
2010 WORKS!

- HHW Training
- March 23, 2010

Junction City

Joe Cronin

- SW Processing & Planning Unit
- Solid Waste Permits Section

- 785-296-1667

- jcronin@kdheks.gov



www.kdheks.gov

Our vision – Healthy Kansans living in safe and sustainable environments.

HHW Regulations

- K.A.R. 28-29-1100 thru 1107

28-29-1100 Household hazardous waste

28-29-1100

- (a) Applicability

To each facility defined in KSA 65-3402

KSA 65-3402 (z)

“Household hazardous waste facility”

- Established to collect, accumulate and manage HHW

HHW Facility



28-29-1100

- (b) Definitions
 - (1) HHW
 - Household waste
 - Hazardous per K.A.R. 28-31-4(b)



Protects Wood's Natural Beauty

ior
ain
pendent
parent

DANGER
HARMFUL OR FATAL
IF SWALLOWED
COMBUSTIBLE
See Other Cautions
on Back Panel.

Ignitable

Analysis 47-477
Pigment 21%
Raw Ureter
Vehicle 97.2%
Aliphatic Hydrocarbons
Dipentene
Glycol Ethers
Soya Alkyd Resin
Soya Mod. Polyurethane
Resin (Type I)
Tung Oil
Driers
N (Trichloromethyl)
Thiophthalimide
Bodied Linseed Oil
Additives
Tint Colors Less Than 5%

Ignitable

ONE POUND
(net weight)

**100% ACID
PHOSPHORIC
PHOSPHATE**

ANTIDOTE: EXTERNAL: Wash with water.
INTERNAL: Give magnesium, chalk, or white
in water. CALL PHYSICIAN.



FOR PHOTOGRAPHIC OR
TECHNICAL PURPOSES ONLY

MADE IN UNITED STATES OF AMERICA BY
EASTMAN KODAK COMPANY
ROCHESTER, N.Y.

Trade Mark Reg. U.S. Pat. Off.

CAUTION: This acid is of exceptional strength and purity.
It will etch and readily attack the container if its
temperature is allowed to go below 32 degrees F.
IMPORTANT: To make 25% (250 ml) acid, dilute three
parts Glacial Acetic Acid with eight parts water.
E 7 235334

Flashpoint 110° F

Generator Handbook

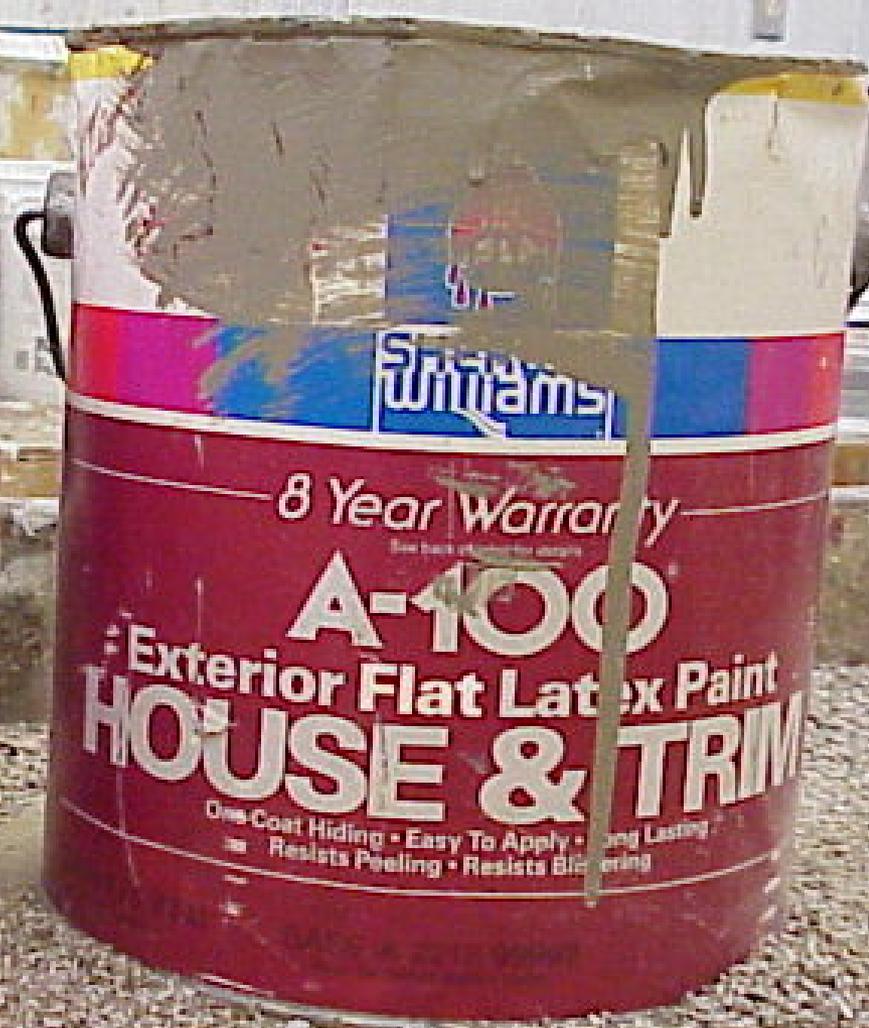
- Page 2 Listed Characteristics
- Page 9 Typical HHW

