MINNESOTA DEPARTMENT OF AGRICULTURE

Waste Pesticide Collection Program
Legislative Report
March 15, 2010

Serving Minnesota Farms,
Minnesota Businesses
and
Minnesota Households

This report has been prepared by the Minnesota Department of Agriculture (MDA) and is submitted to the Minnesota legislative committees with jurisdiction over agriculture finance, pursuant to 2009 Laws of Minnesota, Chapter 94, Article 1, Section 51.

The report offers information for fiscal year (FY) 2009 and FY 2010 (to 12/31/09) rather than for the "previous calendar year" as directed by the 2009 law cited above. The time period difference is made necessary and provides best available information because the MDA Waste Pesticide Collection Program has managed its data since 1991 on a fiscal year basis, and is in a transition to the new calendar year reporting period. Subsequent annual reports will include information on previous calendar year's activities, trends, and recommendations, and the report due March 15, 2011, will report on the entire 2010 calendar year.

Several regional entities have been formed to address recycling and hazardous waste, including pesticides disposal. However, for ease of reading, this report will refer to "counties" in place of the more precise phrase "counties and regional entities".

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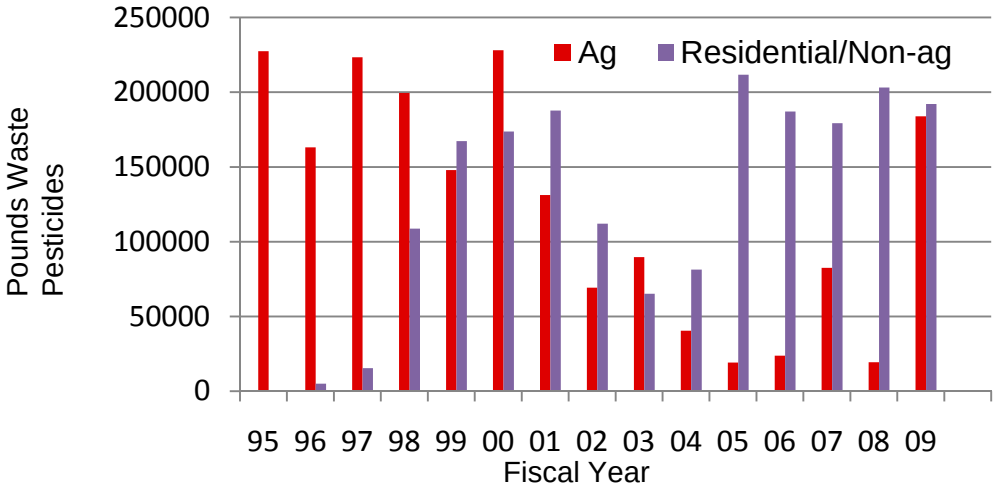
The Minnesota Department of Agriculture (MDA) has coordinated and funded the collection of waste pesticides since the 1990's. As a result, over 4,000,000 pounds of waste pesticides have been collected and properly disposed. Risks to the environment have been minimized and potential costly environmental cleanups have been averted. Credit goes to Minnesota growers, citizens and pesticide users for their stewardship and participation in the program.

Annual Waste Pesticides Collected and Disposed



In the past two years significant changes have been made to the statutes that direct the Waste Pesticide Collection Program. Among those changes is the requirement for a report on the activities of the program.

> By law, the MDA no later than March 15th of each year must report the following:
> Each instance of a refusal to collect waste pesticide or the assessment of a fee to a pesticide end user; and
> 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; a summary of waste pesticide collection trends; and,
> any corresponding program recommendations.

The MDA knows of no instance during FY09 or FY10 (to 12/31/09) where any offered waste pesticide was refused disposal at any county under a cooperative agreement, or at any MDA-sponsored event.

MDA knows of no instance of a refusal occurring in any county not under a cooperative agreement.

