

Used Motor Oil Recycling

The S.C. Solid Waste Policy and Management Act of 1991 (Act) – S.C. Code of Laws § 44-96-160 – requires the S.C. Department of Health and Environmental Control (DHEC) to annually compile a report on the state’s used motor oil recycling program for do-it-yourself oil changers (DIYers). According to the Act, the report must include:

- the amount of used motor oil collected in each county;
- the number of used motor oil collection sites available in each county; and
- a summary of local government programs receiving grant funding from DHEC.

The Act requires that transporters of used motor oil must report to DHEC the amount hauled each calendar year (CY). Grant funding and the solid waste data in this publication are reported by fiscal year (FY). For purposes of this report, however, the amount of used motor oil collected is presented in two ways: 1) by CY11; and 2) by FY12 (July 1, 2011 to June 30, 2012). In South Carolina, only used motor oil generated and recycled by DIYers is counted as part of the state’s MSW recycling rate.

In CY11, DIYers recycled 965,623 gallons of used motor oil at nearly 900 collection sites. The sites are provided by local governments, retail outlets, quick lubes and auto parts stores. Chart 5.1 illustrates the success of the used motor oil collection program for DIYers (by calendar year) while Table 5.2 lists the number of DIY collection sites and amount of DIY used motor oil collected in each county in FY12. The 932,725 gallons of used motor oil collected in FY12 equates to 3,265 tons.

DIYers recycled more than 18.3 million gallons of used motor oil since the program began in 1990.

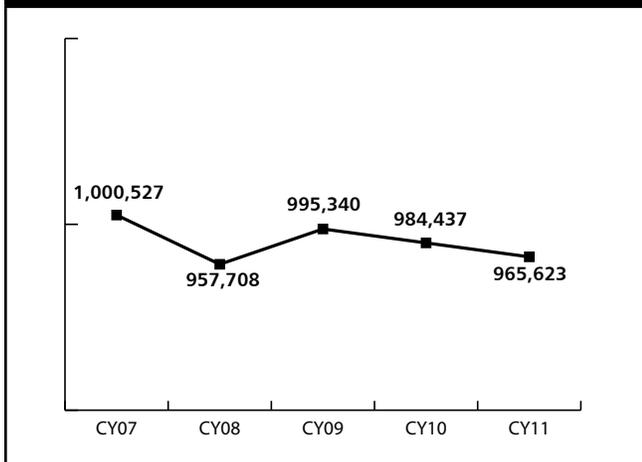
Annual collection data for DIY used motor oil recycling seems to indicate a plateau of about 1 million gallons as seen in Chart 5.1. This leveling off may be attributed to several factors including: 1) the number of DIYers may be decreasing; 2) some local governments may use DIY used motor oil in waste oil heaters and not track or report that volume; and 3) the

frequency of DIY oil changes may be decreasing due to the economy, use of synthetic motor oil and new manufacturer recommendations.

There is a fee of two cents per quart of motor oil collected at the wholesale level. Part of this funding is used to provide a grant program for local governments focusing on DIY used motor oil collection and recycling. In FY12, \$673,856 was awarded to local government programs to support the collection and recycling of used motor oil from DIYers. The amount of individual grant awards for FY12 is provided in Table 5.2. Grant funds are used primarily for the purchase of equipment and supplies associated with used motor oil collection sites. Funds also are used to cover costs for used motor oil filter recycling, public education and professional development of local government recycling coordinators and others.

In addition to used motor oil, most county and some municipal recycling programs also collect used motor oil filters and motor oil bottles from DIYers. The amounts of used motor oil filters and motor oil bottles recycled are not always available as many counties collect and market filters with other metals and bottles with other HDPE plastic bottles and jugs. The data presented in Table 4.7 does not reflect the full extent of used motor oil filter recycling in South Carolina.

CHART 5.1: DIY Used Motor Oil Recycling by CY in Gallons



Overall, there are few barriers to recycling used motor oil, used motor oil filters and motor oil bottles. Markets are not an issue. The S.C. Budget and Control Board has developed a state-term contract that provides vendors for the recycling of used motor oil and used motor oil filters. In fact, the state-term contract vendor for used motor oil collection and recycling pays contract users 65 cents per gallon of used motor oil collected. Other markets – including Santee Cooper – for used motor oil recycling are available as well.