28-29-1100

- (b) Definitions
 - (2) NHHW

Not HHW

Latex Paint



28-29-1100

- (b) Definitions
 - (3) Small quantity generator-business

Business



28-29-1100

- (b) Definitions
 - (4) USDOT hazard class or division
 - see USDOT presentation

HAZARDOUS WASTE

FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE OR
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:

NAME SHAWNEE COUNTY RECYCLING DEPT

ADDRESS 131 NE 46TH ST.

CITY LOPEKA STATE KS ZIP 66618

EPA ID NO. KS R000012864 EPA WASTE NO. D001

ACCUMULATION START DATE _____ MANIFEST DOCUMENT NO. _____

[R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
(PAINT RELATED MATERIALS)]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!

BRADY SIGNMARK DIV.

Hazard Class

28-29-1100

- (c) Used Oil
- From household DIY or exempt farmers

Managed by K.A.R. 28-31-16 (40 CFR 279)

- Upon receipt at central collection center
- From point of generation from business



**USED MOTOR OIL
ONLY**





Secondary containment (660 gallons)

28-29-1100

- (d) Small quantity generator (SQG) waste
- Manage all SQG the same as HHW or NHHW

SQG - HHW

• Protects Wood's Natural Beauty

DANGER!
HARMFUL OR FATAL
IF SWALLOWED
COMBUSTIBLE
See Other Cautions
on Back Panel.

ior
ain
pellent
arent

Analysis 47-471
Pigment 2.0%

Raw Umber

Vehicle 97.2%

Aliphatic Hydrocarbons

Dipentene

Glycol Ethers

Soya Alkyd Resin

Soya Mod. Polyurethane
Resin (Type I)

Tung Oil

Driers

N (Trichloromethyl)
Thiophthalimide

Bodied Linseed Oil

Additives

Tint Colors Less Than 5%

Generator Handbook pg. 12

- Small Quantity Generator

SQG



Haz-Waste Generator



Small Quantity Generator?



28-29-1100

- (e) Other hazardous waste

PARKS

Toluene

Toluol

Medium strength
solvent

DANGER!
FLAMMABLE LIQUID AND VAPOR.
IRRITANT. HARMFUL OR
FATAL IF SWALLOWED.
See Other Labels On Back And Side Panels.

