

SOLUTIONS

QMI

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Refining Oil

Queensland's first waste oil refinery shows the power of recycling



About 350 million litres of waste lube oil is collected in Australia every year. Wastefully, 60% is burned in Australia and 24% is exported to be burned overseas, mainly in Asia. This means more than 290 million litres of Australia's waste lube oil is burned as fuel every year.

Recognising this problem, two companies have now joined forces to address this issue and have opened Queensland's first oil re-refinery, turning waste lube oil into a lucrative commodity.

The project is a joint venture between Southern Oil and J.J. Richards & Sons that together have developed and will operate the Northern Oil Refinery (NOR); a new re-refining plant at Yarwun, near Gladstone in central Queensland.

The re-refining plant is a first for Queensland with construction completed earlier this year. The facility was officially opened by the Hon Andrew Powell, Minister for Environment and Heritage Protection (QLD), in conjunction with the Hon Ian MacFarlane MP – Federal Minister for Industry. Also in attendance were Member for Flynn, Mr Ken O'Dowd MP and Member for Riverina Mr Michael McCormack MP, along with several of their Federal, State and Local Government colleagues and a number of current and future clients.

Now it's down to business with Southern Oil and JJ Richards saying the plant has the potential to process 100% of Queensland's (30% of Australia's) annual production of waste/used lube oil.

"High-end re-refining to recover base oil for re-use is the most environmentally responsible treatment of waste lube oil," says Darrell Corbett - Strategic Development Manager for JJ Richards & Sons. "We believe it should be the process of choice for any used oil producer that is committed to its environmental credentials and reputation."

"Our customers were looking for a cost effective, environmentally sustainable solution to deal with their waste oil. Our commitment to providing to providing a Total Waste Management Service ignited our search to find the right solution for our customers. This lead us to Southern Oil."

Southern Oil already currently re-refines about 8% of Australia's annual waste lube oil through its Wagga Wagga plant in NSW for reuse as lube oil. The re-refining process used is a 'cradle' treatment that recovers 99% of the lube oil component of the waste oil, creating a near perpetual cycle of use and re-use of a diminishing and finite resource.

A surprising 95% of the base oil for Australia's lube oil needs is imported, mainly from the Middle East via Asian refineries. Just 5% is provided through re-refining waste lube oil. About 350 million litres of waste lube oil is collected in Australia every year. Wastefully, 60% is burned and 24% is exported to be burned overseas. Burning destroys a valuable commodity and permanently removes lube oil from productive use.

With the addition of the Gladstone re-refinery 38% of



Australia's waste lube oil will now be able to be processed, 84% of which will be sourced from oil that is usually burned and which will in turn reduce Australia's reliance on oil imports.

More importantly the re-refining process produces no waste. Every component is reused and 99% of the lube oil component in the waste oil is recovered as high quality lube oil.

Production of re-refined lube oil uses 60% less energy compared to the production of crude lube oil, all of which is imported into Australia. It is the environmental factor that Southern Oil and JJ Richards & Sons are both keen to have people better understand.

"The waste lube oil in Australia which is burned or exported to be burned produces a carbon footprint eight times greater than re-refining and, if unregulated or burned at low temperatures, potentially releases a range of toxic compounds directly into the environment," explained Mr Corbett.

"Re-refining of used lube oil is not the first choice of many businesses and authorities. Business and Government should choose the environmental benefits of re-refining to recover high quality oil for re-use over base commercial decisions. Companies need to embrace the fact that their corporate

environmental responsibility obligations can be achieved, in part, by re-refining to recover reusable base oil."

Employment has also been another benefit from the project with 40 full time positions created in Gladstone through the development of the new plant as well as supporting many more indirect jobs in the region and across Queensland.

"NOR means Queensland and other regions of Australia now have a better option to re-refine waste oil and keep on using it and using it. It also means that Australia's greenhouses are reduced by about 290,000 tonnes every year."

Southern Oil has been providing a "safe pair of hands" supporting corporate reputations and assisting mining companies to deliver on their environmental values for more than 12 years and is now able to provide their service in Queensland, Northern Territory, New South Wales, Victoria and South Australia. JJ Richards is the largest privately owned waste management company in Australia. Services provided by J.J. Richards include an extensive range of commercial and domestic services providing customers with Total Waste Management Solutions for all of their waste needs.



