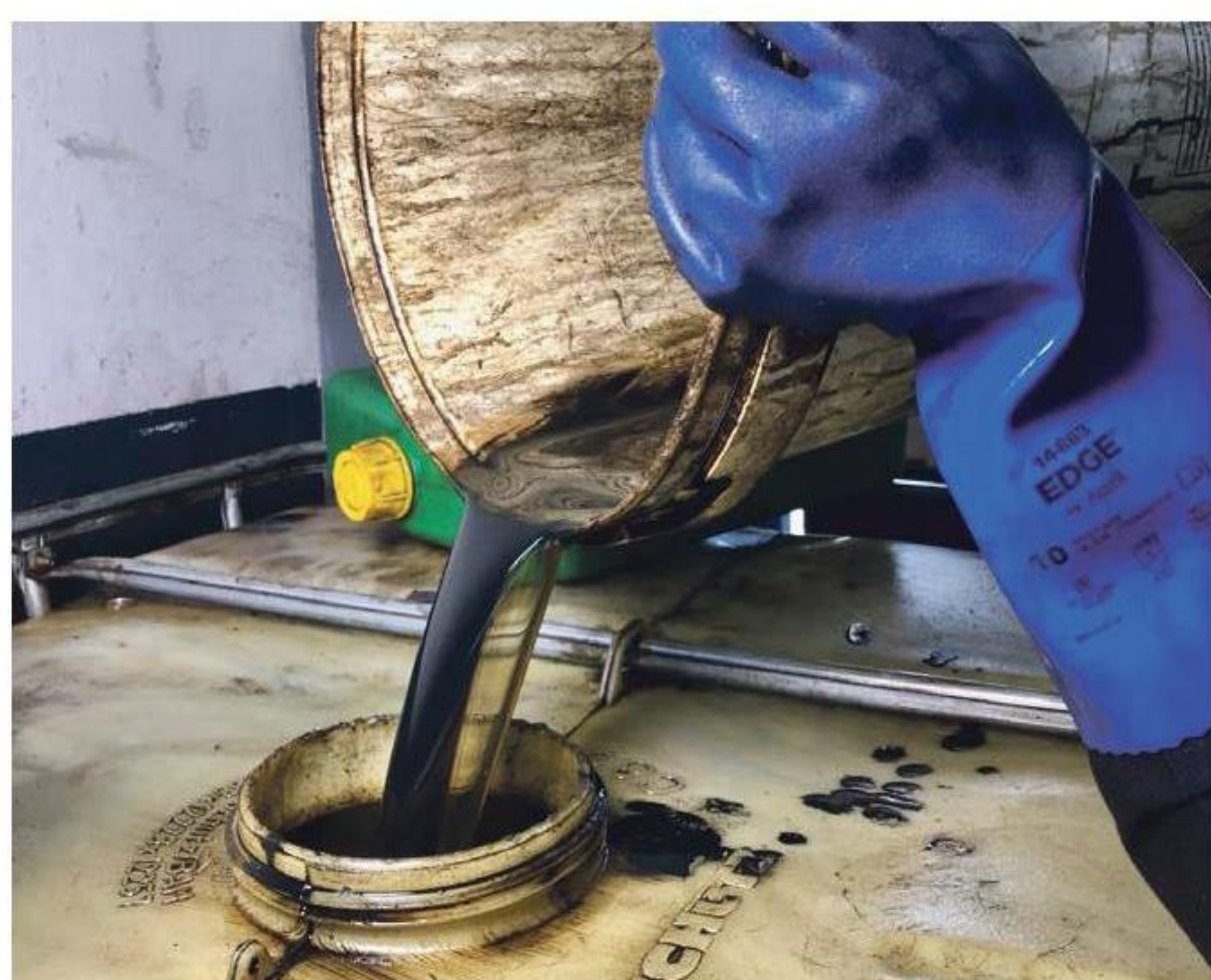


## ENVIRONMENT



# Oil change - What happens to used lubricating oil in South Africa?

**Global warming and environmental pollution has intensified our need to recycle our limited natural resources and to extend the lifespan of the manufactured products we use**



**T**he lubricants industry is no exception and currently in South Africa most of the used oil collected is recycled into heating fuel. However, internationally especially in the European Union, there is a significant trend in the larger refineries towards re-refining used oil back to base oil.

The European Union's Waste Directive strongly favours re-refining over burning for energy recovery, and as a result, it is thought that re-refined base

oils could meet nearly a quarter of Europe's base oil demand by 2020.

### **Used oil processing in South Africa**

Bubele Nyiba, the CEO of the ROSE Foundation (Recycling Oil Saves the Environment) explains that in South Africa less than 20% of used oil is re-refined to base oil with most being used as heating fuel.

"The international trend of refining the majority of used oil back to base oil is exciting, but premature for a developing country like South Africa because of the prohibitive cost of the technology and developing the necessary processes."

### **Re-Refining vs Recycling**

Nyiba explains that the term "recycling" is very different from "re-refining."

"The term "recycling used oil" generally means to take used motor oil and use it for a different

purpose, most commonly to be burnt as fuel. In the lube oil industry, "recycling oil" or "reconditioning oil" is most commonly referring to using commercial filtration systems to remove insoluble impurities. This method, however, does not remove any of the soluble contaminants. This resulting oil is generally used for fuel and is only good for one-time use. Reconditioned oil is not suitable for use in vehicles."

"Re-refining of used oil is a process that has been developed over many years," advises Nyiba. "It removes all impurities, both soluble and insoluble, and returns the oil to a quality suitable for use in vehicles. Re-refined oil has quality that is equal to or better than some virgin base oils and motor oils can be re-refined many times."

### **The used oil refining process explained**

Pre-treatment of used oil involves removing any water within the oil, known as dewatering. One way of