128 FL. OZ. (ONE GAL.)



28-29-1100

- (f) Temporary collection events
- Direct Supervision of permitted HHW or approved by KDHE





BROOKFIELD



28-29-1101 Household Hazardous waste facility design

- (a) access road
- Accommodate traffic safely and efficiently



All weather road



Traffic Flow



Road and Traffic



28-29-1101 Household Hazardous waste facility design

- (b) receiving area
- Concrete or asphalt





KEEP OFF
NO ENTRY
NO PARKING

ENTER
HERE

EXIT



28-29-1101 Household Hazardous waste facility design

- (c) storage area
- roof







KANSAS CITY KANSAS
HOUSEHOLD HAZARDOUS
WASTE COLLECTION SITE



28-29-1101 Household Hazardous waste facility design

- (d) secondary containment
 - 110% of volume of largest container
- Or
- 10% of total volume of all containers



Recessed floor







28-29-1102 Household hazardous waste facility operations

- (a) Nonhazardous household waste
 - (1) Store and manage

Dickinson County Household Hazardous Waste Facility

Facility Design Plan

Operating Plan

Closure Plan

2363 Jeep Road

Abilene, Ks 67410

Permit # 852

-
- (a)(1)(A) Place is designated area in 1 week



-
- (a)(1)(B) Storage container or area has label

WITH GENERAL
CLEANING
PRODUCTS

WITH
CLEANING
PRODUCTS

FORMER
DE BRONCKHOE
PULP MILL



-
- (a)(1)(C) Inspect Weekly

Attachment X

Shawnee County Household Hazardous Waste Program

Weekly Inspection Form

DATE 1-5-04

TIME 6:10 am

Name of person making log CHARLES W. COLE JR Signature [Signature]

INTERIOR STORAGE

Interior Temperature	60"	
Any Smells?	No	
Containers distinctly marked?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Containers sealed and secure?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Labels proper and in place?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
	<input checked="" type="radio"/> Yes	<input type="radio"/> No

-
- (a)(1)(D) Reuse
 - Original container or compatible for latex
 - Labeled, closed, non-leaking



AUTOMOTIVES



28-29-1102 Household hazardous waste facility operations

- (a)(2) Nonhazardous household waste
 - Requirements for use, recycling, and disposal

-
- (a)(2)(A) Distribute for use with original purpose except where restricted

Exit
EXIT



PLEASE DO NOT
STORE FLAMMABLE
LIQUIDS IN THIS
AREA. ALL LIQUIDS
MUST BE STORED
IN THE DESIGNATED
AREA.



RESTRICTED

LASSO
Monsanto





-
- (a)(2)(B) Disposal is MSWLF

RECYCLED
WASTE
WASTE

STOP
DO NOT TO BE PROCESSED



-
- (a)(2)(B) Disposal-Latex
 - i) solidified
 - ii) <5 gallons



STOP
WAIT TO BE PROCESSED



-
- (a)(2)(C) Sanitary sewer



-
- (a)(2)(D)Manage as HHW

28-29-1102 Household hazardous waste facility operations

- (b) Household hazardous waste
 - (1) store and manage

Dickinson County Household Hazardous Waste Facility

Facility Design Plan

Operating Plan

Closure Plan

2363 Jeep Road

Abilene, Ks 67410

Permit # 852

-
- (b)(1)(A)Place in designated area in 1 week



ES

-
- (b)(1)(B) Label container or storage by USDOT hazard class or division

BASES

ACIDS

CAUTION
CORROSIVES

CAUTION
CORROSIVES



-
- (b)(1)(C) Containers closed if in direct contact



-
- (b)(1)(D) Weekly inspections

LYON COUNTY HAZARDOUS WASTE DEPARTMENT

WEEKLY INSPECTION SHEET

DATE: December 29, 2003

ITEM	ACCEPTABLE	UNACCEPTABLE
1. CONTAINER STORAGE	(✓)	()
2. VOLUME STORAGE LIMIT	(✓)	()
3. CONTAINERS SEALED	(✓)	()
4. LABELS INTACT	(✓)	()
5. SEGREGATION ADEQUATE	(✓)	()
6. EVIDENCE OF LEAKS	(✓)	()
7. UNLOADING AREAS CLEAN	(✓)	()
8. BUILDING SECURE	(✓)	()
9. EXTERIOR STORAGE		
CONTAINERS SEALED	(✓)	()
EVIDENCE OF LEAKS	(✓)	()