The MDA knows of no instance during this same period in which any fee was assessed to a pesticide end user offering pesticide waste for disposal by any county, whether or not under cooperative agreement, or assessed by MDA at any of its sponsored collection events.

PROGRAM STATUS, ISSUES, and TRENDS:

I. Law Changes

Changes to the law that authorizes the MDA Waste Pesticide Collection Program were made by the 2008 and 2009 Minnesota Legislatures (Minn. Stat. 18B.065):

- An annual $50 surcharge on each pesticide registered in Minnesota is deposited into a new "Waste Pesticide Cooperative Agreement Account"; monies in the account are to be used to pay for county costs incurred in collecting waste pesticides under MDA cooperative agreements.

- Cooperative agreements provide to a county MDA Waste Pesticide Control Program funding for annually incurred costs of waste pesticide collection, disposal, transportation, advertising, and supplies.

- Cooperative agreements also allow for MDA payment of reasonable overhead costs incurred by the county.

- Records must be kept of collected waste pesticides, including quantity collected, and either product name and active ingredients or the US EPA product registration number. Records need to be submitted at least annually to MDA.

- "Residential" pesticides are now defined as "nonagricultural" pesticides.

- MDA needs only to collect agricultural waste pesticides at least every other year in each Minnesota county (if the county doesn't do so under a cooperative agreement). MDA can provide more collections if warranted.

- MDA may, but is not required, to charge fees for disposal of unusual types or quantities of waste pesticides, and may limit unusual types or excessive quantities collected under cooperative agreements.

II. Status of Cooperative Agreements with Minnesota Counties :

For FY09-

77 of 87 counties signed cooperative agreements to collect waste pesticide.

(See Figures 1 and 3)

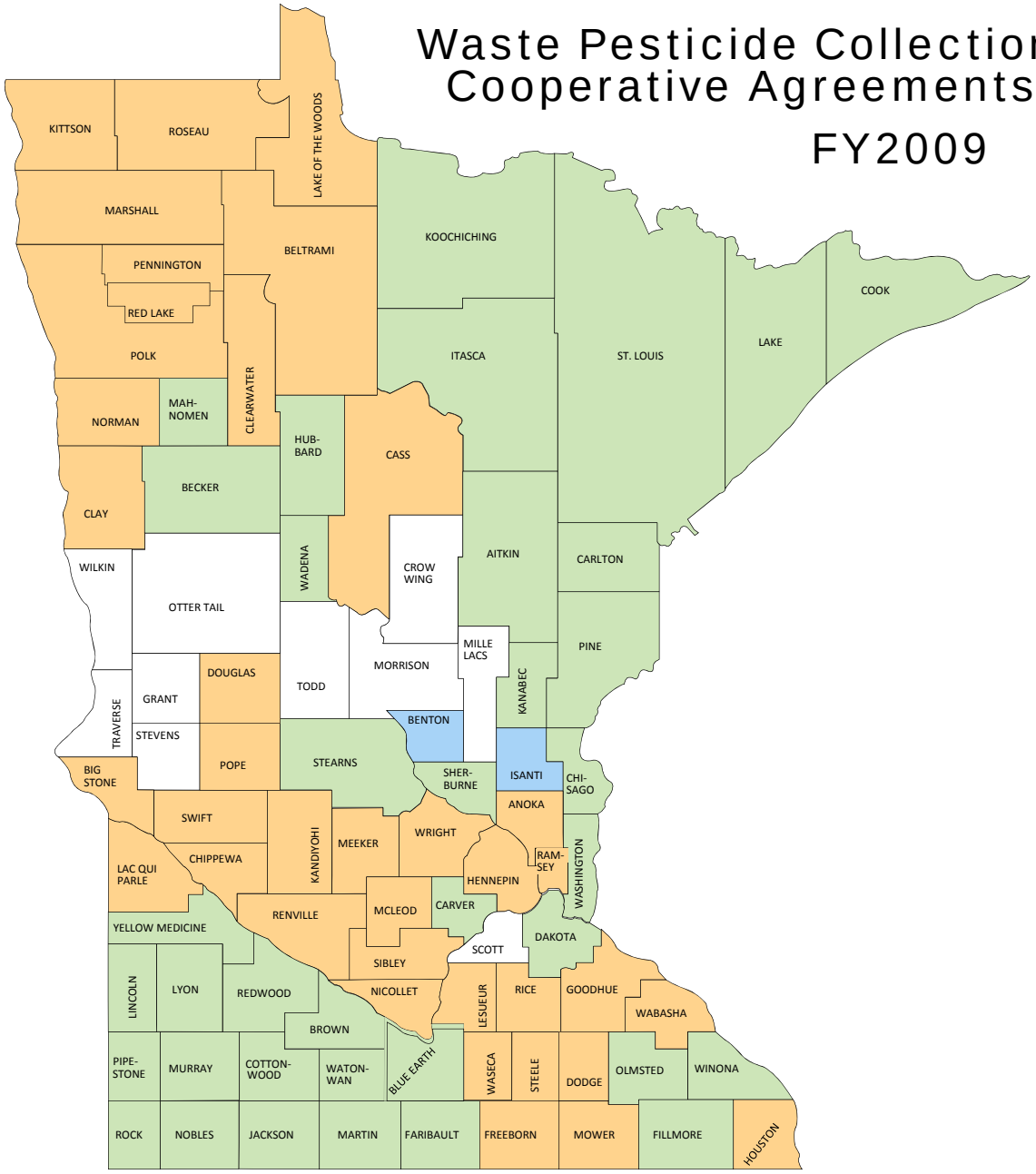
The MDA sponsored an additional 62 collections for both agricultural and residential waste pesticides as required by statute in 2009. All counties were provided with waste pesticide collection and disposal opportunities for agricultural and nonagricultural pesticide.