Bottles, if properly drained, can be recycled with other HDPE plastic. In addition to the state-term contract, local scrap dealers and steel mills accept drained/crushed used oil filters for recycling.

Oil recycling equals revenue.

Not all local governments reported, but those that did earned an average of 89 cents per gallon (ranging from no earned revenue to \$1.43) for used motor oil in FY12. Like all commodities, the price depends on quality, quantity and consistency of supply.

Using this average price per gallon, it is estimated that local governments earned more than \$830,000 from the sale of 932,725 gallons of used motor oil in FY12.

TABLE 5.2: Number of DIY Used Motor Oil Collection Sites, FY12 Grant Funding Awarded for DIY Used Motor Oil Recycling Programs and DIY Used Motor Oil Recycled by County

COUNTY/ MUNICIPALITY	NUMBER OF COLLECTION SITES	GRANT FUNDING	GALLONS COLLECTED	COUNTY/ MUNICIPALITY	NUMBER OF COLLECTION SITES	GRANT FUNDING	GALLONS COLLECTED
Abbeville	12	\$6,180	6,089	Kershaw	16	\$21,340	23,465
Aiken	29	\$9,000	40,386	Lancaster	16	\$12,150	27,143
City of Aiken	***	\$4,000	***	Laurens	13	\$23,551	8,059
Allendale	6	\$6,225	2,018	Lee	9	\$0	2,035
Anderson	31	\$29,131	36,737	Lexington	34	\$34,360	92,041
Bamberg	10	\$6,300	4,745	Marion	10	\$7,180	4,916
Barnwell	14	\$11,555	6,752	Marlboro	17	\$6,887	3,839
Beaufort	19	\$17,900	25,774	McCormick	4	\$4,150	3,792
Berkeley	19	\$14,950	47,240	Newberry	18	\$10,175	8,296
Calhoun	10	\$5,725	5,644	Oconee	22	\$0	16,211
Charleston	30	\$10,000	41,859	City of Seneca	***	\$5,000	***
Cherokee	18	\$25,000	5,978	Orangeburg	30	\$23,020	17,813
Chester	15	\$15,005	8,313	Pickens	19	\$41,230	35,012
Chesterfield	13	\$17,214	7,347	Richland	31	\$11,000	30,701
Clarendon	20	\$5,000	8,773	City of Columbia	***	\$6,000	***
Colleton	19	\$6,600	10,864	Saluda	9	\$9,255	8,014
Darlington	20	\$10,000	11,377	Spartanburg	43	\$32,203	58,359
Dillon	15	\$0	7,287	Sumter	21	\$12,206	25,017
Dorchester	20	\$23,905	30,988	City of Sumter	***	\$4,000	***
Edgefield	10	\$9,255	12,013	Three Rivers SWA*	***	\$1,000	***
Fairfield	12	\$17,553	7,925	Tri-County SWA**	***	\$1,000	***
Florence	30	\$7,788	22,939	Union	10	\$0	6,726
Georgetown	22	\$14,333	17,744	Williamsburg	25	\$12,805	8,765
Greenville	41	\$8,750	49,997	York	40	\$16,000	55,323
Greenwood	14	\$16,305	10,225	City of Rock Hill	***	\$17,850	***
Hampton	12	\$7,500	5,847	STATE TOTAL	898	\$673,856	932,725
Horry	43	\$51,320	55,715				
Jasper	7	\$5,000	6,622				

* The Three Rivers Solid Waste Authority (SWA) provides solid waste management services to local governments in Aiken, Allendale, Bamberg, Barnwell, Calhoun, Edgefield, McCormick, Orangeburg and Saluda counties.

** The Tri-County SWA provides solid waste management services to local governments in Edgefield, McCormick and Saluda counties.

*** Grant funding awarded to municipalities primarily is used to promote used motor oil recycling. Collection sites operated and/or used motor oil collected by a municipality are included in the county's total.

NOTE: The majority of sites listed above are provided by local governments, but the total number (898) includes retail outlets, quick lubes and auto parts stores.