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IN TRUCKING

It's a question of economics.

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Natural Gas for Vehicles

A foremost consideration in the adoption of natural gas vehicles is whether the potential savings justify the investment.

Two fleets go "green" with re-refined engine oil

By Barry McCabe, Director of Marketing, Oil Re-Refining, Safety-Kleen

Why Nestlé Waters and the City of Phoenix made the switch

ven though used oil
re-refinery technology
has advanced considerably over the years,
there are still many
misconceptions and
misunderstandings about re-refined
engine oils. However, fleets that have
decided to use quality re-refined
engine oils have gained a number
of "green" advantages, while still
protecting engines.

One such company is Nestlé Waters North America (www.nestle-watersna.com), a bottled water company in the U.S. It is very focused on managing the environmental impacts of its activities. This includes minimizing the environmental impact in the transportation of its products.

When Safety-Kleen offered Nestlé Waters the opportunity to switch its private fleet of more than 1,900 trucks to a greener, re-refined engine oil, it was intrigued.

Safety-Kleen (www.safety-kleen.com), producer of the EcoPower brand of re-refined engine oil, is the world's largest oil collector and re-refiner, as well as a parts cleaning and environmental solutions provider in North America.

"We were interested in protecting engines with environmentally friendly engine oil," says Rob Austin, director of logistics for Nestlé Waters. "Our company is working to reduce greenhouse gas emissions, and for us,

our fleet is a part of that plan. This change to re-refined engine oil fits well for our fleet, being that it is a true closed-loop sustainable solution.

"We have a big investment in our fleet, so our first priority was to understand how re-refined oil could protect engines, while protecting the environment," he notes.

FROM BASELINE TO BOTTOM LINE

Prior to making the switch, Nestlé Waters required that the engine manufacturer approve any re-refined oil that it considers.

"Approval by the OEM is critical," Austin says. "It provides a baseline that we can start from in evaluating engine oil. Without OEM approval, we'd have a hard time justifying a switch to a particular engine oil, even if it was eco-friendly."

Moreover, Nestlé Waters wanted to know that the re-refined oil would perform in the demands of fleet trucks that frequently stop and go in city traffic and on delivery routes.

While Nestlé Waters identified EcoPower as the re-refined engine oil that offered the best fit, it wanted more facts about performance, Austin says. In visiting with Safety-Kleen representatives, he learned that the oil is American Petroleum Institute (API)-licensed and exceeds all North American standards for engine protection, plus it is approved by or conforms to requirements of all major engine OEMs.

Additionally, EcoPower has been tested and proven in million-mile, on-road engine tests at oil change intervals of more than 40,000 miles in long-haul service. It has been used for decades by the U.S. military, the largest fleet in the world, along with many of the largest private and for-hire fleets in North America.

"When we studied and evaluated the performance of EcoPower 15W-40 CJ-4 Heavy



Duty Engine Oil, it was clear that we could rely on this brand to protect engines and help us protect the environment by reducing greenhouse gas emissions," says Austin.

EcoPower Re-refined Oil reduces greenhouse gas emissions by more than 80 percent, compared to oil made from virgin crude, because it has already been refined, and it requires up to 85 percent less energy for the same reason.

A GREEN CITY

The City of Phoenix (www.phoenix.gov), the capital of Arizona, is known as a Green City. This is evidenced in the universal recycling program and by a commitment to reducing the city's carbon footprint. When the opportunity arose to switch the city's fleet of more than 225 refuse trucks to a greener, re-refined engine oil, Phoenix was naturally interested.

"We were looking for an environmentally-friendly alternative," says Gregg Duckett, the city's public works operations manager.

Because the city is ultimately responsible to the citizens – akin to a fiduciary responsibility, the decision-making process for Phoenix to switch engine oils was deliberate, competitive and thorough, he notes.

For Phoenix, like Nestlé Waters, it was a requirement that the engine manufacturer approve any re-refined oil being considered. In this case, it was Cummins engines. It also was necessary that any re-refined oil be able to handle the severe duty service of refuse

THE OIL meets OEM engine requirements.



