

# FMC Environmental News



## Winter 1999

Established in 1971, the Filter Manufacturers Council (FMC) represents manufacturers of vehicular and industrial filtration products. Initially developed to monitor regulatory and technological developments affecting the industry, the Council has expanded its activities substantially.

The Council has undertaken several environmental initiatives, including the most comprehensive study of used oil filters to date. The study served as the impetus for the easing of regulatory requirements issued by the U.S. Environmental Protection Agency (EPA).

The Council continues to undertake activities which encourage the proper management of used filters, such as operation of its used filter hotline. The Council is administered by the Motor & Equipment Manufacturers Association (MEMA).

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[www.filtercouncil.org](http://www.filtercouncil.org)



## Letters From EPA to Make Recycling Easier

During the first week of June 1998, the Environmental Protection Agency (EPA) released two letters of clarification that affect the recycling industry. The first letter, released June 2, indicated that the processed scrap metal exemption applies to used oil filters. This means that used oil filters destined for recycling and processed in some way (e.g. crushed, shredded, dismantled, or processed by other approved means) are exempt from regulation as a solid waste.

Processed scrap metal is defined as scrap metal that has been manually or physically altered to separate it into distinct materials either to enhance economic value or to improve the handling of materials. The metal also must not contain significant amounts of liquid.

Used oil filters that have been properly drained have been found not to contain significant amounts of liquid. The EPA, however, said that simply draining used oil from the filter would not, by itself, meet the new definition of processing.

In the 1997 processed scrap metal exclusion, EPA believed that removing some of the regulatory barriers for processed scrap metal would create more recycling markets for all types of processed scrap metal. The EPA believes that this policy will encourage recycling of used oil filters and that increased flexibility will benefit all used oil filter recyclers, since the filters that are sent for recycling are generally processed.

In a letter released June 3, 1998, the EPA made clarifications related to the recycling of spent metal fuel filters. In this letter, the EPA indicated that properly drained metal fuel filters meet the regulatory definition of scrap metal and, therefore, are exempt from regulation as a hazardous waste if recycled.

Each of these letters is very important as companies, assisted by the efforts of the Filter Manufacturers Council, strive to increase the recycling rate of filters nationwide. The recycling rate of used oil filters has risen from approximately 0 to 30% in just seven short years. For more information, please call or write the Filter Manufacturers Council. ■

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## Filter Manufacturers Council Goes On Line

Information on recycling oil filters – and much more – is now available on the Internet at the Filter Manufacturers Council's website, [www.filtercouncil.org](http://www.filtercouncil.org)

The FMC recently launched its website, making valuable information available to industry insiders, technicians, and the public at a keystroke or click of a mouse button. In addition to filter recycling information, the site features access to more than 40 technical service bulletins (TSB), environmental information, and member and related association links.

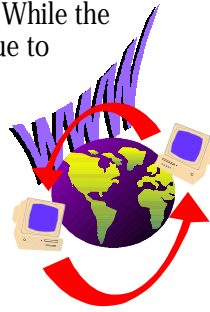
The website provides access to each state's filter recycling regulations and to recyclers and transporters, which are listed by state. Its news page posts the most recent FMC news releases and archives past releases.

Filter recycling information was previously available to companies only by calling the Filter Recycling Hotline

at 800/99-FILTER. While the hotline will continue to answer calls, the website allows immediate access to filter recycling information.

The FMC website also gives access to the 40-plus TSBs published by the Council. The TSBs contain vital information such as cooling system maintenance for heavy-duty engines, diagnosing hydraulic filters with collapsed center tubes, and transmission fluid evacuation services.

Since its debut in June, the site has received more than 30,000 hits. The FMC also plans to add a "frequently asked questions" (FAQ) page and recent environmental news articles to the website. ■



## Trucking Filtration Changes

Filter recycling has increased within the automotive and trucking industries. In an effort to be more environmentally responsible, more fleets are recycling used oil filters today than ever before. The technologies of oil and filtration media have also been improved.

Reducing the use of a product is the first of three steps required for any effective recycling program (reduce, reuse, recycle). The trucking industry has actively pursued new maintenance programs that allow for reduced product usage and improved equipment utilization, while minimizing operating costs. These programs are geared toward extended service intervals (ESI). Within the last ten years, advances in oil and filtration technology have significantly decreased the required frequency of oil and filter changes for diesel engines. These maintenance intervals now occur every 24,000 miles rather than the approximately 15,000 mile interval required a decade earlier.

Today's oils are manufactured with greater total base number (TBN) ratios and contain higher detergent levels, offering better control over sludge and soot fallout – which may result in longer oil life. Filtration manufacturers are utilizing synthetic and multi-layered media which remove finer contaminants, thereby maintaining the integrity of the oil and prolonging engine life.

