

**2006**  
**Dane County and City of Madison**  
**Clean Sweep Program**  
**Annual Summary**

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## I. 2006 Season Summary

The Dane County/City of Madison Clean Sweep Program completed a very successful 2006 season. The success was defined by a high degree of productivity and innovation, including:

**Total poundage of material collected** included solid waste, product exchange material, latex paint, and hazardous waste, which totals 583,282 pounds and is a 10.3 % increase from 2005

- Waste was collected from households, very small quantity generators (VSQGs), agricultural concerns, and municipalities throughout the season. A special event was organized for the Village of Deforest, WI.
- The participation of agricultural concerns, as well as businesses remained statistically constant.
- Product Exchange users increased by 26.3%.
- The program recycled approximately 201,000 pounds of latex paint.
- The total customer count for the season was 10,514 people, which is a 11.3% increase from the year before.
- Disposal costs for the program were 12% less than 2005 in spite of a 10.3% increase in waste volume. This is due, primarily, to re-bidding the waste disposal contract for 2006 and the increased use of the product exchange.
- Total costs per pound for disposal (including administration costs) \$0.54 per pound, down 19%
- Total expenditures (including grant money and VSQG payments) are down 13% from 2005.
- Increased video surveillance continues to reduce the occurrence of illegal drop offs.

## II. Waste Collection Methods

This season, the Clean Sweep staff interacted with an average of 102 customers per day, including household drop offs, business and agricultural related visitors, and product exchange users. Each morning the site is opened, boxes, signs, tables and information sheets are arranged to ensure a safe and efficient collection day. Ventilation fans are turned on, the Product Exchange is opened, and the solvent bulking area is set up.

Most customers arrive at the site in their automobiles, park and turn off their ignition. At this time, a Clean Sweep staff member greets and collects the customer's materials on a cart for sorting. Those products deemed to be useable (eg: paint, household cleaners, automotive supplies, lawn and garden needs, etc.) are inventoried and placed in the free Product Exchange area. Flammables, aerosols, latex quarts, and special paints are sorted into their appropriate boxes. Latex gallons are stacked into a 30 cubic yard roll-off to be collected and recycled. Any remaining hazardous materials are sorted, placed into appropriately labeled storage areas, boxes or drums. Many customers bring in used gasoline and other flammable liquids. These are bulked into a 55-gallon metal

solvent drum for fuel blending. The date, number, type of container, and type of waste are logged into a binder for Clean Sweep records, as well as on the container for future cross referencing. Full containers are placed on a semi-trailer awaiting disposal.

Once the semi trailer is full, Veolia Environmental Services, the hazardous waste disposal vendor, hauls the trailer to the facility in Menomonee Falls, Wisconsin for processing. The wastes are disposed of based on the waste disposal hierarchy of beneficial reuse: recycling, treatment, incineration, and lastly land filling. The majority of materials are reused or recycled. Full latex paint roll-offs are trucked by Veolia directly to the paint processor in Roseville, Minnesota.

To accommodate the anticipated increase in customers on the last days of the season, program operations were changed. The Product Exchange was closed on Saturday 10/28 and Tuesday 10/31. On Saturday 10/28/2006, the parking spaces were blocked off, Clean Sweep personnel collected the waste from the customers cars without assistance, and customers stayed in their cars to eliminate foot traffic at the site. Traffic at the site was controlled using highway signs, cones and barricades, allowing for one-way traffic through the site using one driveway for an entrance and one for an exit. A number of trained City of Madison Public Health employees were on hand to assist with the operations of the site. As there was no press coverage, the volume of customers was equivalent to a busy Saturday. Tuesday 10/31/2006 (the actual last day) saw 141 customers, as opposed to 112 on 10/28. Due to the lack of press coverage, the majority of customers surveyed on these last 2 days stated prior knowledge as their sole source of information as to the last day of collection.

### **III. Program Promotion**

In 2006, press releases announced the first and last days of the season, in addition to the DeForest special event conducted during the season. When customers were surveyed, none made mention of either reading or hearing of these special days from a local news source. This suggests that either the press release was not communicated well or was not published fully by local press. The Clean Sweep website, information line and mailings were the primary methods of advertising the Clean Sweep program. The website and information line are available year round and give a description of how, where and what materials to bring to the site. The mailings are sent to local businesses, farmers and other county residents. In addition, of the 100 customers surveyed, 100% of first time visitors learned of the program by way of a personal recommendation.

