

2007

CPG

COMPREHENSIVE
PROCUREMENT
GUIDELINES

Buy-Recycled Series

VEHICULAR PRODUCTS

VEHICULAR



Buying recycled products...

- ...conserves natural resources
- ...saves energy
- ...reduces solid waste
- ...reduces air and water pollutants
- ...reduces greenhouse gases
- ...creates new jobs

If you are a fleet manager, buying recycled products can take you a long way down the road toward protecting the environment and saving resources. Cost-effective, reliable, and high-quality recycled-content vehicular products, such

as re-refined oil, retread tires, recycled engine coolants, and rebuilt vehicular parts are being used with success by many government agencies nationwide.

To make it easier to buy recycled, the U.S. Environmental Protection Agency (EPA) periodically updates the Comprehensive Procurement Guidelines (CPG). Through the CPG, EPA designates items that must contain recycled materials when purchased with appropriated federal funds by federal, state, and local agencies, or by government contractors. Several vehicular products are among these items. EPA's research shows that the items designated in the CPG are of high quality, widely available, and

cost-competitive with virgin products. EPA also issues non-regulatory companion guidance—the Recovered Materials Advisory Notice (RMAN)—that recommends levels of recycled content for these items.

Why Buy Recycled?

Recycling is more than just dropping off your cans, bottles, and newspapers at the curb or at a local collection facility. Diverting recyclables from the waste stream is only the first of three steps in the recycling process. The second step occurs when companies use these recyclables to manufacture new products. The third step comes when you purchase products made from recovered materials.

Buying recycled products results in many environmental benefits. It supports local recycling programs by creating markets for the collected materials that are processed and used to manufacture new products. This creates jobs and helps strengthen the economy; conserves natural resources; saves energy; and reduces solid waste, air and water pollutants, and greenhouse gases that contribute to global warming.



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What Is CPG?

The Resource Conservation and Recovery Act (RCRA) requires procuring agencies to buy recycled-content products designated by EPA in the CPG. Issued in May 1995, the first CPG designated 19 new products (including engine coolants) and incorporated five previously designated items (including re-refined lubricating oils and retread tires) in eight product categories. The first CPG update (CPG II) was published in November 1997. A second CPG update (CPG III) was published in January 2000. Neither of these updates designated any new vehicular products. The third CPG update (CPG IV), published in April 2004, designated seven new products, including rebuilt vehicular parts. The fourth CPG update (CPG V), published in September 2007, designated one new item and revised another designation, but did not designate any new vehicular products. For more information, visit www.epa.gov/epaoswer/non-hw/procure/about.htm.

Procuring agencies include all federal agencies, and any state or local government agencies or government contractors that use appropriated federal funds to purchase the designated items. If your agency spends more than \$10,000 per year on a product designated in the CPG, you are required to purchase it with the highest recycled-content level practicable. The CPG also applies to lease contracts covering designated items. Executive Order (E.O.) 13423 and the Federal Acquisition Regulation also call for an increase in the federal government's use of recycled-content and environmentally preferable products.

Once any new items are designated in a published CPG update, an agency has 1 year to develop an affirmative procurement program (or revise an existing one) to include these new items. By May 1, 1996, agencies were required to develop affirmative procurement programs to incorporate buy-recycled requirements for re-refined lubricating oils, retread tires, and engine coolants. Agencies also were required to revise their affirmative procurement programs to include the new items designated under CPG IV by April 30, 2005. This effort might have involved reviewing specifications for those items and eliminating provisions that pose barriers to procuring them with recycled content (such as aesthetic requirements unrelated to product performance). Since CPG V designates no new vehicular products, agencies are not required to revise this portion of their affirmative procurement program.

The CPG acknowledges that specific circumstances might arise that preclude the purchase of products made with recovered materials. Your agency may purchase designated items that do not contain recovered materials if it determines that: 1) the price of a given designated item made with recovered materials is unreasonably high; 2) there is inadequate competition (not enough sources of supply); 3) unusual and unreasonable delays would result from obtaining the item; or 4) the recycled-content item does not meet the agency's reasonable performance specifications.



How Do I Purchase Recycled-Content Vehicular Products?

EPA issues purchasing guidance in RMANs, which are designed to make it as easy as possible to buy the designated items. The RMANs recommend recycled-content levels to look for when purchasing vehicular products, as shown in the table below. Following the RMANs' recommended levels will help ensure your affirmative procurement program and standards meet the buy-recycled requirements. The RMANs also provide other purchasing guidance. Please refer to <www.epa.gov/cpg/products.htm> for more information on individual products.