For FY10 (to 12/31/09)-

63 of 87 counties have signed cooperative agreements. (See Figures 2 and 3)

Under the new amendments to the law, the MDA will sponsor an additional 20 collections for both agricultural and nonagricultural waste pesticides prior to June 30, 2010.

Waste Pesticide Collection Cooperative Agreements FY2009



Agreed to Collect Both Ag and Residential Pesticides (37)

Agreed to Collect Only Residential Pesticides (38)

Unable to Collect Ag or Residential Pesticides (2)

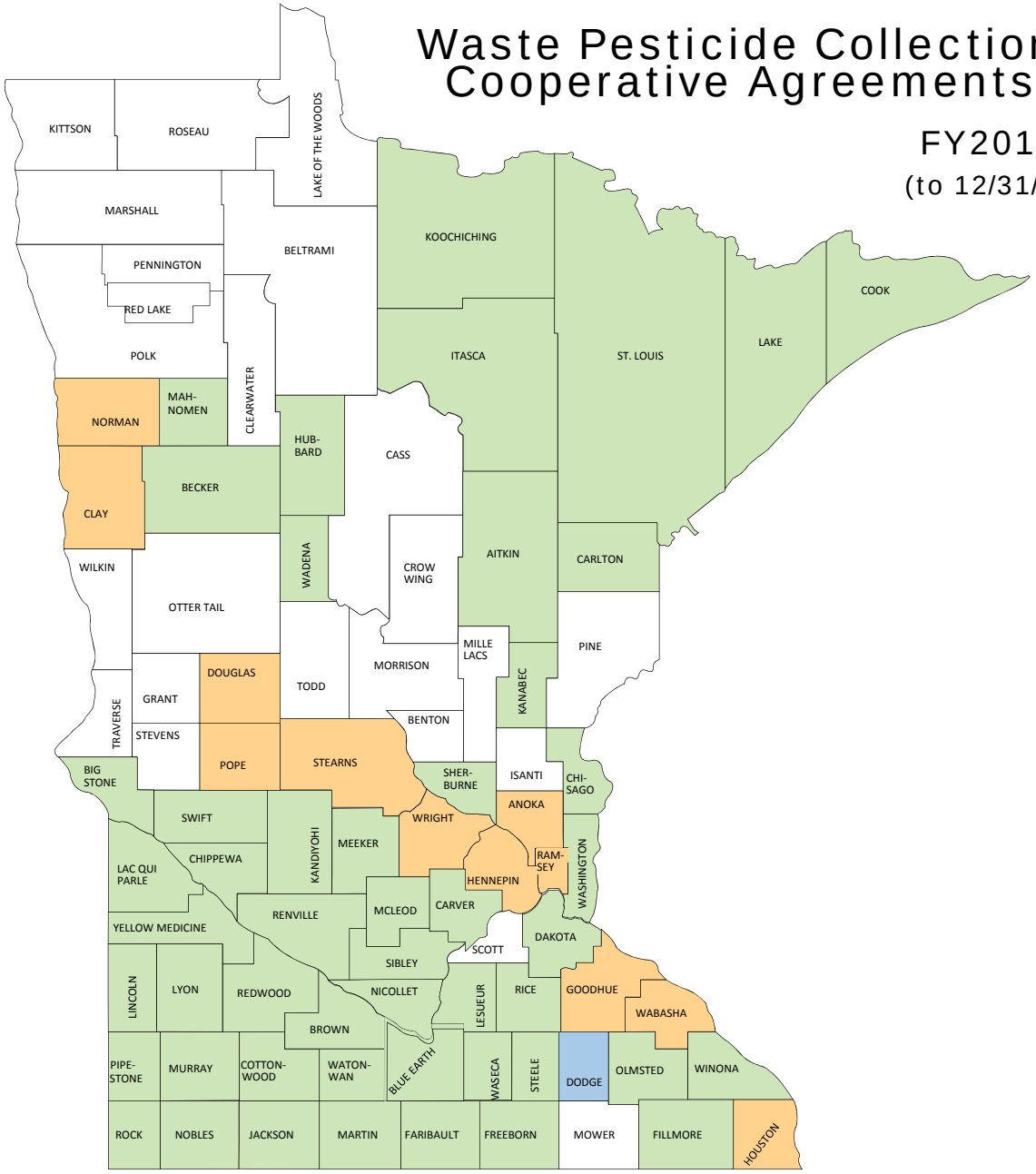
Declined/No Response (10)

Figure 1

June 30, 2009

Waste Pesticide Collection Cooperative Agreements

FY2010
(to 12/31/09)



Collect Both Ag and Non-Ag Pesticides (50)

Collect Only Non-Ag Pesticides (12)

Unable to Collect Ag or Non-Ag Pesticides (1)

No Written Response to Date (24)

Figure 2

December 31, 2009

III. Cooperative Agreement Enrollment Issues / State Coverage & Costs

MDA encouraged all Minnesota counties to sign a cooperative agreement and accept waste pesticides from county residents, farmers, and businesses.

A number of counties have either rejected or failed to respond to MDA's request to participate. However, 14 counties that only participated in residential/nonagricultural waste pesticide collections in FY09 have agreed to collect agricultural waste pesticides in FY10. At the same time, only one county that participated in collecting both agricultural and residential/nonagricultural pesticides in FY09 decided not to continue collecting both.

The consequences of incomplete participation among the counties include: incomplete statewide waste pesticide disposal service, continued need for MDA to provide the more expensive MDA-sponsored collections, and incomplete understanding of the state's waste pesticide disposal situation due to a lack of complete records.

Counties with cooperative agreements can do it cheaper than MDA. For example, MDA-sponsored collection costs range from about $1.36 per pound to over $50.00 per pound, due in large part to the high costs of disposal contractor mobilization, regardless of the amount to be collected. By comparison, county disposal costs under cooperative agreements typically range from about $1.03 to $1.15 per pound. Counties can actually save money by accepting and holding waste pesticides until such time as the disposal contractor is called to pick up a full load for disposal.