### **IV. 2006 Season Operational Changes**

The 2006 season included several changes:

- New, larger color signs with a newly design program logo were erected
- Interior of product exchange building was repainted
- More useable acids and bases were channeled to the product exchange area

- The exchange of spray paint was discontinued as a result of vandalism to the product exchange building
- All latex paint collected was recycled or given away including small cans
- Additional security cameras were installed

## **V. Program Totals**

### **2006 was a year of successes for the Clean Sweep Program.**

In 2006, there were more product exchange users, increases in daily number of customers, agricultural businesses, farms and very small quantity generators (VSQG) participation (including municipalities), as well as total pounds of materials collected.

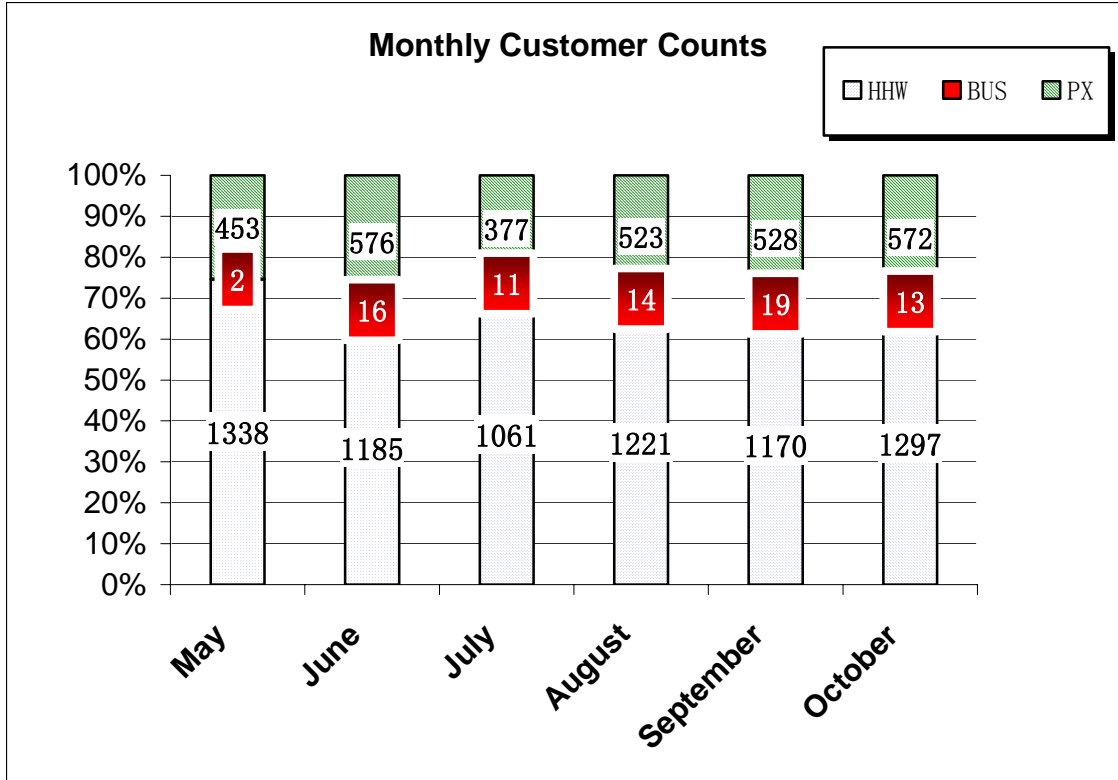
The household portion of the program continued to be the majority of customers and poundage of materials collected.

- 10,514 customers visited the site in 2005.
- 7272 household customers from all over Dane County disposed of latex paint and a wide variety of hazardous wastes.
- 3029 customers participated in the Product Exchange and 76,102 pounds of materials were re-used.
- A total of 75 VSQGs, agricultural businesses, and farmers participated in the program and increased the total poundage of materials collected by 21,637 pounds.