Rather than specifying just one level of recycled content, the RMANs recommend ranges that reflect actual market conditions. The recommendations are based on market research identifying recycled-content products that are commercially available, are competitively priced, and meet buyers' quality standards.

Access EPA's online recycled-content products database by going to <www.epa.gov/cpg> and selecting "Supplier Database." See the last section of this guide for other helpful resources.

EPA's Recommended Content Levels for Vehicular Products

VEHICULAR PRODUCT	RECOMMENDATIONS
Re-refined Oil	Use 25% or more re-refined oil base stock for engine lubricating oils, hydraulic fluids, and gear oils.
Retread Tires	<p>Procurement of tire retreading services for agencies' used tire casings: EPA recommends that procuring agencies specify that tire repair and retread services must conform to Federal Specification ZZ-T-441H (or current version).</p> <p>Procurement of tires through competition between vendors of new tires and vendors of retread tires: EPA recommends that procuring agencies specify that retread tires must meet the requirements of Federal Specification ZZ-T-381, "Tires, Pneumatic, Vehicular (Highway) (New and Retreaded)."</p>
Engine Coolants	Reclaim engine coolants onsite or contract for offsite reclamation services. Also request reclaimed engine coolant when having vehicles serviced at commercial service centers and buy it when making direct purchases.
Rebuilt Vehicular Parts	EPA recommends that procuring agencies whose vehicles (passenger vehicles as well as medium- and heavy-duty equipment, including trucks, cranes, off-road vehicles, and military vehicles) are serviced by a motor pool or vehicle maintenance facility establish a service contract to require the use of rebuilt vehicular parts in the agencies' vehicles or establish a program for vehicular parts rebuilding and reuse consisting of either recovering a used vehicular part and rebuilding it, replacing it with a rebuilt part, or contracting to have the part replaced with a rebuilt part. This designation applies to vehicles served by both onsite and commercial facilities.



Myths and Facts About Recycled-Content Vehicular Products

People are often reluctant to try new technologies. Recycled-content products are no exception. Out-of-date and incorrect information about the uses and benefits of recycled-content products lead people to believe that they do not work as well as virgin products. Several agencies using recovered-content products, however, have proven that these products work well and are cost-effective. Some of the common myths about recycled-content vehicular products are dispelled below. At the end of this resource guide, you can find an extensive list of additional resources for more information.

Re-refined Oil

MYTH: Re-refined lubricating oil is inferior to new lubricating oil.

FACT: Re-refined oil is subject to the same stringent refining, compounding, and performance standards as virgin oil. Extensive laboratory testing and field studies conducted by the National Institute of Standards and Technology, the U.S. Army, the U.S. Department of Energy, the U.S. Postal Service, and EPA concluded re-refined oil is equivalent to virgin oil, passes all prescribed tests, and can even outperform virgin oil. The American Petroleum Institute (API) has licensed qualified re-refined oil products, which display the API starburst and/or donut symbol.



MYTH: Using re-refined oil voids manufacturers' warranties.

FACT: All three major U.S. automobile manufacturers (i.e., Ford, General Motors, and Chrysler) now recognize that re-refined oil meets the performance criteria specified in their warranties. Each has issued a written statement explaining that the use of re-refined oil will not void warranties. Warranty requirements are based on performance criteria and not on the origin of the base oil. As long as the purchased oil meets the warranty requirements, the warranty must be honored.

Retread Tires

MYTH: Retreads are less safe than new tires.

FACT: Statistics compiled by the U.S. Department of Transportation show that nearly all tires involved in any tire-related accidents were underinflated or bald. Properly maintained tires, both new and retreaded, do not cause accidents. Retread tires have been safely used on school buses, trucks, cars, fire engines, and other emergency vehicles for years.



MYTH: Retreads have a higher failure rate than new tires.

FACT: Rubber on the road comes from both new tires and retread tires, primarily from truck tires that are overloaded, underinflated, or otherwise abused. New or retread tire failures can be greatly reduced by following all the rules of good maintenance, including proper mating with regard to diameter and tread depth and design, and maintaining proper air pressure.

Recycled Engine Coolants

MYTH: Recycled engine coolant is inferior to new engine coolant.

FACT: Testing shows recycled coolant meets nationally recognized performance specifications for new coolant, such as those established by the American Society for Testing and Materials and the Society of Automotive Engineers. The recycling process reduces the chlorides that come from hard water so that recycled antifreeze might actually be purer than virgin coolant.



MYTH: Recycled coolant costs more than new coolant.

FACT: Recycled coolant might cost less than new coolant if you select the right recycling process for your shop. You must consider the cost of new coolant and your current disposal costs and compare these to the cost of onsite or offsite recycling.