IV. Special MDA-Sponsored Collections

MDA sponsored an additional nine waste pesticide collections (serving 11 counties) in FY10 (up to 12/31/09) where collections in FY09 produced amounts greater than 2,000 pounds in each of the nine locations.

V. Trends:

The amount of collected agricultural waste pesticide has decreased through 2003. With renewed MDA collections, which are very successful in reaching agricultural pesticide users, an increase of agricultural pesticide waste collected was observed. Importantly, the concern about the potential of an overwhelming amount of agricultural pesticides being offered for disposal did not materialize.

The amount of collected nonagricultural waste pesticide has steadily increased since 1996 to a level now near 200,000 pounds per year.

The number of counties signing cooperative agreements has decreased in the last year; however, the number of counties agreeing to collect both nonagricultural and agricultural waste pesticides has increased.

State vendor / disposal contractor disposal costs (per pound of waste) remain low when compared to previous year's costs.

A greater volume of consumer-type "ready-to-use" nonagricultural pesticides are now in the marketplace. These products have high water contents and low active ingredient contents. However, disposal costs are based on total weight or volume.

MDA-sponsored collections are effective for the collection of agricultural waste pesticides but not effective for the collection of nonagricultural pesticides. County-run programs are most effective in the collection of nonagricultural pesticide waste. The recent increase in the number of counties that have agreed to collect agricultural waste pesticides may change that situation.

Costs incurred by counties for overhead and advertising, and paid for by the MDA, were reasonable.

VI. Recommendations

- Continue urging non-participating counties to cooperate in the collection of waste pesticides now that a reliable and dedicated fund has been established via the assessment of a surcharge on the registration of all pesticide products.

- Continue to support the collection activities of cooperating counties.

- Explore and establish pilot projects, in cooperation with counties, pesticide users, and the pesticide industry for new and innovative methods to increase the participation of waste pesticide owners in the program and to obtain best available data on pesticide waste issues in Minnesota.

- Continue to obtain more complete waste pesticide collection product and volume data to better understand Minnesota's waste pesticide stream.

- Explore and incorporate electronic web -based technologies to promote access, efficiency, and convenience of waste pesticide disposal opportunities.

Cooperative Agreements

Figure 3

Agreed to Collect	FY09	FY10 (to12/31/09)
Residential/Non-Ag and Ag	37	50
Only Residential/Non-Ag	38	12
Declined/Did Not Respond to MDA Cooperative Agreement Offers	10	24
Unable to Collect Either	2	1

Type and Amount of Waste Pesticide
FY09

Figure 4

	Residential	Ag	Total (lbs)
Collected by Counties or Regions	189,550	34,416	223,966
Collected by MDA	2,585	149,465	152,050
Total (lbs)	192,135	183,881	376,016

Type and Amount of Waste Pesticide
FY10 [to 12/31/09]

Figure 5

	Non-Ag	Ag	Total (lbs)
Collected by Counties or Regions	132,181	18,070	150,251
Collected by MDA	87	20,393	20,480
Total (lbs)	132,268	38,463	170,731

MINNESOTA DEPARTMENT OF AGRICULTURE

MDA SPONSORED COLLECTIONS
FY 09
Combination Ag / Residential Waste Pesticide Collections

Figure 6

County	Ag Waste Pesticides (lbs)	Residential Waste Pesticides (lbs)	Total (lbs)
Anoka	1,408	0	1,408
Benton	1,178	0	1,178
Big Stone	2,362	19	2,381
Beltrami	464	0	464
Cass	103	0	103
Clay*	30,523	0	30,523*
Clearwater	1,775	0	1,775
Chippewa	9,118	0	9,118
Crow Wing	521	0	521
Dodge	585	0	585
Douglas	97	0	97
Freeborn	2,133	0	2,133
Goodhue	2,773	0	2,773
Grant	1,709	0	1,709
Hennepin	7,144	0	7,144
Houston	1,159	0	1,159
Isanti	2,009	0	2,009
Kandiyohi	1,696	0	1,696
Kittson	2,634	0	2,634
Lac Qui Parle	2,476	0	2,476
Le Sueur	1,820	105	1,925
Lake of the Woods	708	0	708
Marshall	4,945	8	4,953
Martin (special)	907	0	907
McLeod	131	0	131

*Clay County- 1 person brought in 21,245 lbs.