Over the next ten years it is estimated that – with the support of engine, oil, and filtration manufacturers – the trucking industry could increase service intervals tenfold, to nearly 300,000 miles. With nearly two million heavy-duty trucks on the road today, it is apparent that our waste stream can be reduced significantly with collective partnerships, as illustrated here. ■

## Council Changes Leadership

Brent Hazelett assumed the responsibilities of executive director of the Filter Manufacturers Council in March 1998. Greg Griggs, who held the position for over six years, left to become president of a local chamber of commerce.

Hazelett is a graduate of the University of Northern Iowa and is currently completing his master of public administration degree from North Carolina State University. Robin Marcks-Peloquin, who enters her second year with the Council, assists him. ■

*For more information on  
FMC Environmental News, contact*

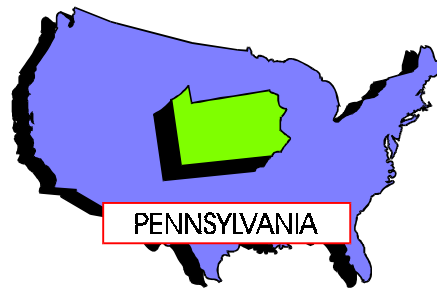


**Brent Hazelett, FMC executive director, or  
Robin Peloquin, regulatory assistant,  
at 919/549-4800, 800/993-4583 (Filter Recycling Hotline),  
919/549-4824 (fax), or [www.filtercouncil.org](http://www.filtercouncil.org) (website).**

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# Partnership With Pennsylvania Continues

On April 1 and 2, 1998 – in cooperation with the American Petroleum Institute (API), the National Oil Recyclers Association (NORA), and the Steel Recycling Institute (SRI) – FMC conducted the first Used Oil and Oil Filter Recycling Workshops in Pittsburgh and Philadelphia, Pa. Both workshops had more than 50 attendees from various businesses and organizations, including municipalities, service stations, and parts stores.

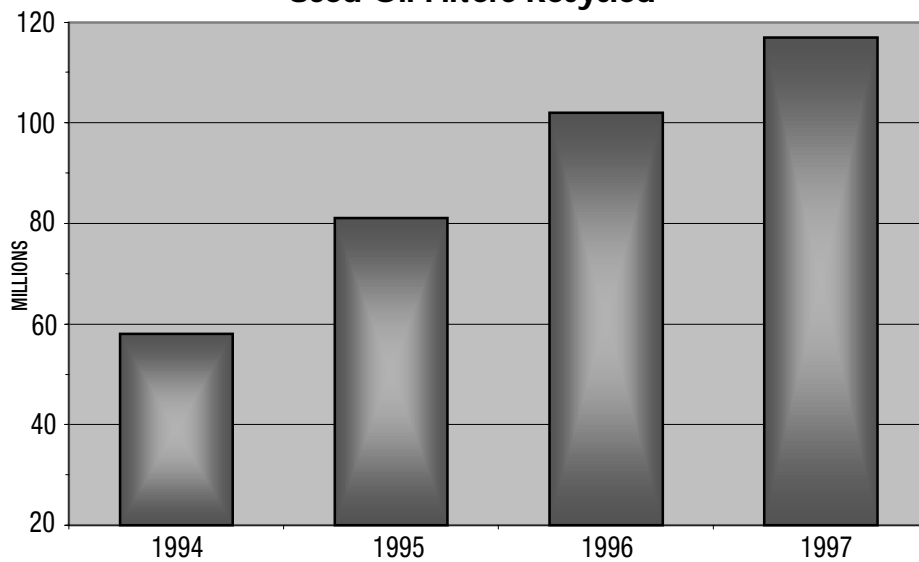


The partnership was formed in 1997 in an effort to recycle the more than 28 million gallons of oil and 15.3

million light-duty oil filters sold in the Pennsylvania Commonwealth each year. Plans are already under way to hold two more workshops in the spring of 1999.

For more information about the partnership and planned activities, please contact Bill LaCour, Pennsylvania Used Oil Recovery Coordinator (717/787-7382), or Brent Hazelett, FMC executive director (800/993-4583). ■

## Used Oil Filters Recycled



### About the Associations –

#### Filter Manufacturers Council (FMC)

Established in 1971, the Filter Manufacturers Council (FMC) represents manufacturers of vehicular and industrial filtration products. Initially developed to monitor regulatory and technological developments affecting the industry, the Council has expanded its activities substantially. The Council has undertaken several environmental initiatives, including the most comprehensive study of used oil filters to date. The study served as the impetus for the easing of regulatory requirements issued by the U.S. Environmental Protection Agency (EPA). The Council continues to undertake activities which encourage the proper management of used filters, such as operation of its used filter hotline. The Council is administered by the Motor & Equipment Manufacturers Association (MEMA).

#### Motor & Equipment Manufacturers Association (MEMA)

Founded in 1904, MEMA is the only association which exclusively represents North American manufacturers of automotive original equipment and replacement parts, service tools and equipment, and automotive chemicals. With supporting offices in Washington, D.C.; Detroit; Brussels, Belgium; Mexico City, Mexico; São Paulo, Brazil; and Yokohama, Japan, MEMA is headquartered in Research Triangle Park, N.C.