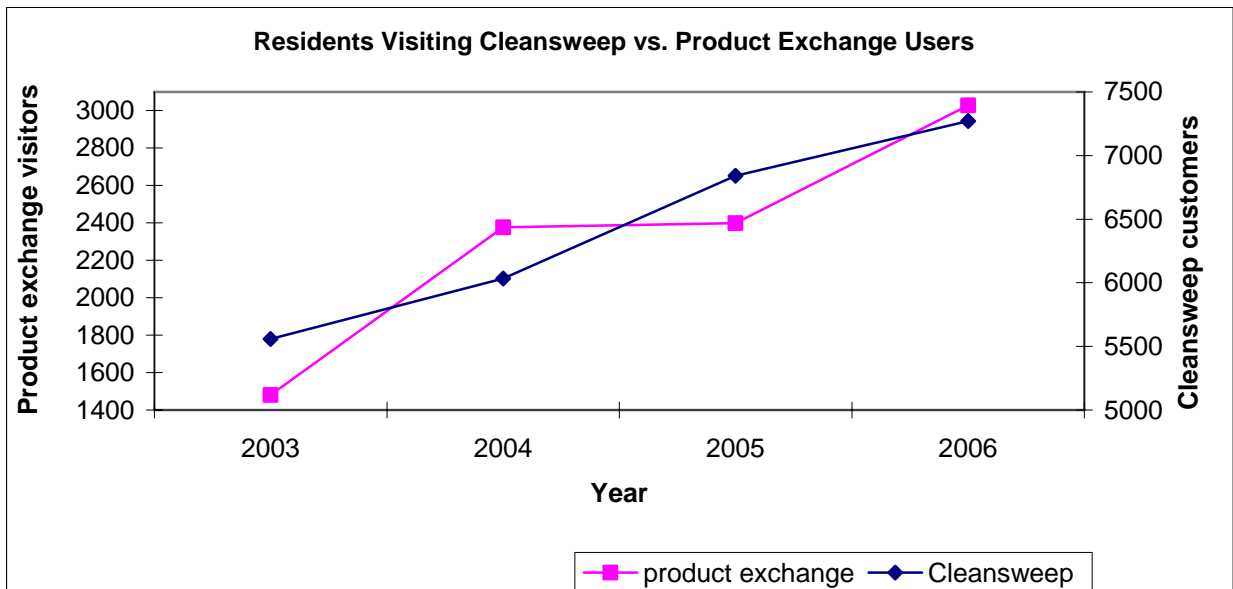
This year Clean Sweep received grant money from the Wisconsin Department of Agriculture, Trade and Consumer Protection (WDATCP) for the collection and disposal of hazardous wastes from agricultural businesses and farmers. This grant money reduced the total season's cost by \$37,000. Money received from VSQG's (agricultural and non-agricultural) reduced disposal costs by \$31,279

### **Customers**

The number of customers who participate in the program varies, with the greatest numbers on Saturdays and the first and last months of the season. Figure 1 shows the distribution of customers by month.



Note: HHW = household hazardous waste customers; BUS = VSQGs; PX = product exchange  
**Figure 1:** Clean Sweep customer distribution by month. Data was taken from the actual customer counts at the site.



**Figure 2:** Trended increase of visitors to the Clean Sweep site from 2003 to 2006.

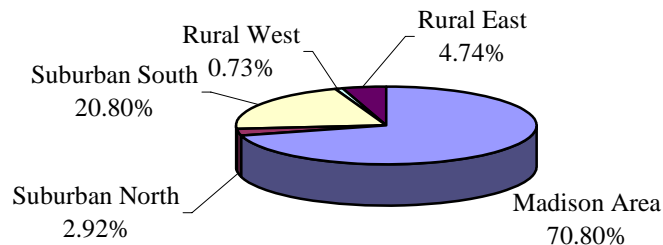
Agri-business and farms make up the agriculture part of the program and VSQGs pertain to non-agriculture businesses. Figure 3 shows what percent each area

contributes to the total customer count. 67.65% of customers participated in the household hazardous waste collection and 24.21% took part in Product Exchange, making up 91.86% of the total customers. Agricultural participants, VSQGs, and Municipalities all made up less than 1% of total customers. Interestingly, 7.45% of customers participated in special events, which suggests that special events can be used effectively to increase total customer counts. Table 1 shows the customer counts by program.

