 600      |
| Malathion         | 557      |
| Cyanazine         | 520      |

\* HHW and Farm pesticides are categorized at the point of collection by parties processing the waste.

\*\* Pesticide products may contain blends of several active ingredients.

### Minnesota Household Hazardous Waste Facility and Collection



**MDA Sponsored Ag Focused Waste Pesticide Collections in  
Non-participating Counties 2012**

| <b>County</b>  | <b>Total (lbs)</b> |
|----------------|--------------------|
| 1. Goodhue     | 1175               |
| 2. Wabasha     | 624                |
| 3. Dodge       | 205                |
| 4. Mower       | 2815               |
| 5. Houston     | 258                |
| 6. Douglas     | 1599               |
| 7. Pope        | 1245               |
| 8. Stevens     | 230                |
| 9. Traverse    | 1068               |
| 10. Wilkin     | 827                |
| 11. Grant      | 260                |
| 12. Isanti     | 231                |
| 13. Pine       | 61                 |
| 14. Benton     | 116                |
| 15. Mille Lacs | 28                 |
| 16. Morrison   | 1975               |
| 17. Crow Wing  | 1907               |
| 18. Wadena     | 429                |

| <b>County</b>         | <b>Total (lbs)</b> |
|-----------------------|--------------------|
| 19. Todd              | 25                 |
| 20. Otter Tail        | 1085               |
| 21. Clay              | 7126               |
| 22. Polk              | 3005               |
| 23. Red Lake          | 600                |
| 24. Clearwater        | 0                  |
| 25. Beltrami          | 0                  |
| 26. Cass              | 445                |
| 27. Lake of the Woods | 438                |
| 28. Roseau            | 2154               |
| 29. Kittson           | 1071               |
| 30. Marshall          | 377                |
| 31. Pennington        | 5101               |
| 32. Hennepin          | 1083               |
| 33. Anoka             | 192                |
| 34. Scott             | 0                  |
| 35. Ramsey            | 27                 |
| <b>Total</b>          | <b>37,782</b>      |

**Top Ten Active Ingredients in Waste Pesticides Products Collected at MDA Events**

**Top 10 HHW Products**

| <b>Active Ingredient</b>  | <b>Pounds**</b> |
|---------------------------|-----------------|
| 2,4-D                     | 297.5           |
| Dicamba                   | 174             |
| MCPP-P                    | 164             |
| Diazinon                  | 77              |
| Formetanate Hydrochloride | 75              |
| Bifenthrin                | 68              |
| Piperonyl Butoxide        | 63              |
| Phostebupirim             | 62              |
| Tetramethrin              | 62              |
| Permethrin                | 60              |

**Top 10 Farm Products**

| <b>Active Ingredient</b> | <b>Pounds**</b> |
|--------------------------|-----------------|
| Pendimethalin            | 2,034           |
| Metolachlor              | 1,953           |
| Metribuzin               | 1,613           |
| 2,4-D                    | 1,565           |
| Glyphosate               | 1,475           |
| Difenzoquatr             | 1,295           |
| Metalaxyl                | 1,069           |
| Trifloxystrobin          | 1,000           |
| Clopyralid               | 992             |
| MCPA                     | 889             |

\*HHW and Farm pesticides are categorized at the point of collection by parties processing the waste.

\*\*Pesticide products may contain blends of several active ingredients.