28-29-1102 Household hazardous waste facility operations

- (b) Household hazardous waste
 - (2) Distribute for use, recycling or disposal

-
- (b)(2)(A) Distribute for reuse as originally intended





-
- (b)(2)(B) Transferred to TSD by HW transporter

HAZARDOUS WASTE

FEDERAL LAWS PROHIBIT IMPROPER DISPOSAL

IF FOUND, CONTACT THE NEAREST POLICE OR
PUBLIC SAFETY AUTHORITY OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERATOR INFORMATION:

NAME SHAWNEE COUNTY RECYCLING DEPT

ADDRESS 131 NE 46 TH

CITY TOPEKA STATE KS ZIP 66618

EPA ID NO. KS R000012864 EPA WASTE NO. D001

ACCUMULATION START DATE 11-1-03 MANIFEST DOCUMENT NO. _____

[R.O.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG II
(PAINT RELATED MATERIALS)]

D.O.T. PROPER SHIPPING NAME AND UN OR NA NO. WITH PREFIX

HANDLE WITH CARE!



-
- (b)(2)(C) Manifested

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form App

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

K, S, R, 0, 0, 0, 0, 1, 2, 8, 6, 4

Manifest Document No.

04001

2. Page 1 of 1

3. Generator's Name and Mailing Address

SHAWNEE COUNTY HHW
131 NE 46th, TOPEKA, KS 66618

A. State Man

B. State Gen

4. Generator's Phone (785) 286-4381

5. Transporter 1 Company Name
SCHIBER TRUCK CO.

6. US EPA ID Number

I, L, D, 0, 0, 6, 4, 9, 3, 1, 9, 1

C. State Tra

D. Transpor

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Tra

F. Transpor

9. Designated Facility Name and Site Address

SYSTECH ENVIRONMENTAL CORP.
SOUTH CEMENT ROAD
FREDONIA, KS 66736

10. US EPA ID Number

K, S, D, 9, 8, 0, 6, 3, 3, 2, 5, 9

G. State Fa

H. Facility's

316-3

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

12. Containers

No. Type

GENERATOR

a. HM R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
PAINT RELATED MATERIAL

b. R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
PAINT RELATED MATERIAL

01

c.

-
- (b)(2)(D)LDR

-
- (b)(2)(E) Prepared for transportation

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form App

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

K, S, R, 0, 0, 0, 0, 1, 2, 8, 6, 4

Manifest Document No

04001

2. Page 1 of 1

3. Generator's Name and Mailing Address

SHAWNEE COUNTY HHW
131 NE 46th, TOPEKA, KS 66618

A. State Man

B. State Gen

4. Generator's Phone (785) 286-4381

5. Transporter 1 Company Name

SCHIBER TRUCK CO.

6. US EPA ID Number

I, L, D, 0, 0, 6, 4, 9, 3, 1, 9, 1

C. State Tra

D. Transpor

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Tra

F. Transpor

9. Designated Facility Name and Site Address

SYSTECH ENVIRONMENTAL CORP.
SOUTH CEMENT ROAD
FREDONIA, KS 66736

10. US EPA ID Number

K, S, D, 9, 8, 0, 6, 3, 3, 2, 5, 9

G. State Fa

H. Facility's

316-3

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

12. Containers

No. Type

GENERATOR

a. HM R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
PAINT RELATED MATERIAL

b. R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
PAINT RELATED MATERIAL

01

c.

-
- (b)(2)(F)
 - (i) universal waste



-
- (b)(2)(F) (ii) Antifreeze



-
- (b)(2)(F)(iii) Sanitary sewer

Approval by POTW (WWTP)



-
- (b)(2)(F)(iv) Disposal MSWLF empty containers

RECYCLED
WASTE
WASTE

STOP
DO NOT TO BE PROCESSED



-
- (b)(2)(F) (v) Transfer between facilities
 - (b)(2)(F) (vi) KDHE approved

28-29-1102 Household hazardous waste facility operations

- (c) Storage

Below permitted capacity





COMPAQ

COMPAQ

merica

Label on the front of the bin.