Nestlé Waters is focused on minimizing the environmental impact in the transportation of its products.

Photo courtesy of Nestlé Waters

collection trucks, many of which are equipped with hydraulic lifts/arms.

There also was the question of whether or not a re-refined oil could perform in Phoenix's desert-like climate where the summer temperature often hits 110 degrees F or higher.

It was necessary that all re-refined heavy duty diesel engine oils considered have any API

classification of CJ-4, or the highest current standard listed by the API, according to Duckett. The preferred standard would be equivalent to the current Cummins CES 20081 specification.

Furthermore, all re-refined engine oil would need to have base oil consisting of 100-percent re-refined oil.

During the bidding process, the City of Phoenix identified EcoPower as the re-refined engine oil that "appeared" to meet its requirements.

"We thank people for their input, but we study the facts," Duckett says. "Everything is a process. We never just do it.

"EcoPower Re-refined Oil was proven to protect engines and provide a competitive value."

Phoenix is a member of the Department of Energy's Clean Cities program, which advances the nation's economic, environmental and energy security by supporting local actions to reduce petroleum consumption in transportation. Given that diesel-powered refuse trucks make up a large volume of the city's fleet, the switch to EcoPower fit with the city's mandate to lower petroleum use.

Phoenix's refuse truck fleet uses 40,000 to 50,000 gallons of engine oil per year. By switching to re-refined oil, all that oil is recycled or re-refined from used oil, thereby reducing petroleum use. Conventional engine oil, on the other hand, is made from virgin crude.

CLOSED LOOP

Using a re-refined engine oil reduces America's dependence on foreign oil. It takes 42 gallons of crude oil to make the same amount of high-quality engine oil



Phoenix switched its refuse truck fleet to re-refined oil – which requires less energy to produce and conserves crude oil – as part of the city's mandate to lower petroleum use.

Photo courtesy of City of Phoenix

from recycling just one gallon of used engine oil.

Oil molecules don't break down and can be re-refined over and over again, once they are hydro-treated and processed in the same way lubricants made from crude oil are made. It's just the additives that need to be replaced.

Used oil is the feedstock for re-refined oil, and it's collected from tens of thousands of locations across North America. Safety-Kleen collects used oil and transports it to one of its three re-refineries where it's re-refined to make more EcoPower.

A refinery feedstock is a product or a combination of products derived from crude oil that is transformed into one or more components and/or finished products.

GREENER

The switch to re-refined oil is one of the green decisions Nestlé Waters and City of Phoenix have made to be more sustainable and reduce greenhouse gas emissions. This is significant because, as any fleet maintenance technician will tell you, oil is the lifeblood of an engine.

Re-refined oil is helping fleets protect engines, protect the environment and attract or keep eco-responsible customers at costs comparable to oil made from virgin crude. That is a change for the better.

Barry McCabe is the director of marketing, oil re-refining, for Safety-Kleen (www.safety-kleen. com), the producer of EcoPower Re-refined Oil (www.ecopoweroil.com). The company is the world's largest collector and re-refiner of lubricants, and is also a leading North American parts cleaning and environmental solutions company, serving more than 200,000 customer locations in the United States, Canada and Puerto Rico.



AFTER PROTECTING BOTH FOR A MILLION MILES, WE WENT ONE BETTER. BETTER FUEL ECONOMY.



Now available: EcoPower® HD Diesel 10W-30 CJ-4. EcoPower HD 10W-30 is our follow up to EcoPower HD 15W-40 and its impressive performance protecting engines and the environment in a million mile engine test at 40,000-mile oil change intervals. Our HD 10W-30 engine oil improves fuel economy up to 1.5%*, can reduce fuel cost, delivers better cold weather starts and is formulated from the same base oil as our HD 15W-40. And since both are EcoPower, they protect engines and the environment, plus reduce CO² emissions and take up to 85% less energy to produce than oil made from virgin crude. Learn more at EcoPoweroil.com/fleets.