**Table 1. Customer Counts by Program**

Program	Customers
VSQG	46
Municipalities (VSQG)	9
Agricultural Business	8
Agricultural Unit (farm)	12
DeForest	138
Household total	7272
Product Exchange	3029
<b>Total</b>	<b>10,514</b>

**Figure 3. Percent of Customers by Area**



Based on the customer surveys, data from agriculture and VSQG collections, Fig. 3 shows where Dane County customers came from during 2006. Most of the customers came from the Madison area (71%), while approximately 1% came from rural west and 5% from rural east. More customers came from suburban south (21%) than from suburban north (3%). The results indicate that the location of the Clean Sweep facility on the south side of the City of Madison results in the highest use by the suburban south population.

In 2006, the Clean Sweep Program served 3.57% of the estimated 207,450 households in Dane County, down from 5.1% in 2005. This is possibly the result of a record number of new residential units in Dane County over the same time period, as well as less support from local media outlets. The percentile usage shows sustained growth. Increased participation with other municipalities, as well as with VSQGs should be strongly encouraged.

## Materials Collected

During the 104 days of collection, Clean Sweep collected 583,282 pounds of materials. These materials are:

- Paints, which includes both latex and oil-based
- Flammable, ignitable and combustible materials, which includes gasoline, paint thinners, strippers, solvents.
- Acids and corrosive materials
- Oxidizers
- Toxic solids and liquids, which include pesticides, herbicides and heavy metals.
- Aerosols & pressurized containers
- Chlorinated solvents, which includes materials that contain methylene chloride, carbon tetrachloride, or 1,1,1 trichloroethane.
- Dioxins
- NiCad batteries
- Solid waste, which consisted of empty pour off containers, trash from customer collection, and other non-hazardous waste produced on site.

Figure 4 shows the materials collected broken down by waste streams. Paints make up 82% of the total volume. Petroleum-based cleaners and solvents make up 10% and the third largest waste stream, toxic materials, is 4% of the total volume.

**Figure 4: 2006 Clean Sweep Volumes/by Waste Stream**

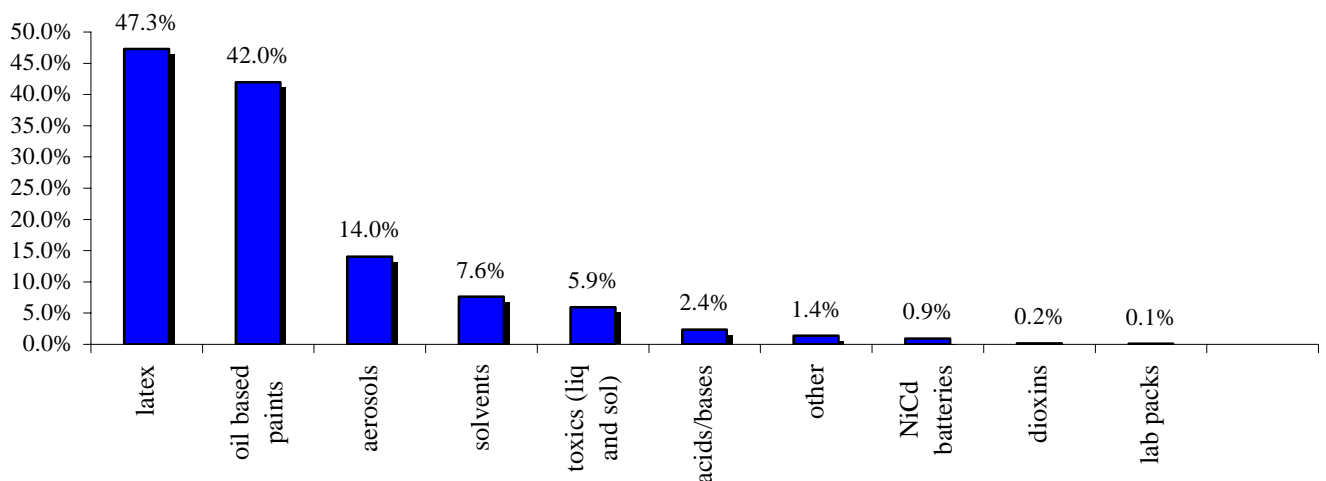
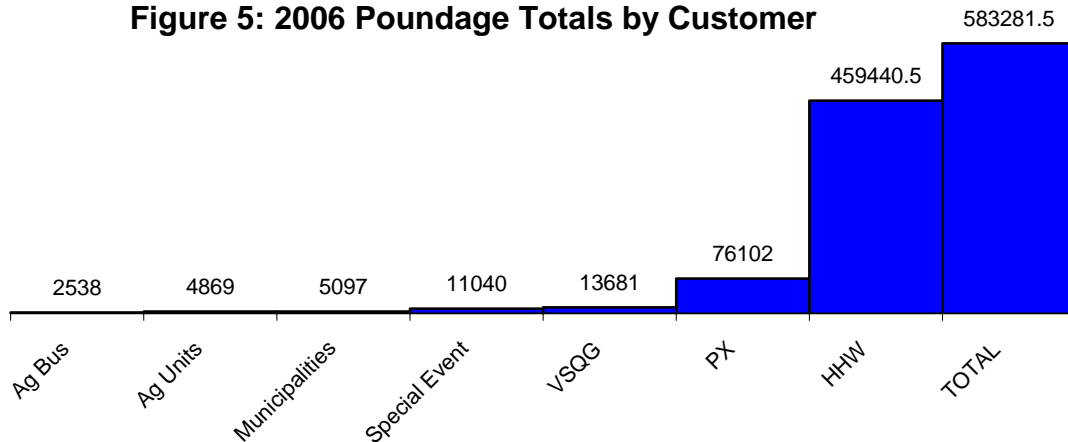