Label on the side of the bin.

48005190A-92

LATEX
PAINT
BUILDING

LATEX
PAINT
BUILDING



28-29-1102 Household hazardous waste facility operations

- (d) Signs

PERMIT HOLDER:
SHAWNEE COUNTY
EMERGENCY NO.
911
PERMIT NO.
643H

NOTICE:
DO NOT LEAVE
MATERIAL WITHOUT
AN APPOINTMENT
VIOLATORS SUBJECT
TO:
KSA 21-3722

**SHAWNEE COUNTY
HOUSEHOLD
HAZARDOUS WASTE
FACILITY**

**HOURS OF OPERATION
FIRST SATURDAY OF EVERY MONTH
(EXCEPT JANUARY AND JULY)
9:00AM TO 12:00 NOON**

28-29-1102 Household hazardous waste facility operations

- (e) Training



**28-29-1103 Mobile HHW
collection units (see
satellite/cabinet presentation)**

**28-29-1104 Satellite HW
facilities (see satellite/cabinet
presentation)**

28-29-1105 HHW reporting and recordkeeping

- (a) Annual report
- (b) copy of all plans
- (c) copy of operating plan at facility

28-29-1105 HHW reporting and recordkeeping

- (d) Copy of records
 1. Annual report
 2. Training records
 3. Bills of lading
 4. HW manifests
 5. LDR
 6. Weekly inspections
 7. Changes

Attachment XI

Household Hazardous Waste Collection Facility
Emergency Contingency Plan

Operated By:
Shawnee County

TES

Anne Glogowski

August 1995 Curmode Associates 40 hour HHW training

January 23, 1997 HHW course by Wichita Industrial Safety Council in Wichita

June 4, 1997 Microsoft Office

September 13-18, 1998 SWANA/NAHMMA Hazardous Materials Management Conference in Kansas City, Missouri

February 10-11, 1999 KDHE HHW conference

June 1999 12 hours of Crisis Prevention Institute Training

February 2, 2000 KDHE HHW Conference in Wichita

May 9, 2000 How to Use Adobe Photoshop

December 9, 2000 HHW course in Manhattan

Ins

In

E

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form App

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

K, S, R, 0, 0, 0, 0, 1, 2, 8, 6, 4

Manifest Document No

04001

2. Page 1 of 1

3. Generator's Name and Mailing Address

SHAWNEE COUNTY HHW
131 NE 46th, TOPEKA, KS 66618

A. State Man

B. State Gen

4. Generator's Phone (785) 286-4381

5. Transporter 1 Company Name

SCHIBER TRUCK CO.

6. US EPA ID Number

I, L, D, 0, 0, 6, 4, 9, 3, 1, 9, 1

C. State Tra

D. Transpor

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Tra

F. Transpor

9. Designated Facility Name and Site Address

SYSTECH ENVIRONMENTAL CORP.
SOUTH CEMENT ROAD
FREDONIA, KS 66736

10. US EPA ID Number

K, S, D, 9, 8, 0, 6, 3, 3, 2, 5, 9

G. State Fa

H. Facility's

316-3

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)

HM

a. R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
PAINT RELATED MATERIAL

12. Containers

No. Type

b. R.Q.F. WASTE FLAMMABLE LIQUIDS
N.O.S. 3 UN 1993 PG III
PAINT RELATED MATERIAL

01

GENERATOR

Attachment X

Shawnee County Household Hazardous Waste Program

Weekly Inspection Form

DATE 1-5-04

TIME 6:10 am

Name of person making log CHARLES W. COLE JR Signature [Signature]

INTERIOR STORAGE

Interior Temperature	60"	
Any Smells?	No	
Containers distinctly marked?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Containers sealed and secure?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
Labels proper and in place?	<input checked="" type="radio"/> Yes	<input type="radio"/> No
	<input checked="" type="radio"/> Yes	<input type="radio"/> No

28-29-1106 HHW facility closure

- (a) 60 day notice
- (b) Remove waste within 90 days
- (c) Closure certification