The MEMA Environmental Institute is the environmental education and awareness arm of MEMA. The Institute was established to facilitate the proper disposal of used vehicle parts. The Institute administers the Filter Recycling Hotline and Database on behalf of the Filter Manufacturers Council.

### FMC Members

- 3M
- Air-Maze Corp.
- AlliedSignal Automotive
- Allomatic, Inc.
- APT, Inc.
- Baldwin Filters
- Carfel, Inc.
- Caterpillar, Inc.
- Central Illinois Manufacturing
- Champion Laboratories, Inc.
- Delphi Automotive Systems — General Motors Corp.
- Denso Sales California, Inc.
- Donaldson Company, Inc.
- Farr Co.
- FilterTek, Inc.
- Filtran — A Division of SPX Corp.
- Fleetguard, Inc.
- Gonher
- Kaydon Corp.
- Parker Hannifin Corp. — Filtration Group
- Purolator Products — Mark IV Automotive
- Stanadyne Automotive Corp.
- Tomi Industries, Inc.
- Walmi Transforma
- Wix Filtration Products Division — Dana Corp.

# How a Used Oil Filter Is Recycled: The Three Key Steps

Used oil filters no longer represent just another product lingering in the solid waste stream; they are fast becoming a valuable resource for the steel recycling industry. Just as automobiles are shredded, oil filters are now recycled to produce new steel products such as reinforcing bar (rebar) or construction beams.

A short time ago, the majority of used oil filters were disposed in landfills. Today, millions of filters are recycled. Rather than simply meeting the minimum standards for filter disposal, businesses throughout the country are choosing to recycle, even though the majority of states still allow filters to be disposed as solid waste.

Yet, filter recycling is not a simple process. Three key elements are needed – transportation, proper processing, and adequate end markets. Companies involved in used filter management may perform one, two, or all three of these functions.

A company transporting filters simply hauls the used oil filters to be further processed at a different location. The company may or may not process the filters.

Processing involves preparing the

filter for an end use by shredding, crushing, dismantling, utilizing pyrolysis, or a combination of any of these.

The key to effective processing is removing as much residual oil as possible. While properly drained filters only contain a small amount of residual oil, processing is needed to ensure that ferrous metals (e.g. steel) are suitable for end markets such as steel mills and foundries.

End markets produce a new product such as rebar, construction beams, fence posts, or even manhole covers. End markets include integrated steel mills (i.e., mills producing rolled steel products from a combination of iron ore and as much as 25% scrap steel); mini-mills (smaller mills normally operating with electric arc furnaces and which utilize 100% scrap to make products such as rebar); and foundries. These end markets now gladly accept filters as long as the materials have been adequately processed.

Federal regulations require filters to be – at a minimum – punctured through their dome end or anti-drain back valve and then hot-drained. Hot-draining is draining the oil from the filter for a recommended 12 hours at or near-engine operating temperature and above 60 degrees Fahrenheit.

Used filters may also be hot-drained and crushed, or dismantled and hot-drained.

After hot-draining, the large majority of oil is removed from the filter, and federal regulations permit disposal in the solid waste stream at that point. However, the Filter Manufacturers Council encourages recycling of used oil filters to save natural resources and to further protect the environment.

In 1994, the Council established a Filter Recycling Hotline to provide state and federal regulations on used filter disposal, as well as a list of companies that supply filter management services, to consumers.

This service, available to business and government generators of used filters, can be reached by dialing 800/99-FILTER (993-4583). The Council provides other educational information about filter recycling, including brochures informing used oil filter generators about how to choose a company which properly recycles used filters, how to recycle at the shop, and how to recycle at home. The Council also offers a poster that demonstrates proper hot-draining techniques. ■

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## Filter Recycling Hotline Proves Successful

In less than five years, more than 10,000 businesses have contacted the Filter Recycling Hotline to learn more about proper filter disposal

The Filter Manufacturers Council, a North American trade association of 25 vehicular and industrial filter manufacturers, established the toll-free service in the spring of 1994. Callers to the hotline can obtain a summary of their state's oil filter management services, a referral to their state's

governing agency, and three brochures on proper used oil filter disposal.

The hotline's database contains regulations for 62 jurisdictions in the United States and Canada and lists more than 110 companies providing filter management services.

The filter industry developed this environmental education program to assist customers in recycling of used oil filters. The service is sponsored by the Council and is administered by the

Environmental Institute of the Motor & Equipment Manufacturers Association.



The hotline, reached by dialing 800/99-FILTER (993-4583), is operational weekdays from 9 a.m. to 5 p.m. EST. The same information can also be accessed from FMC's website at [www.filtercouncil.org](http://www.filtercouncil.org). ■