Figure 4 shows the 2006 Clean Sweep volumes separated out by waste streams. Figure 5 is a representation of the source of each waste stream.



**Figure 5: 2006 Poundage Totals by Customer**



### Disposal / Recycling Options

The materials collected at Clean Sweep are taken by outside sources to be reused, recycled or land filled. These sources include:

- Veolia Environmental Services, which is Dane County's contracted hazardous waste disposal vendor. Seventy-nine percent of the materials collected are taken by Veolia while the remaining 21% are reused in the Product Exchange or disposed of by the City of Madison Streets or Madison Metropolitan Sewerage District or at the Dane County Landfill.
- Madison Metropolitan Sewerage District received 2% of material, consisting of diluted acids and bases.
- Non-hazardous solid waste (empty pour-off containers, trash produced, etc. on site), which comprised 3% of the total waste, was collected in 30 cubic yard rollofs for land filling at the Dane County Landfill.
- City of Madison Streets Department recycled approximately 5-6 cubic yards of cardboard.

### Disposal Methods

The wastes are disposed of based on a hierarchy of beneficial reuse:

- Reuse
- Recycle
- Treatment
- Incineration
- Landfill

All latex paint was recycled for 2006. In years previous, latex quarts and smaller containers of latex paint were fuel blended.

An additional \$17,827.60 was spent on supplies and mobilization fees to special events with the Veolia Environmental Services. In years previous, these costs were included in the disposal cost per pound prices.

Table 2 shows only the different waste streams collected by Veolia and the charge for disposal and does not include solid waste, and materials sent to Madison Metropolitan Sewerage District.

