HD Sludge Remover Separator is specially designed to liberate in-organics from all types of oil without damaging or changing the oil's characteristics.

RAW's Sludge Separator is designed to create an additional revenue stream from the liability that is known as oil sludge or oil slop.

Sludge Separator Remover is designed with a unique colloidal formulation which quickly separates in-organics attached to all types of hydrocarbons. This safe and effective separator is activated with water to create nano-sized micelle that penetrate the hydrocarbon mass to begin the separation process.

Active ingredients measure from 1 – 5 nanometers and create the ideal medium to separate in-organics from hydrocarbons. This product will not change or alter hydrocarbon characteristics and allows for full marketability of the oil after separation.

Separated oil will rise to the surface for easy recovery while sand and debris migrates to the bottom of the containment or separation vessel. The sludge remover product can remain in the vessel for repeated use providing even greater financial benefits and return on investment.

Once spent, product can be re-charged with additional super-concentrated Sludge Remover or safely disposed of through conventional non-hazardous processes

The flexible nature of this powerful agent is an ideal companion for use in treating:

- Refinery slop oil
- Sludge held in containment ponds
- Oil Storage Tanks
- Waste Oil Disposal System and at the site of discharge wells

RAW Biochem Is

Readily Biodegradable
Non-Reactive
Non-Toxic
Non-Corrosive
Non-Hazardous
Not Flammable
Contain No VOC's

RAW Biochem Products Do NOT Contain

Petroleum Distillates
Glycol Ethers
Caustics
Ozone Depleting Agents
Nonylphenols
Endocrine disruptors

TECHNICAL DATA SHEET

Description

HD Sludge Remover Separator is a super-concentrated blend of readily biodegradable ingredients derived from domestically grown sources. Sludge Remover will separate sand and other debris from the hydrocarbons and create a valuable revenue stream from what is normally classified as a liability.

Diluted, ready-to-use products are safe to use on all substrates and will not damage steel, glass, fiberglass or plastics.

Physical State	Liquid
Colour	Amber
Odour	Mild
pH	8.4 – 8.9
Base	Plant Extracts
Persistence & Degradability	Readily Biodegradable

Directions for Use

Sludge Remover Separator is designed as a water miscible product for the separation of in-organics from various hydrocarbon sources.

The process is accelerated with of agitation during the early period of separation and through the extended application of heat.

1. Determine ideal dilution rate with bottle and BSW (*Basic Sediment & Water*) test prior to beginning separation process in vessel or pond. Dilution rates will vary for each application but will range from 1-part product for 50 up to 750 parts water.
2. Dilute super-concentrate to desired level in tank or vessel.
3. Aggressively agitate the solution until all of the hydrocarbons have been introduced to the product.
4. If possible, apply heat to vessel or pond. Increased heat will accelerate separation.
5. Allow product to settle without further agitation.
6. Periodically test hydrocarbons at surface to confirm preferred BSW levels have been achieved.
7. In the event that BSW levels are too high, increase product strength and repeat agitation, settle and test.
8. After separation remove hydrocarbons, product and bottoms.
9. Product can be re-used or disposed of through normal disposal methods. Check with local authorities on acceptable method of disposal.

C.H.A.T.

Chemical: Unlike typical petrochemicals, RAW formulations may not perform as well with higher concentrations of product than they would with higher dilution rates. In a new process or application, trials are strongly recommended to achieve the correct chemical concentration.

Heat: The optimum temperature ranges from 43^{0}C – 80^{0}C. Product can be used in steam applications up to 490^{0}C (540^{0}F).

Agitation: Where applicable, agitation aids in dislodging soils from surfaces so they can be rinsed away.

Time: Dwell time is dependant on the application, heat and chemistry but generally speaking, longer dwell times enable more satisfactory results.