County	Ag Waste Pesticides (lbs)	Residential Waste Pesticides (lbs)	Total (lbs)
Meeker	3,257	14	3,271
Mille Lacs	217	4	221
Morrison	732	0	732
Mower	1,558	0	1,558
Nicollet	437	22	459
Norman	9,256	7	9,263
Otter Tail	5,128	0	5,128
Pennington	766	0	766
Polk	12,596	0	12,596
Pope	3,568	0	3,568
Ramsey	3,100	0	3,100
Red Lake	462	0	462
Renville	5,844	0	5,844
Rice	3,595	318	3,913
Roseau	1,060	0	1,060
Sibley	1,901	0	1,901
Steele	1,324	0	1,324
Stevens	1,170	0	1,170
Swift	1,182	0	1,182
Scott	1,054	0	1,054
Todd	903	0	903
Traverse	1,475	3	1,478
Wabasha	2,399	0	2,399
Waseca	1,526	0	1,526
Wilkin	2,515	0	2,515
Total	**147,403**	**500**	**147,903**

WASTE PESTICIDE COLLECTION PROGRAM

MDA SPONSORED COLLECTIONS

Residential Collections
FY 09

Figure 7

County	Ag Waste Pesticides (lbs)	Residential Waste Pesticides (lbs)	Total (lbs)
Benton	118	4	122
Crow Wing**	164	569	733
Grant	75	0	75
Isanti	62	67	129
Mille Lacs	0	14	14
Morrison	10	24	34
Otter Tail**	512	296	808
Scott**	0	946	946
Stevens	102	2.5	104.5
Todd	341	99	440
Traverse	672	61	733
Wilkin	6	2.5	8.5
TOTAL	**2,062**	**2,085**	**4,147**
Yearly Total	**149,465**	**2,585**	**152,050**

Agricultural/Non-Agricultural Collections
FY 10 (to 12/31/09)

Figure 8

County	Ag Waste Pesticides (lbs)	Residential Waste Pesticides (lbs)	Total (lbs)
Clay	*	*	2,966
Kittson	*	*	436
Marshall	*	*	1,866
Norman	*	*	375
Otter Tail	*	*	597
Polk	*	*	4,924
Pope	*	*	2,525
Wilkin	*	*	2,034
Hennepin, Ramsey & Anoka	*	*	4,670
TOTAL			**20,393**

*Data being tabulated.

** Ottertail and Crow Wing HHW Regions, and Scott County, without cooperative agreements, dropped a total of 2,487 lbs. of waste pesticides (Mixed Residential and Ag) at MDA-sponsored collections. Disposal costs of $4,790 were paid by MDA.

Costs

Figure 9

	FY09				**FY10 (to 12/31/09)**		
	Cooperative Agreements	**MDA Sponsored**	**Total**		**Cooperative Agreements**	**MDA Sponsored**	**Total**
Disposal	$231,615	$212,671	$444,286		$137,599	$27,381	$164,980
Advertising	$13,237	$6,190	$19,427		$4,242	$5,228	$9,470
Overhead	$52,591	$118,220 (est)	$170,811		$32,373	$38,872 (est)	$71,245
Total	**$297,443**	**$337,081**	**$634,524**		**$174,214**	**71,481**	**245,695**