**TABLE 2: Summary of Types, Amounts, and Costs of Waste Collected in 2006**

Disposal Method	Waste Description	Quantity	lbs	Cost Per Unit	Total Cost (\$)
R	PCB CONTAINING DEVICES	570 lbs	570	0.7/lb	399
R	LATEX PAINT	34 cubes (51000 lbs)	51000	320/cube	10880
FB	AEROSOLS	11824 lbs	11824	0.85/lb	10050.4
I	FREON	1 cylin (30 lbs)	30	330/cylin	330
I	TOXIC LIQUIDS LOOSEPACK	13293 lbs	13293	1.02/lb	13558.86
FB	OIL BASED PAINT CANS FOR FUEL	80 cubes (120000 lbs)	120000	325/cube	26000
FB	OTHER DISPERSABLE, NON-PUMPABLE FUELS	1x55 (400 lbs)	400	300/55	300
I	DANGEROUS WHEN WET LABPACK	1x5 (10 lbs)	10	60/5	60
I	DANGEROUS WHEN WET LABPACK	1x14 (35 lbs)	35	96/14	96
I	FLAMMABLE LIQUID LOOSEPACK	1266 lbs	1266	0.8/lb	1012.8
I	DIOXINS	741 lbs	741	1.02/lb	755.82
I	TOXIC SOLID LOOSEPACK	9580 lbs	9580	1.02/lb	9771.6
R	MERCURY COMPOUNDS	1x5 (20 lbs)	20	190/5	190
I	LITHIUM BATTERIES	90 lbs	90	4/lb	360
I	OTHER INCINERATION WASTE	1525 lbs	1525	1.45/lb	2211.25
AT	ACID LABPACK	2x55 (350 lbs)	350	225/55	450
AT	ACID LABPACK	2x30 (160 lbs)	160	168.75/30	337.5
AT	ALKALINE LABPACK	2x55 (350 lbs)	350	225/55	450
R	MERCURY	1x55 (250 lbs)	250	760/55	760
I	OXIDIZER LABPACK	516.5 lbs	516.5	2/lb	1033
R	LATEX PAINT	10 rolloffs (150000 lbs)	150000	6,700.00/rolloff	67000
FB	HHW PAINTCANS	46 cubes (69000 lbs)	69000	325/cube	14950
FB	HHW NON-HALOGENATED SOLVENTS	53x55 (21200 lbs)	21200	95/55	5035
I	HHW CREOSOTE	1x15 (100 lbs)	100	55/15	55
LF	HHW DIESEL FUEL/HYDRAULIC OIL DEBRIS	184 lbs	184	0.4/lb	73.6
LF	NON-FRIABLE ASBESTOS	224 lbs	224	1.02/lb	228.48
AT	SULFURIC ACID	1x55 (150 lbs)	150	420/55	420
I	2,4-D SOLUTION	1,344.00 lbs	1,344.00	1.45/lb	2038.7
I	AQUEOUS PARAQUAT SOLUTION	2x55 (800 lbs)	800	225/55	450
FB	OIL-BASED PAINT (BULKED)	3x55 (1350 lbs)	1350	165/55	495
I	PESTICIDE/HERBICIDE CONTAM DEBRIS	610 lbs	610	0.9/lb	549
R	ANTIFREEZE (BULK DRUMS)	1165 lbs	1165	0.18/lb	290.34
LF	EMPTY DRUMS	6x55 (300 lbs)	300	20/55	120
I	ORGANIC PEROXIDE LABPACK	1x30 (75 lbs)	75	105/30	105
R	MERCURY DEVICES AND DEBRIS	208 lbs	208	5.5/lb	1144
R	MIXED PCB CAPACITORS AND BALLASTS	720 lbs	720	1.6/lb	1,152.00

**Note:** Disposal methods are as follows: R-Recycled, FB- Fuel Blended, I-Incinerated, LF-Hazardous Waste Landfill, AT-Aqueous Treatment

Over 92% percent of the products brought to the Clean Sweep are reused or recycled in one form or another. Thirteen percent of the materials collected go to the product exchange program. The product exchange program is the best disposal solution since the product is used for its intended purpose. 100% percent of the latex paint was shipped for recycling. Flammable liquids and gases, solvents and special purpose paint were all fuel blended and comprised 7% of the materials brought to the site. Dioxins, toxics, and mercury compounds were incinerated and comprised 4% of total materials collected. Mercury devices and elemental mercury are recycled, and comprised <0.1% of total materials collected. Corrosives, which make up 0.3%, are disposed of through aqueous treatment. Less than 8% of the waste stream is disposed of in incinerators or hazardous waste landfills.

### **Averages & Ratios**

The 10,514 customers served by Clean Sweep were the most in the program's history. Since the start of the program, costs, customer participation, and total material collected has followed an increasing trend. Table 3 shows the total costs and volume of materials collected from 2003 to 2006.

