

2023 Fall County HHW Events and Other Disposal Options



Fall 2023 Mobile HHW Analysis Season Report



Tennessee Department of Environment & Conservation | *May 2024*

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Overview

Since the program's inception in 1993, the Tennessee Department of Environment and Conservation (TDEC) continues to provide the Tennessee Household Hazardous Waste Mobile Collection Event services to counties to aid in the management of household hazardous wastes (HHW). Regulations for HHW are found in Tennessee Code Annotated [Title 68 chapter 211](#). To date, there have been close to 1,500 one-day collection events with over 374,000 Tennessee families safely disposing over 24 million pounds of HHW.

HHW is any unwanted, spent, used household product that can catch fire easily (flammable); eat away at or irritate living tissue (corrosive, both acid and base); react violently with water or other chemicals (reactive); or is poisonous to humans or animals (toxic). Usable household products may exhibit hazardous properties but until they become a waste, they are not appropriate for the HHW program.

The Mobile Collection Service is open to any Tennessee resident and is limited to households. Businesses, institutions, schools, and agri-business operations may not use this service, but can participate as a Very Small Quantity Generator (VSQG) which can assist with reduced mobilization fees for proper business waste disposal. Persons or businesses interested in participating in the business waste should refer to the following web site: <https://www.tn.gov/environment/sw-mm-household-hazardous-waste-program/very-small-quantity-generators.html>.

Counties request mobile HHW events using a tiered priority listing provided by TDEC. Interested parties can find the tiered guidelines on the Department's website in the [Mobile HHW Collection Service Guide](#). As the county requests are submitted, the schedule is set trying to maximize access of the majority of the citizens.

Season Participation Analysis

The 2023 Fall HHW (August 26th – November 4th) event season ended with 20 counties hosting 2,415 households versus 17 counties and 1,872 households in Fall 2022. The season saw a 12.89% decrease in participation when evaluated among counties with comparative events in Fall 2022 (see table 3).

Batteries, Oil, Paint, Electronics and Antifreeze (BOPAE) continue to be a focus by the counties through the year. The Department conducted seventeen oil-based paint and eleven fluorescent lamp milk runs in Fall 2023. The frequency and convenience of BOPAE collections provides added service for the citizens and spreads the workload for the collection sites. TDEC provided laminated paint job aids that assisted counties to identify and segregate oil paint that needed to be collected. These tips for identifying latex and water-based paint were useful to help solidify and manage latex paint in the solid waste stream.

In an effort to increase year-round access for HHW disposal, the Department has strategically placed seven temporary HHW containers across the state (Chester, Giles, Blount, McMinn, Loudon, Sevier, and Grainger Counties) that are available to all citizens of Tennessee. In the second half of 2023, the containers collected 16,401 lbs. of HHW via five milk runs at a cost of \$25,483.31.

The season concluded with a total of 171,729 pounds of discarded household hazardous waste that was collected in the combined 53 events (28 milk runs of oil-based paint, bulbs, and other HHW for a total of 79,188 pounds, 5 temporary HHW container disposal events, and the 20 mobile HHW events included in tables 1-3). The Department collected through mobile events and milk runs: oil based paint, fluorescent bulbs, and other HHW at county facilities

throughout the year and then picked up these materials by a contractor for proper disposal that resulted in a total cost of \$254,309.91 (milk runs cost \$25,639.58, other HHW is included in the above paragraph and in tables 1-3).

