



Waste oil management for the Rose Foundation, South Africa

Project Summary

Through robust environmental management techniques we are helping the Rose Foundation in South Africa, which works with the country's oil industry, to understand and minimise the impacts from used lubricating oils. In addition our work is informing carbon conscious recycling strategies.

The Client's Challenge:

The Rose Foundation was established in the mid 1990s as an initiative of the oil industry to promote responsible management of used lubricating oils in South Africa.

The Foundation aims to minimise the amount of waste oil ending up in hazardous waste disposal. In addition, conscious of the impacts of carbon emissions, the Foundation also aims to understand the environmental impacts from the use of used oils and is looking to develop a sustainable policy to guide the used oil recycling industry in South Africa.

Registered as a private non-profit company, the Rose Foundation is funded and managed by its members, including Shell, BP, Sasol and other major lubricant suppliers into the South African market.

Our Work:

Since around 2003, WSP Environment & Energy (WSP) has been the lead consultant to the Foundation advising on all aspects of environmental management and best practice.

Our role has included: environmental authorisations; routine compliance auditing of waste oil processing facilities; and input to the establishment of a South African National Oil Recyclers Association in 2005.

Currently, most waste lubricating oils are recycled for use as heating fuels rather than being converted back into base oil that can be sold back into the lubricants industry - this is the case in most countries. Recovery to base oil is very energy intensive and so is not necessarily the best option. However, concerns over depleting oil reserves, ever increasing carbon emissions and climate change, are now driving re-assessment of best practice within the global waste oil industry. And in South Africa, WSP is advising the Rose Foundation on appropriate adaptive strategies.

Through a series of complex atmospheric emission studies WSP is developing the first inventory and predictive models for assessment of environmental impacts from use of used oils in South Africa. The studies lead the way for recycling associations in countries such as the UK which have yet to undertake dedicated emission trials.

Our approach is innovative and will require integrating environmental technical studies with economic, policy and life-cycle considerations to develop a sustainable policy for the Foundation that will be used to guide the used oil recycling industry.

The Outcome:

With an estimated 120 million litres of waste oil generated in South Africa a year, our advice on environmental management and best practice has, for example in 2008, led to the successful recovery of over 70% of waste oil. This would otherwise have ended up going to hazardous waste disposal or worse, illegal dumping or discharge to environment.

In addition we are helping the Foundation present a more responsible and carbon conscious approach to waste management in South Africa through our emission studies.

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