There are many reasons that attribute to the growing water crisis in South Africa.

Climate change and rising temperatures are making droughts more frequent and severe, with potentially devastating consequences for agriculture, water supply and human health.

This phenomenon is already being observed in the Western Cape, with Cape Town currently facing the very real threat of running out of water completely – Day Zero as it has become known.

The Western Cape, Northern Cape, and Eastern Cape are all in the grip of one of the worst droughts in history and have been declared national disaster areas.

Coupled with climate change putting pressure on water resources, is the migration of people from rural areas to the cities which means more water demands than ever before.

## Water contamination threatens already dwindling water resources

Infrastructure is old and/or lacking, and a backlog in services has exacerbated the issue, with valuable water sources being contaminated with sewage and other pollution.

There are many sources of contamination that end up making their way into our dwindling water resources. One of these is used lubricant oil, which is a common byproduct of mechanised processes in all industry sectors.

Used oil contain harmful compounds and carcinogens that can easily contaminate the environment, especially if thrown down drains, into landfills or onto the ground where it leaches into the water table.

One litre of used oil can contaminate a million litres of water. Because of its harmful properties, used oil is classified as a hazardous waste and is strictly governed by environmental laws - with its storage and disposal needing to meet the requirements of the Waste Act.

The ROSE Foundation (Recycling Oil Saves the Environment) has been championing the responsible collection and removal of used oil for proper recycling since 1994. Bubele Nyiba, the CEO of ROSE explains that due to a lack of education many people who generate used oil may dispose of it improperly and illegally – pouring it down a drain, throwing it out onto the ground or even re-using it as a dust suppressant, burner fuel, or wood preservative.

"It is estimated that South Africa generates an average of 120 million litres of used lubricant oil in a year. This is a large amount of used oil that, if not collected and recycled responsibly, could make its way into our environment."

## The ROSE Foundation offer some practical tips on storing used oil:

- Drain oil into a clean container with a tight fitting lid. Empty oil containers and drums
  make effective makeshift storage vessels for used oil, however, DO NOT use a
  container that previously held chemicals, such as cleaners, solvents, fuels, paint
  or bleach.
- Always clearly label the container "Used Motor Oil."
- Keep these containers in a place that can be accessed by a NORA-SA used oil

- collector and keep the surrounding area clear and clean. Ideally store them under cover and away from heat or sources of ignition.
- Keep oil change pans tightly sealed and covered to protect them from rain water. Oil that is contaminated with water is far more difficult to recycle.
- Ensure that you do not mix used oil with other fluids such as antifreeze, transmission fluid, petrol, diesel etc. Mixing them may make them non-recyclable as well as very hazardous and flammable.
- Build a bund wall around bulk used oil storage tanks so that in the event of a spill or leak, the used oil will be contained. In the event of an oil spill, contact your used oil collector.

Once your container is full you can drop it off at your nearest approved municipal garden refuse site – a list of which is available from the ROSE Foundation. Otherwise, most reputable service centres have used oil storage facilities and will take your oil, as they are paid according to volume by the collectors who take it away for processing. Nyiba says that the safe disposal of hazardous waste has become a critical issue in South Africa in order to protect our environment. "The legislation in place in South Africa means that responsible waste management is no longer a nice thing to do but a necessary thing to do."

For more information and to find out about an accredited collector or drop-off point, contact the ROSE Foundation on (021) 448 7492 or visit www.rosefoundation.org.za.