Waste Pesticides Collected Under Cooperative Agreements
FY09

Figure 10

TOP 25 NON-AG PRODUCTS			TOP 25 AG PRODUCTS	
ACTIVE INGREDIENT	**POUNDS**		**ACTIVE INGREDIENT**	**POUNDS**
2,4-D	19,198.00		2,4-D	5,140.10
GLYPHOSATE	11,843.60		CARBARYL	2,694.90
DICAMBA	9,969.30		MANCOZEB	2,212.50
DIAZINON	5,914.40		BUTOXYETHYL TRICLOPYR	1,950.00
PHOSTEBUPIRIM	5,065.20		ATRAZINE	1,522.50
PROMETON	4,932.10		TRIFLURALIN	1,121.90
CARBARYL	4,837.50		DICAMBA	946.30
TRIFLURALIN	4,725.40		FORMALDEHYDE	934.00
3,6-DICHLORO-O-ANISIC ACID	3,292.50		CHLORPYRIFOS	766.30
BIFENTHRIN	3,227.10		GLYPHOSATE	752.40
MALATHION	3,119.20		ALACHLOR	746.10
CHLORPYRIFOS	2,892.90		PHOSTEBUPIRIM	742.50
PENDIMETHALIN	2,854.40		2-(ETHYLAMINO)-4-(ISOPROPYLAMINO)-6-(METHYLTHIO)-S	720.00
PIPERONYL BUTOXIDE	2,526.60		ENDOSULFAN	627.40
PERMETHRIN	2,067.60		ALIPHATIC PETROLEUM HYDROCARBONS	589.40
METHOXYCHLOR	1,517.90		MALATHION	497.40
CHLOROTHALONIL	1,460.30		DIAZINON	489.70
N-OCTYL BICYCLOHEPTENE DICARBOXIMIC	1,418.20		COPPER SULFATE	484.70
DDT	1,342.80		DICHLORVOS	482.20
DISULFOTON	1,318.50		PROMETON	459.40
RESMETHRIN	1,245.80		PENDIMETHALIN	370.00
ACEPHATE	1,136.70		3,6-DICHLORO-O-ANISIC ACID	343.80
ALIPHATIC PETROLEUM HYDROCARBONS	1,083.60		CYANAZINE	341.50
DIOUAT	1,012.80		EPTC	340.80
DEET	998.40		ETHALFLURALIN	304.50

Waste Pesticides Collected at MDA Sponsored Collections
FY09

Figure 11

TOP 25 NON-AG PRODUCTS			TOP 25 AG PRODUCTS	
NAME OF ACTIVE INGREDIENT	**POUNDS**		**NAME OF ACTIVE INGREDIENT**	**POUNDS**
GLYPHOSATE	156		MANEB	22,575
2,4,5-T	107		GLYPHOSATE	5,899
2,4,-D	77		TRIFLURALIN	5,736
PENTACHLOROPHENOL	32		ATRAZINE	4,870
CHLOROTHALONIL	30		ZINEB	4,652
CARBON TETRACHLORIDE	26		2,4-D	3,339
ACETOCHLOR	25		EPTAM	3,214
PERMETHRIN	24		BIFENTHRIN	2,572
ISOTOX	17		EPTC	2,552
DDT	15		PROPANIL	2,494
MALATHION	15		CARBOXIN	2,313
PYRETHRIN, ROTENONE	13		TRIALLATE	2,196
CHLORDANE	12		DESMEDIPHAM	1,850
PENDIMETHALIN	12		CHLORPYRIFOS	1,838
CHLORPYRIFOS	10		PYRETHRIN	1,827
METOLACHLOR	10		BENTAZON	1,780
METRIBUZIN	10		COPPER HYDROXIDE	1,767
DIAZINON	9		FOMESAFEN	1,767
PYRETHRIN, ROTENONE	9		PENDIMETHALIN	1,686
DEET	8		DICAMBA	1,585
MCPA	5		BROMOXYNIL	1,506
NICOSULFURON	5		ALACHLOR	1,489
PROPANIL	5		CHLOROTHALONIL	1,464
QUIZALOFOP-ETHYL	5		MALATHION	1,341
ROTENONE	5		CARBARYL	1,336