



# Re-refined Motor Oil

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For government purchasers

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## **Responsible Purchasing Attributes**

- Climate Change
- Energy Efficiency
- Resource Conservation
- Toxics Reduction

## **Benefits of Purchasing**

- Conserves non-renewable petroleum resources
- Support recycling infrastructure

## **How to Buy**

Washington State contract # [09005](#) Lubricants, Virgin and re-refined.

Various grades are available. Please check the contract for more information.

## **Goal: State fleets purchase re-refined motor oil to help conserve petroleum resources.**

Purchasing re-refined motor oil is a responsible choice for agency fleets and heavy-duty vehicles. It saves energy, protects our environment and conserves a nonrenewable resource – petroleum.

Re-refining oil saves energy. The state of Massachusetts reports that the re-refining process consumes only one-third the energy used in obtaining virgin oil from the crude stock.

Re-refining oil is an environmentally protective way of managing used oil. When a robust infrastructure for collecting and recycling used oil exists, it is less likely that oil will be improperly disposed into our waterways and soil.

Re-refining oil also slows down the use of our remaining petroleum resources. Oil does not wear out, it just gets dirty. This means that used motor oil can be re-refined endlessly into the same high quality lubricant. According to the U.S. Environmental Protection Agency (EPA), it takes 42 gallons of crude oil, but only 1 gallon of used oil, to produce 2.5 quarts of high quality motor oil.

Automotive suppliers and vendors may not widely market their re-refined oil products. Request that your vehicles be filled with re-

refined motor oil whether your agency has a central maintenance yard or uses service stations. If your agency leases vehicles, make sure the leasing agent uses re-refined oil.

Make sure that your fleet is using a product with a high percentage of re-refined oil as the base stock. One-hundred percent re-refined base stock is preferable.

The state of California recommends that agencies purchase re-refined lubricating oils with at least 70 percent re-refined base stock. The EPA recommends that agencies set their minimum re-refined oil content standard at the highest level they can, but no lower than 25 percent re-refined oil.

The small price difference between re-refined and virgin oil fluctuates. Sometimes re-refined motor oil is a little cheaper. The final cost depends on factors including availability, blend, quantity, and supplier.

## **Standards**

No independent third party environmental standards exist for re-refined motor oil. See the Performance section to learn more about performance certifications.

## **Success Story: Metro Transit**

Metro Transit in King County became one of the first major metropolitan transit authorities in the nation to adopt the use of re-refined motor oil for its entire fleet of over 1,200 buses in 1999.

Metro Transit recently added new hybrid buses and uses re-refined oil in these vehicles as well.

In 2011, King County saved an estimated 20 cents a gallon (for a total of \$68,000) by purchasing re-refined oil and then selling the used oil for recycling. See the [2011 King County Environmental Sustainability Report](#) to learn more.

**Environmentally Preferable Purchasing**

The Department of Ecology offers tools and resources to make environmentally preferable purchasing easier.

Find out about environmentally preferable products, standards and certifications, law and directives, and more at our website:

<http://www.ecy.wa.gov/programs/swfa/epp/>

**Contact:**

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**Resources**

EPA Comprehensive Procurement Guidelines  
[Re-Refined Lubricating Oil](#)

CalRecycle [Used Oil Recycling](#)

State of Massachusetts [Motor Oil, Re-Refined, Antifreeze & Other Lubricants](#)

City of Santa Monica [Facts about Re-refined Motor Oil](#)

American Petroleum Institute [Engine Oil](#)

[King County, Washington \(PDF\)](#)

**Product Performance**

Re-refined motor oil has exactly the same performance characteristics as virgin oil. In fact, the U.S. Environmental Protection Agency (EPA) [Vehicular Products](#) states that re-refined oil may outperform virgin oil.

Motor oil gets contaminated with dirt, fuel, water and other particulates during use. The re-refining process cleans the oil of these contaminants. Then a fresh additive package is blended in that provides performance characteristics such as heat stability, and prevention of wear and corrosion.

The American Petroleum Institute (API) certifies re-refined oil to meet the same performance criteria as virgin oil. These criteria include cold-start and pump-ability, rust corrosion, engine wear, high temperature viscosity, deposit and phosphorus.

Auto manufacturers must honor vehicle warranties if the motor oil in use has the API symbol on the product. Vehicle and engine manufacturers such as Ford, GM, Chrysler, and Mercedes Benz have all gone on record to state that using API-certified re-refined oil does not affect warranty coverage.

Many Washington State agencies purchase re-refined oil. In 2009, state and local agencies made purchases of re-refined motor oil totaling \$185,675 (26,754 gallons) from state contract # [09005](#).

**End of Life**

Purchasing re-refined motor oil helps create demand for the product, which supports the recycling infrastructure needed to produce it. Since large purchasers can often sell their used oil to re-refiners, this provides incentive for users to properly store and recycle their waste oil.

Washington State law (RCW [70.95I](#)) mandates proper disposal of used motor oil. It is illegal to dispose of used motor oil in landfills, down the drain, or on surface waters.



**Laws and Directives**

<p><a href="#">RCW 43.19A</a> Recycled Content Products</p>	<p>Requires state agencies to make purchases that are consistent with U.S. EPA recycled content standards; this includes lubricating oils.</p>
<p><a href="#">RCW 70.95I</a> Used Oil Recycling</p>	<p>In light of the harmful consequences of improper disposal and use of used oil, and its value as a resource, the Legislature declares that the collection, recycling, and reuse of used oil is in the public interest.</p>
<p><a href="#">Executive Order 02-03 Sustainable Practices by State Agencies</a></p>	<p>Requires sustainable practices by state agencies.</p>