TRIBOLOGIK® NEWSLETTER

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Used Oil Disposal

In the past, used oils used to be disposed in sewers, on the ground or in municipal landfills and dumps. Fortunately, that is now longer permitted. Since May 1992, used oils are regulated by the Basel Convention on hazardous waste of which Canada, the United States and OECD countries are signatories.

Machinery operators are therefore requested by Environment Canada and the U.S. EPA to recover their used lubricants and send them to a certified recycling facility that is in full compliance with local, provincial/State and national regulations.

Recycling facilities

Used lubricants are not accepted unconditionally. A number of principles must be respected, which are not so different from those guiding the handling and storage of your new lubricants:

- Single Use Containers: By far, the largest amount of used lubricants consists of used motor oils, which include, but are not limited to crank case oil, engine lubricating oils, transmission fluids, gearbox and differential oils. These lubricants can be stored in the same container. You will note that brake and power-steering oils are not motor oils and therefore must be recovered separately.
- No Mixtures: Certified centers will not accept used motor oil that has been contaminated with other fluids such as coolants, solvents, gasoline, diesel fuel, paints, varnish, chemicals, household cleaning products, water or solid debris. Used motor oil that is mixed with any other substance is not recyclable. It must be disposed of as hazardous waste and your recovery center may charge a supplement for its disposal.

In addition to the above, used oil should be handled and stored in accordance with the same set of precautions that must be taken with new lubricants and those currently used in your operations (See Newsletter, December 2015):

- Keep lubricants inside. It not advised to store lubricants outside. It is indeed impossible to protect them from contamination resulting from adverse meteorological conditions such as water, windblown dust or dirt accumulation on the container.
- Do not use galvanized steel containers.

- Keep container caps tightly closed.
- Containers must be clearly identified with clear and easy to read labels in order to prevent cross contamination and shipping errors.
- Place containers on supports with retention trays underneath in order to avoid spillage in case of overflow.
- Etc.

Reusing Used Oil

Despite the laws and regulations on hazardous waste, despite public and corporate awareness and although no one today dares questioning the principle of recycling, it is estimated that around 60% used lubricating oils are lost, which leaves only 40% for reuse.

Settled and filtered oils usually find a second and final life as supplementary combustibles, saving money and refined fuel in high energy consuming industries, such as cement plants and the likes.

However, the most modern, sound and sustainable way of recycling used oil is re-refining. The major advantage of this technology is to regenerate the oil as if it had never been used. Re-refined oil is as pure and clear as new or virgin oil refined from crude.

Re-refining presents many additional benefits:

- Re-refining can save high amounts of crude oil: According to U.S. EPA, 3,8 Liters of used oil provides 2,4 Liters of base oil, while 159 L of crude oil are needed to produce the same 2.4 L;
- The oil can be re-refined again and again, almost endlessly.
- It generates less hazardous waste in the environment than burning in industrial processes. Fewer greenhouse gases and fewer heavy metals are released in the atmosphere.
- By-products such as asphalt can be used in road construction or building materials.

Of the 40% recycled and reused oil, only 12% is being re-refined as of now, but good handling and storage practices contribute to the overall growth of this percentage.

Contact your account manager for further information.