

**SUSTAINABLE FACILITATED ENVIRONMENTAL (SAFE) THERMAL TREATMENT
FOR LOW COST TREATMENT OF HEAVILY IMPACTED OILY WASTES**

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Heavily impacted oily wastes such as tank bottom sludge and solid wastes from oil-water separators are a large and costly problem within the oil industry. The high residual hydrocarbon content in these types of wastes (typically greater than 10% by weight) makes them poor candidates for biodegradation and expensive for both treatment and disposal.

Sustainable Facilitated Environmental (SaFE) Thermal Treatment is a new technology that will allow for the low-cost treatment of heavily impacted oily wastes. SaFE Thermal treatment is conducted using a heat-resistant reaction vessel and a conventional air blower to initiate a sustainable and controlled smouldering combustion reaction. The energy trapped within the oily waste is used as fuel to achieve near complete destruction of organic contaminants and render the waste material suitable for re-use as clean fill. In contrast to incineration, no external source of heat/energy is needed once the reaction is initiated.

This talk will present the results of laboratory and bench scale testing to date (soil quality & air emissions testing) as well as early results from a large scale (1m by 5m) test vessel.

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