<b>Results</b>	<b>Disposal Cost</b>	<b>Disposal Cost/per lb.</b>	<b>Administrative/Labor Cost</b>	<b>Admin/Labor Costs/lb.</b>	<b>Disposal + Administrative Costs</b>	<b>Cost Per Pound</b>	<b>Total Volume Collected (lbs.)</b>	<b>DATCP Subsidy</b>	<b>VSQG Payments</b>
<b>2003</b>	\$162,997	\$0.40	\$105,600	\$0.26	\$268,597	\$0.66	406,881	\$10,085	\$18,742
<b>2004</b>	\$224,376	\$0.41	\$110,374	\$0.19	\$336,035	\$0.58	582,653	\$14,768	\$27,972
<b>2005</b>	\$221,362	\$0.30	\$122,747	\$0.17	\$344,109	\$0.66	528,778	\$34,000	\$29,922
<b>2006</b>	\$194,952	\$0.33	\$122,395	\$0.21	\$317,347	\$0.54	583,282	\$37,000	\$31,279

Table 4 is a summary of program total from 2003 – 2006 including % change date from 2005 – 2006.

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>% Change from 2005</b>
Total Pounds of Hazardous Waste	529,586	582,653	528,778	583,282	10.3
Total Number of Customers	7,143	8,516	9,447	10,514	11.3
Total Disposal Costs	\$162,997	\$224,376	\$221,362	\$194,952	-12%
Labor, Admin. and Supplies	\$105,600	\$110,374	\$122,747	\$122,395	-0.003
Total Expenditures*	\$227,972	\$294,246*	\$287,044*	\$249,068*	-13%

Note: Total number of customers includes those participating in the Household Hazardous Waste and Product Exchange.

The cost savings from 2005 presented on the tables above is due mainly to the lower cost per pound for waste disposal, increased use of the product exchange, and slight increases in DATCP grant money and VSQG payments.

Funding for the program comes primarily from Dane County landfill tipping fees with additional revenue from DATCP subsidies and VSQG payments.

The site was open 104 days in 2006. An average of 5,608 pounds of material were collected at the site each day. The average pounds per day include non-hazardous solid waste, Product Exchange, and hazardous waste from VSQGs, agricultural businesses, farmers and households. Table 6 shows the cost per collection day.

<b>Table 5: Program Summary: Cost per Collection Day 2003-2006</b>					
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>Percent Change</b>
Number of Collection Days	101	105	104	104	N/A
Pounds of Material Collected per Day	4,028.5	5,549	5,084	5,608	10.3%
Costs per Day of Collection	\$2,659.4 0	\$2,802.3 4	\$2,760.0 4	\$2,394.8 8	-0.13%

Note: the pounds collected per day include all waste streams, in addition to solid waste and waste disposed of at the Madison Metropolitan Sewerage District. The costs per collection day include disposal and administration costs, as well as the WDATCP and VSQG costs received by Clean Sweep.

## **Special Events**

One special event was conducted during the 2006 season. This took place in DeForest on October 14 from 9:00 a.m. – 1:00 p.m. The event was held at in a parking lot at the Fireman’s Park. A total of 138 participated in this successful activity, and approximately 4,100 pounds of hazardous materials were collected for disposal. Latex paint was not collected during the event.

## **VI. Customer Comments**

Clean Sweep collected random surveys from customers throughout the season. Over half of the surveys collected from Dane County Clean Sweep customers showed encouraging and appreciative comments for the personnel and the services offered by the Clean Sweep Program. They particularly commented on the professional but friendly attitudes and behavior of all employees on the site. There were, however, some complaints and recommendations that may help the management staff to improve operation in the future. The following table lists the most common recommendations and complaints we have received through the surveys (from most common to least):