28-29-1107 HW permits

Kansas Household Hazardous Waste Program - Annual Report Form

for State Fiscal Year 2003 (July 1, 2002 to June 30, 2003)

Name of Facility: McPherson Area Solid Waste Utility

County(ies) Served: McPherson

Facility Address: 1481 Pueblo Road, McPherson, KS

Facility Contact: Scott H

Phone #: 620-654-319

Tax#: 620-654-319

e-mail:

Waste Category DOT Class (Class description)	Name of Disposal Contract for each category	Conversion factors used to estimate amounts left in Storage	Wastes in STORAGE (includes all wastes left in storage at the close of the report period) pounds	Wastes DISTRIBUTED through a REUSE Waste Exchange program pounds	HAZARDOUS WASTES CONTRACTED or disposal at a cost					Wastes not contracted as Hazardous Waste or disposal cost				Total Pounds COLLECTED		
					Recycled (HW) i.e. batteries pounds	Energy Recovery (HW) fuel sub. pounds	Treatment (HW) pounds	Landfilled (HW) pounds	Incineration (HW) pounds	Recycled i.e. batteries, & refining of used oil pounds	Energy Recovery i.e. used oil, fuel substitutes pounds	Treatment and/or disposal through sanitary sewer pounds	Landfilled at Non HAZ MSW LF pounds			
1. NR (Bulk Latex Paints)		12 pounds per gallon													0	
2. NF (Bulk Used Oil)	Victory Oil	8 pounds per gallon								4,800					4,800	
3. Class 2, Div. 2.1 (Sorted Aerosols, Lab/Loose)	Clean Harbors							710							710	
4. Class 3 (Bulk Oil Based Paint)	Clean Harbors	12 pounds per gallon					12,353								12,353	
5. Class 3 (Bulk Fuels/ Fuel Blends)		8 pounds per gallon													0	
6. Class 4, Div. 4.1 (Flammable Solids)		When determining weights of LAB PACKS in Storage don't forget to subtract the drum weight and the absorbent material, to report the NET WEIGHT, or the amount of wastes collected and managed.													0	
7. Class 4, Div. 4.2 (Spontaneously Combustible)																0
8. Class 4, Div. 4.3 (Dangerous when wet)																0
9. Class 5, Div. 5.1 (Oxidizers)	Clean Harbors						38									38
10. Class 5, Div. 5.2 (Organic Peroxides)																0
11. Class 6, Div. 6.1 (Poisons)	Clean Harbors							1,230								1,230
12. Class 6, Div. 6.1 (Dioxin)																0
13. Class 8 (Corrosives, Acids and Bases)	Clean Harbors						240									240
14. Class 8 (Batteries - lead Acid)	Allied Battery		Car batteries, at 30 pounds each								5,640					5,640
15. Class 8 (Sorted Batteries - NiCd)			For all other batteries report actual weight													0
16. Class 8 (Batteries - Dry Cell)															0	
17. NR (Antifreeze)	Clean Harbors	Please note conversion factor used to estimate amounts left in storage, if applicable.													0	
18. NR (Non-Hazardous)	Safety Klean							560								560
19. Other: (Mercury)																0
20. Other: Loose Pack Paints	Safety Klean															0
21. Other:															0	
22. Other:															0	
Total pounds Managed:			0	0	0	0	278	14,143	710	10,440	0	0	0	0	25,571	

Additional Program summary results:			
Annual Operational Costs for the year (July 1, 2002 - June 30, 2003):			
A. Disposal Cost:	\$25,681.00	E. Public Education/Advertising:	\$0.00
B. Salaries:	\$8,625.00	F. Physicals:	\$0.00
C. Equipment/Supplies:	\$2,425.00	G. Training:	\$295.00
D. Overhead (Admin & Util):	\$0.00	H. Other:	\$0.00
TOTAL ANNUAL OPERATIONAL COSTS:		\$37,026.00	
How many hours did volunteers save?			
Total Number of Participants for the year (July 1, 2002 - June 30, 2003)		401	