



# Used Oil Filter Recycling A Guide for Local Governments

## FACT SHEET

### BACKGROUND

In 2005, the North Carolina General Assembly enacted House Bill 1465 adding oil filters to the list of items banned from landfill disposal in the state. See a copy of the bill at:

<http://www.p2pays.org/ref/38/37333.pdf>.

The bill, with an effective date of Oct. 1, 2009, recognizes that oil filters are highly feasible to recycle. HB1465 also reinforces the disposal ban on used motor oil enacted in 1989. Estimates of residual oil in a standard auto filter range from two to eight ounces. If all of the approximate 14.3 million filters generated in North Carolina each year were disposed, they would introduce between 240,000 and 970,000 gallons of oil into landfills. Fortunately, many filters generated in the state are already being recycled, yielding valuable oil and steel resources for industrial use.

In banning oil filters from disposal, HB1465 placed no obligation on local governments to start oil filter recycling programs. In fact, Section 3 of the law allows a county or city to petition for a waiver from the disposal ban if it can be shown that it would create an economic hardship. However, as a number of local governments in North Carolina have shown, oil filter collection programs are easy to start, relatively inexpensive and supported by a choice of market service providers across the state.

### MARKETS/COLLECTION SERVICES

The first step in initiating any recycling program is securing a market for the materials. For communities already recycling oil in North Carolina, a good first option in finding a filter market is to request this service from their current oil collection company. The vast majority of oil recyclers serving local governments offer filter recycling programs as well.

In addition to their current oil recycler, local governments may also find other markets through a search of the North Carolina Recycling Markets Directory at: <http://www.p2pays.org/DMRM/start.aspx>. As of February 2006, the directory contained more than twenty companies providing oil filter recycling services. In addition to filters and oil, many of these companies also recycle antifreeze and oil absorbents.

### SETTING UP A COLLECTION PROGRAM

Oil filter collection programs require very little equipment or supplies. Filter recycling companies usually provide barrels for storing collected filters. Local governments will want to set up a site accessible to the public ideally immediately adjacent its oil collection area with some containment in case of possible spills. Potential locations include the local landfill, the local transfer station, convenience centers or a permanent household hazardous waste facility. Note that filters may also be accepted as part of an HHW collection event. Local governments will have to balance aspects of convenience and cost in determining where and how many filter collection sites to establish. Some communities choose to let the public drop the filter directly into the barrel, while others handle the filters for the service users.

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## PRICES/COST OF OIL FILTER RECYCLING

The main cost in an oil filter recycling program is paying the collection/processing fee for the picked-up filters. Filter recyclers commonly charge by the full container (most often a 55-gallon drum). Below are some ballpark figures that can help determine the costs of filter recycling:

- A full 55-gallon barrel can contain between 250 and 400 filters, depending on the mix of auto, truck, farm equipment or other filters, and whether or not the filters are crushed. A full barrel can weigh as much as 450 pounds.
- Recyclers generally charge between \$40-85 to pick up a full barrel of filters. Note: these are general estimates; communities should check specifically with filter recycling companies on their exact charges. Transportation is a factor in determining prices and it may be worthwhile to coordinate with adjacent communities to help establish a regional “milk run” for the service provider.
- Using the general numbers above, a ballpark estimate cost is between 10 and 30 cents per filter to have the materials picked up and processed by a market vendor.
- Most filter recyclers will encourage customers to fill up barrels completely and it is certainly to the benefit of community recycling programs to do so, especially with vendors charging a flat rate per barrel.
- The average drop-off collection system collecting used motor oil and oil filters together at all convenience sites can plan on an ratio of one filter for every two to three gallons of motor oil collected (based on 250 filters per barrel). Since most county drop-off systems already collect used motor oil, this ratio can be useful in anticipating collection costs.

## LOCAL GOVERNMENT PROGRAMS

In 2005, 12 counties and five municipalities reported offering oil filter recycling programs in North Carolina, ranging from small to large communities in both urban and rural parts of the state. DPPEA has profiled some of these existing programs, which can be viewed at: <http://www.p2pays.org/BannedMaterials/OilFilters/CaseStudies.asp>.

Some basic information for a few of the communities collecting oil filters is provided in the table below. For a list of communities with oil filter programs, contact DPPEA at (919) 715-6500.

<b><i>Community</i></b>	<b>Year Program Started</b>	<b># of Sites</b>	<b>Current Vendor (in FY 06)</b>	<b>Vendor Cost per picked-up barrel</b>
Orange County	1999	12	Holston Environmental Services	\$40
Cabarrus County	2002	1	U.S. Filter	\$45
Lee County	2000	6	Noble Oil Services	\$77
Transylvania County	1996	3	Holston Environmental Services	\$50

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## **PUBLIC EDUCATION**

As with any recycling program, public education is key to making it effective. Local governments should use standard educational programs to announce and promote filter recycling, supplementing the effort with local press releases, events or other efforts that make the public aware of the service. [Click here for a Bladen County press release](#) about the ban and how to recycle oil filters. Good signage is also very important, both in helping the public find the service and in helping people understand how to recycle the filters properly.

## **GRANTS AND ASSISTANCE**

DPPEA holds a grant cycle usually in the spring of every year to help fund improvements in local recycling programs. Initiating oil filter collection services is an eligible grant idea and one that DPPEA encourages local applicants to consider.

## **WHAT ABOUT PRIVATE GENERATORS?**

Private garages, auto repair shops and “quick lubes” will be expected to adhere to the oil filter disposal ban. Due to the high volume of filters generated at these businesses, local governments will probably find it difficult and relatively expensive to offer them filter recycling services. However, local governments can provide guidance to the private generators, including helping them find market service providers (see markets section above). Communities can also direct private generators to a similar filter recycling fact sheet at: <http://www.p2pays.org/ref/38/37889.pdf>.



The North Carolina Division of Pollution Prevention and Environmental Assistance provides free, non-regulatory technical assistance and education on methods to eliminate, reduce, or recycle wastes before they become pollutants or require disposal. Telephone DPPEA at (919) 715-6500 or (800) 763-0136 for assistance with issues in this fact sheet or any of your waste reduction concerns.