- **Be open longer hours**  
We have had late afternoon hours in the past and these had the lowest utilization of all. The hours of operation have been the same for several years and we have tried to not change them often because this has lead to confusion over when we are open. Finally, with a limited staff, covering extended hours is very difficult.
- **Open during November-April, even just once in a while**  
The Clean Sweep is an outdoor facility and due to weather limitations must close when the temperatures drop and the weather becomes inclement. We do take toxic materials by appointment when there are no other disposal options available. Until an indoor facility is built there appears to be no other viable alternative.
- **Put service in yellow pages of the telephone book, advertise more**  
We are continually updating our web site URL ([www.danecountycleansweep.com](http://www.danecountycleansweep.com)) to make the information about hazardous materials and the Clean Sweep more accessible. Clean Sweep's phone number has been listed in additional sections of the "government" section of the phone book. Additional We will seek to find cost effective ways to advertise more within very limited budget constraints.
- **Accept more non-hazardous material such as computer equipment**  
Many materials collected have alternative disposal sites that collect free of charge. Due to budget constraints, Clean Sweep tries not to duplicate services that are available elsewhere in the County. Brochures are handed out on site that provide information on these alternative sites and Clean Sweep employees encourage customers to take advantage of the information on our web site and hot line

Many customers asked whether the materials from the Product Exchange were free or if customers had to bring materials to drop off to participate in the exchange. The title implies an exchange; however, the materials are there for all customers to reuse.

## **VII. Conclusions**

The 2006 season showed increase in customers and the amount of materials brought in to the program. In fact, record numbers were achieved in all areas. There was a significant increase in users and amount taken from the product exchange this year. That was all achieved, while spending less money on the program. Greater participation in the Product Exchange program meant that more material was recycled with no disposal costs to the program

## VIII. Recommendations

In the 2006 season, the Clean Sweep program was very successful, however could improve. The number of VSQGs as well as Ag units and businesses have not increased over time. This could be for several reasons, however the most likely is a lack of knowledge of the program. The Clean Sweep program, is as stated on a customer response sheet, "one of the best kept secrets in town." To increase awareness, additional outreach programs should be undertaken: reaching out to local realtors, to notify their customers of proper disposal methods for items left by previous owners, reaching to schools, small businesses, and local groups, so that the word spreads amongst those who do not take advantage of the program.

The following are recommendations for the 2007 season:

- a. Continue satellite collection events throughout the county;
- b. Increased outreach to local communities, schools, and businesses;

For the year 2007 collection season, Clean Sweep will service households, small businesses and agricultural units as outlined below. The days and hours of operation will be the same as in the last three years. Small businesses and agricultural customers are accepted on a pre-registration basis only on the dates listed.

### 2007 Program Information

Dates:	May 1 through October 31, 2007 Tuesday, Wednesday, Friday and Saturday
Hours of Operation:	7:30 A.M. to 2:00 P.M.
Location:	The Dane County/City of Madison Clean Sweep Facility is located on the north end of the Dane County Highway Garage property, 2302 Fish Hatchery Road, Madison, Wisconsin, 53713.
What is accepted:	Hazardous waste from households, Very Small Quantity Generator Businesses and agricultural units
Household Materials:	May be brought any day the site is open.
Very Small Quantity Generator Business Waste:	By appointment on any Wednesday. (There is a per-pound charge for materials brought in.) Other days, as time permits, there will be a non-scheduled drop-off fee of \$25.00.

## IX. Appendix

<b><u>2006 Clean Sweep Summary and Totals</u></b>		
	<b>2006 Season</b>	<b>% change from 2005</b>
<b>Customer Totals</b>		
Product Exchange	3,029	26.3
Household Hazard Waste	7,272	6.3
Agricultural Businesses	8	100.0
Agricultural Units (Farmers)	12	-25.0
Municipalities	9	-10.0
Very Small Quantity Generators (VSQGs)	46	17.9
Special Event (Deforest)	138	N/A
<b>TOTAL</b>	<b>10,514</b>	<b>11.3</b>
<b>Poundage Totals</b>		
Product Exchange	7,6102	9.5
Household Hazard Waste	459,440.5	-5.2
Agricultural Businesses	2,538	155.8
Agricultural Units (Farmers)	4,869	59.0
Municipalities	5,097	-55.2
Very Small Quantity Generators (VSQGs)	13,681	14.8
Special Event (Deforest)	11,040	-16.1
<b>TOTAL</b>	<b>572,767.5</b>	<b>10.3</b>
<b>TOTAL Including Product Exchange</b>	<b>583,281.5</b>	<b>10.3</b>