Summary of mobile HHW materials collected (Additional Data in Tables 1-3)

- Corrosive acids (Sulfuric acid, phosphoric acid, CLR cleaner, muriatic acid, battery acid); 4,692 pounds
- Corrosive Bases (Drano, sodium hydroxide); 4,199 pounds
- Pesticides, herbicides, rat poisons, insecticides, animal medications; 23,976 pounds
- Flammables, gasoline, charcoal lighter, kerosene, paint thinners; 13,110 pounds
- Aerosols, paint, health & beauty aids, insecticides, lubricants, cleaners; 5,540 pounds
- Mercury; 59 pounds
- Oxidizers, bleach, chlorine, pool sanitizers; spa and hot tub sanitizers; 538 pounds

Advertising

The Materials Management Program requires advertising and information sharing. The Department shared as an outreach to the counties, recommendations for advertising and promoting the events to help maximize communication opportunities in the serviced areas. The Program encouraged counties and participating organizations to reach out to public utilities, business employee newsletters, social media, and other forms of information sharing. Additionally, TDEC Central Office shared the schedule at the beginning of the 2023 by using Emma as a platform for sending emails to interested citizens who have shared email addresses. Department drug take back programs coordinated by some counties increased the take back of products and increased awareness of the hazards of pharmaceuticals in households. Additional events associated with HHW collection events at some counties included beneficial item collection with local non-profits and electronics collections.

Safety

TDEC Materials Management Program considers safety the highest priority for state, county, volunteer staff, and participants. The TDEC event staff prioritized safety by wearing high visibility safety vests, making first aid kits available and providing additional event resource materials that encourage site safety. Many event staff workers have received CPR and AED training with a goal for all staff to be prepared for unexpected situations that may occur at mobile events. Clean Harbors, the event contractor, provides an onsite chemist and additional technical staffing who assists with the proper segregation of chemicals and Department of Transportation (DOT) requirements for safe packaging and transportation.

As industries develop household materials that may cause problems for proper disposal or impacts safe management, TDEC searches for consumer-based solutions. Disposal option challenges for sharps, needles, lancets, and auto inject pens caused the Program to expand this option to HHW mobile events. As participants remove these materials from the solid waste stream, the safety of solid waste staff, haulers, landfill staff and maintenance staff is greatly increased. HHW participants appreciate this added option and benefit from this expansion.

The Program urges counties to submit their recommended dates by December 1, 2023 so that staff may schedule the upcoming year’s events by mid-January 2024. The Department will post the mobile event schedule at <http://tn.gov/environment/hhw/schedule> for public review.

Individual Counties-Participation-Table 1 of 3						
Event Date	County	Participation	Cost	cost/HH	cost/lb	lbs/HH
10/7/2023	Anderson	200	\$14,179.79	\$70.90	\$3.04	\$23.31
9/16/2023	Bedford	32	\$1,913.74	\$59.80	\$3.04	\$19.66
10/21/2023	Carter	75	\$5,828.61	\$77.71	\$2.63	\$29.53
10/7/2023	Cheatham	33	\$4,608.04	\$139.64	\$2.48	\$56.33
9/23/2023	Coffee	85	\$6,221.49	\$73.19	\$3.08	\$23.78
10/14/2023	Cumberland	209	\$20,938.19	\$100.18	\$3.47	\$28.91
9/9/2023	Greene	103	\$11,040.15	\$107.19	\$2.32	\$46.23
8/26/2023	Henry	115	\$8,941.13	\$77.75	\$3.63	\$21.43
9/9/2023	Hickman	28	\$2,652.35	\$94.73	\$2.36	\$40.07
10/14/2023	Jefferson	71	\$7,398.59	\$104.21	\$3.18	\$32.77
10/28/2023	Madison	251	\$9,548.59	\$38.04	\$2.72	\$13.96
9/9/2023	Marshall	62	\$8,403.80	\$135.55	\$3.34	\$40.61
9/30/2023	Maury	85	\$9,474.60	\$111.47	\$2.40	\$46.51
9/16/2023	Monroe	35	\$2,108.86	\$60.25	\$3.05	\$19.74
9/23/2023	Montgomery	239	\$19,985.94	\$83.62	\$2.54	\$32.89
9/9/2023	Overton	7	\$1,163.15	\$166.16	\$2.27	\$73.14
11/4/2023	Rutherford	162	\$16,959.81	\$104.69	\$2.38	\$44.02
9/30/2023	Sullivan	185	\$14,269.07	\$77.13	\$2.59	\$29.77
10/21/2023	Sumner	235	\$20,455.97	\$87.05	\$2.42	\$35.92
10/7/2023	Wilson	203	\$17,095.15	\$84.21	\$2.19	\$38.51
	Season Totals	2,415	\$203,187.02	Average \$92.67	Average \$2.76	Average \$34.86

