3.0 Environmental Impact associated with Used/Waste oil

The oil and greases have been known to cause extensive damage to environment, creates risks of contaminating air, water and soil with substances that pose substantial hazards to animal and plant life death to migrating birds, marine life, as much harmful to human life.

Improperly disposed oil percolates and creates ground water contamination, cause damage to surface of ground soil, mixes with water resources, killing plants, marine life, floats over water in the sea, spoiling the beautiful beaches and a great threat to environment.

- Just one gallon of Used/Waste oils can make a million gallons of fresh water undrinkable (US. EPA, 1994).
- A film of Used/Waste oils on a water surface prevents oxygen from entering the water and blocks sunlight. This makes it difficult for plants to photosynthesize and reduces plant and animal life in water body. Oils have considerable potential to cause environmental damage by virtue of their ability to spread over large areas of land and water.
- Very small concentrations of Used/Waste oils (50 to 100 ppm) in the wastewater can foul sewage treatment plants, resulting in increased maintenance costs and reduced treatment efficiency (US. EPA, 1994).
- Used/Waste oils applied to land can render the soil unproductive.
- Used/Waste oil placed in landfill may seep through the bottom of such landfill and subsequently contaminate groundwater supplies.
- Used/Waste oil pollution can affect a high fish mortality rate and affect the reproductive cycle. These considerations are important in relation to the food chain and ultimate consumption of these fish and fish products.
- In the environment, Used/Waste oils degrade very slowly. Between 20% to 80% of petroleum products in soil are degraded after 1 year. For waterways, only 20% get degraded
- People’s health can be affected if Used/Waste oils are handled improperly. Most Used/Waste oils contain small amounts of materials that can cause cancer and other health problems if these materials are inhaled and ingested. Used/Waste oils can be ingested if they get into drinking water sources and are not detected and removed.
- Spillage of Used/Waste oils into soil can bring changes in the biological cycles in the soil. The presence of used motor oils in the soil inhibits plant development since oil fills the pores between the soil particles and hampers oxygen access. Also the metal content of surviving plants is increased. These metals inhibit carbon mineralisation, nitrogen transformations and mineralisation of sulphur and phosphorous.
- Uncontrolled burning of Used/Waste oils may result in significant levels of hazardous emissions to the environment. This may expose humans, wildlife and vegetation to harmful substances.