MYTH: Spent coolants are hazardous waste and those handling them must follow hazardous waste regulations.

FACT: Spent coolants are not listed by EPA as a hazardous waste. Some older test data indicated used coolant sometimes had levels of lead requiring it to be managed as a hazardous waste. Most new vehicle radiators are made with aluminum cores and plastic tanks, so there is less opportunity for lead contamination of coolant today than in the past. Still, some states consider coolant to be hazardous. Contact your state environmental agency for further information.

MYTH: Recycled coolant will void manufacturers' warranties.

FACT: Coolant recyclers have worked with automotive and truck engine original equipment manufacturers (OEMs) to get their approval on coolant recycling processes. Check with your recycler for a list of OEM approvals.

Coolant Recycling Processes

The RMAN recommends that procuring agencies establish a program for engine coolant reclamation and reuse either on site or through a service contract. There are three general types of coolant recycling processes: filtration, distillation, and ion exchange. Since variations exist among the various processes, check with the system manufacturer for specifics regarding coolant produced by the system.

Filtration is the most common type of coolant recycling process. It has the lowest initial investment but has high operating costs. Coolants often contain dissolved solids and filtration systems often require pre- and post-filter treatment as well.

Distillation evaporates and recondenses the coolant. This is a slow process with a high initial investment, but it requires less operator time and lower operating costs. Solids and other chemicals are left behind as a residue that must be managed according to applicable laws.

Ion exchange removes solids and other chemicals from the coolant as it passes through a resin bed. Periodically, this bed must be regenerated to remove the buildup. Equipment costs are higher than most other systems. Operating costs are comparable to filtration systems.



How Can I Get More Information?

This resource guide and the following resources on buying recycled-content products can be accessed on the Internet.



Information Available From EPA

- **The CPG:** <www.epa.gov/cpg>. This site describes EPA's effort to facilitate the procurement of products containing recovered materials, including information on CPG and RMANs, and an online database of manufacturers and suppliers of designated items.
- **EPA CPG Program:** <www.epa.gov/cpg/pdf/cpgfs.pdf>. This resource guide provides general information about the CPG and the development of affirmative procurement programs.
- **Environmentally Preferable Purchasing (EPP):** <www.epa.gov/epp>. EPA's EPP program encourages and assists federal agencies in purchasing environmentally preferable products and services. The site explains EPA's proposed guiding principles for including environmental performance in purchasing decision-making, and includes case studies of successful pilot projects in both the public and private sectors.
- **Jobs Through Recycling:** <www.epa.gov/jtr>. EPA's Jobs Through Recycling program stimulates economic growth and recycling market development by assisting businesses and supporting a network of state and regional recycling contacts. This Web site provides information on financing and technical assistance for recycling businesses, as well as other market development tools.
- **Municipal Solid Waste:** <www.epa.gov/msw>. This site includes information on recycling, source reduction, and reuse. It contains state municipal solid waste data and the latest facts and figures on waste generation and disposal.
- **WasteWise:** <www.epa.gov/wastewise>. WasteWise is a free, voluntary EPA program through which organizations eliminate costly municipal

solid waste, benefitting their bottom line and the environment. The program provides hands-on assistance to members to help them purchase or manufacture recycled-content products, prevent waste, and recycle solid waste materials.

- **Federal Register (FR):** <www.epg.gov/cpg/background.htm> and <www.epa.gov/epaoswer/non-hw/procure/about.htm>. Notices promulgating CPG I (60 FR 21370) and RMAN I (60 FR 21386), May 1, 1995. FR notices promulgating CPG II (62 FR 60961) and RMAN II (62 FR 60975), November 13, 1997. FR notices promulgating CPG III (65 FR 3070) and RMAN III (65 FR 3082), January 19, 2000. FR notices promulgating CPG IV (69 FR 24028) and RMAN IV (69 FR 24039), April 30, 2004. FR notices promulgating CPG V (72 FR 52475) and RMAN V (72 FR 52561), September 14, 2007.



Other Government Sources

- **U.S. General Services Administration (GSA) Environmental Products Overview:** <www.gsa.gov/Portal/gsa/ep/channelView.do?pageTypeId=8207&channelPage=/ep/channel/gsaOverview.jsp&channelId=-12972>. GSA offers a variety of environmental products and services to its federal customers to assist them in their efforts to comply with procurement responsibilities outlined in federal environmental laws and regulations. This overview contains information about environmentally oriented products and services in the Federal Supply Service Supply System. To access GSA Advantage!, GSA's Internet-based ordering system, and order any GSA product, visit <www.gsaadvantage.gov>.
- **Environmental Products Guide:** <www.gsa.gov/Portal/gsa/ep/home.do?tabId=2>. This guide is designed to help procurement officials identify environmentally preferable products and services. It features nearly 3,000 items, including many recycled-content products.