Individual Counties-Participation-Table 2A of 3 (weight in pounds)								
County	Flammable Liquids	Non Flam Liquid	Poisonous Material	Acid	Caustics	Oxidizers	Reactives	Mercury
Anderson	666	428	1,648	242	448	85		8
Bedford	73	37	288	34	32			
Carter	373	363	724	73	136	18	3	1
Cheatham	860		754	43	84			1
Coffee	364	272	643	58	196	92		1
Cumberland	796	413	1,998	1,833	236	15	3	
Greene	509	1,302	1,002	362	142	12		30
Henry	321		1,692	160	130	44		1
Hickman	217	345	271	102	26			
Jefferson	241	248	1,233	50	119	22	2	1
Madison	486	614	1,272	106	137	2		1
Marshall	383	438	954	159	208	12		
Maury	445	1,360	1,049	139	253	57		1
Monroe	225	58	159	23	151	40		
Montgomery	1,472	1,627	2,336	176	382	18		5
Overton	273		185	18	21	5		
Rutherford	1,437	2,142	1,741	252	427	24		1
Sullivan	1,062	1,187	2,063	190	233	8		5
Sumner	1,937	1,740	2,209	277	513	55		2
Wilson	970	2,869	1,755	395	325	29	10	1
Season Totals	13,110	15,443	23,976	4,692	4,199	538	18	59

Individual Counties-Participation-Table 2B of 3 (weight in pounds)							
County	Oil Paint	Aerosols/ Compressed Gas	Fluorescent Lamps	Sharps	Dry Cell Batteries	Fire Extinguishers	Total
Anderson	574	376	152	35			4,662
Bedford		53	85	27			629
Carter		170	309	23	22		2,215
Cheatham		98		19			1,859
Coffee	144	116	111	24			2,021
Cumberland	282	339	101	26			6,042
Greene	912	109	273	109			4,762
Henry		49	32	36			2,465
Hickman		98	59	3		1	1,122
Jefferson	105	205	80	21			2,327
Madison	321	353	196	17			3,505
Marshall		317	26	5		16	2,518
Maury	378	236	24	11			3,953
Monroe		24	4		7		691
Montgomery	616	1,012	164	53			7,861
Overton		8		2			512
Rutherford	388	391	135	106	87		7,131
Sullivan		411	325	23			5,507
Sumner	711	773	112	113			8,442
Wilson	575	402	416	71			7,818
Season Totals	5,006	5,540	2,604	724	116	17	76,042

HHW County Participation Comparison Table 3 of 3			
County	Fall 23	Fall 22	Fall 23/22
Anderson	200	149	34.23%
Bedford	32	46	-30.43%
Carter	75	74	1.35%
Cheatham	33	88	-62.50%
Cumberland	209	272	-23.16%
Greene	103	91	13.19%
Henry	115	133	-13.53%
Jefferson	71	51	39.22%
Madison	251	361	-30.47%
Marshall	62	70	-11.43%
Maury	85	87	-2.30%
Monroe	35	55	-36.36%
Overton	7	20	-65.00%
Sumner	235	220	6.82%
Households	1,513	1,717	-12.89%

The Fall 2023 HHW event season ended with 20 counties hosting 2,415 households versus 17 counties and 1,872 households in Fall 2022. A 12.89% decrease in participation from the 2022 Fall season can be seen when evaluated using same counties. Six counties that had a Fall 2023 event did not have an event in Fall 2022.



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