- **Tires, Pneumatic for Passenger, Light Truck, Medium Truck/Bus, and Retread Services, Federal Supply Schedule, Group 26, Part 1:** Lists a variety of retread tires available for purchase. For more information, contact GSA.

■ **Office of the Federal Environmental Executive (OFEE):** <www.ofee.gov>. OFEE offers a number of resources to help government agencies learn about CPG-designated products.

- **Closing the Circle News:** This newsletter reports on the government's progress toward an environmentally conscious and friendly approach to recycling, acquisitions, and procurement. For more information, contact OFEE.
- **Greening the Government: A Guide to Implementing E.O. 13101:** <www.ofee.gov/eo/greening.pdf>. This guide provides detailed information on the requirements of E.O. 13101, which established a process for amending the CPG and issuing RMANs. E.O. 13101 preceded E.O. 13423 and established many requirements and definitions that are still in effect. Updated in February 2001, the E.O. is available from OFEE.
- **Executive Order 13423: Strengthening Federal Environmental, Energy, and Transportation Management:** <http://ofee.gov/eo/eo13423_main.asp>. Published in January 2007, this Order replaced E.O. 13101 and requires federal agencies to purchase green products and services, including recycled-content products, energy- and water-efficient products, biobased products, and environmentally preferable products and services. Although E.O. 13423 revoked E.O. 13101, EPA continues to follow certain procedures of E.O. 13101 since they are consistent with the requirements of RCRA 6002 (e).
- **Federal Green Purchasing Program:** <www.ofee.gov/gp/gp.asp>. This program assists federal agencies to promote the acquisition of recycled content, environmentally preferable, and biobased products; non-ozone depleting substances; and products containing alternatives to certain priority chemicals. The program also assists agencies to implement energy-related purchasing requirements, including the purchase of alternative fuel vehicles and alternative fuels. Training tools and other green purchasing guidance are available.

■ **Defense Logistics Agency (DLA) Environmental Products Catalogue:** <www.dscr.dla.mil>. This document is an important source of supply information for environmental products from DLA. It includes items from all DLA inventory control points containing recycled material or having other environmental benefits.



Additional Sources

- **Buy Recycled Business Alliance:** <www.nrc-recycle.org>. The Alliance includes over 3,200 companies and organizations committed to increasing the use of recycled-content products and materials in their day-to-day operations. The Alliance offers educational materials, a quarterly newsletter, and product-specific guides. Public purchasing entities can join free of charge.
- **Official Recycled Products Guide:** <www.dep.state.pa.us/wm_apps/recycledproducts/>. This document is a comprehensive directory of recycled-content products and contains more than 5,000 listings of manufacturers and distributors, including those of re-refined oil, retread tires, and engine coolants.
- **Recycling Data Network Information Services:** <www.recyclingdata.com/contents.htm>. This commercial Web site provides access, on a subscription basis, to a recycled-content products database of over 4,500 listings in 700 product classifications. It also provides a reference library and a newsletter. Managed by the publisher of the Official Recycled Products Guide, the product database is considered to be the largest of its kind.

Product Information—Re-refined Oil

■ **Re-refined and Commercial Motor Oils:** <www.dscr.dla.mil/userweb/dscrld/Re-refined/RR.htm>. This brochure, developed by the DLA General Supply Center, provides ordering information for a variety of re-refined oil products, including a new product line that meets military specifications.



Product Information—Retread Tires

- **Tire Retread Information Bureau (TRIB):** <www.retread.org/Guide>. This organization dedicated to retreading and repairing tires has a Retread Tire Buyers Guide that lists contact information for all TRIB member retreaders and tire dealers in North America and includes the type of retreading available from each listing.
- **Tire Industry Association:** <www.tireindustry.org>. This international association, formed by the merger of the International Tire and Rubber Association and the Tire Association of North America, represents all aspects of the tire industry.

Product Information—Recovered Engine Coolants

- **The Society of Automotive Engineers paper number 921634:** <www.sae.org>. An Evaluation of Engine Coolant Recycling Technologies offers information about recovered engine coolants.

Product Information—Rebuilt Vehicular Parts

- **The Automotive Parts Rebuilders Association:** <www.apra.org>. This site features more than 1,800 member companies that rebuild automotive-related parts such as starters, alternators, clutches, transmissions, brakes, drive shafts, and other parts for passenger cars, trucks, off-road, equipment, and industrial uses.

