

BioRem -2000™

OWS TREATMENT

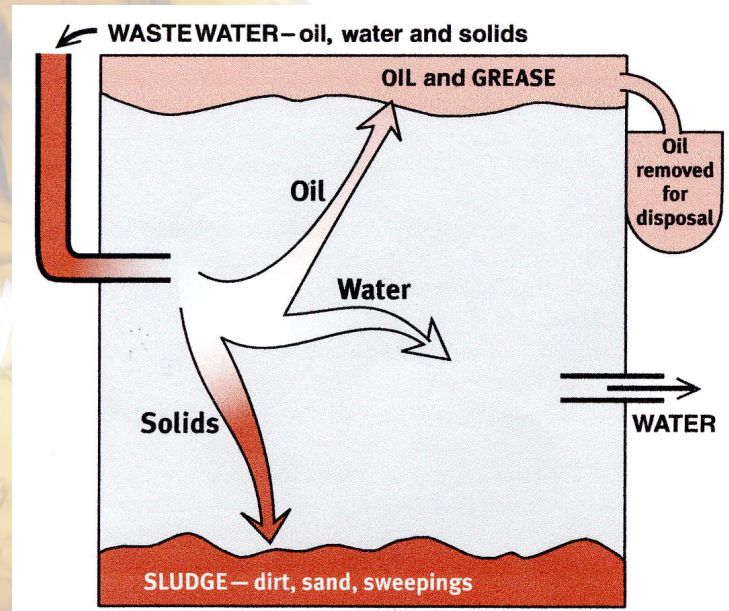
Oil/water separators ("OWS's") can be costly to maintain and, if not properly managed, can pollute surface and ground water and lead to costly violations.

BioRem-2000™ OWS Treatment improves oil/water separator operations as well as reduces costs and liabilities.

BioRem-2000™ OWS Treatment added to an oil/water separator breaks down petroleum products suspended and/or dissolved in the wastewater, floating oil, and/or sludge.

Conventional degreasers contain emulsifiers which cause oily materials to chemically bind to water. This emulsion creates problems with oil/water separators causing the oil not to separate from the water and allowing the oil to bypass the collection system, straight to the sewer.

Facilities using BioRem-2000™ OWS Treatment have eliminated wastewater violations, reduced the sludge levels and petroleum content by more than 80 percent.



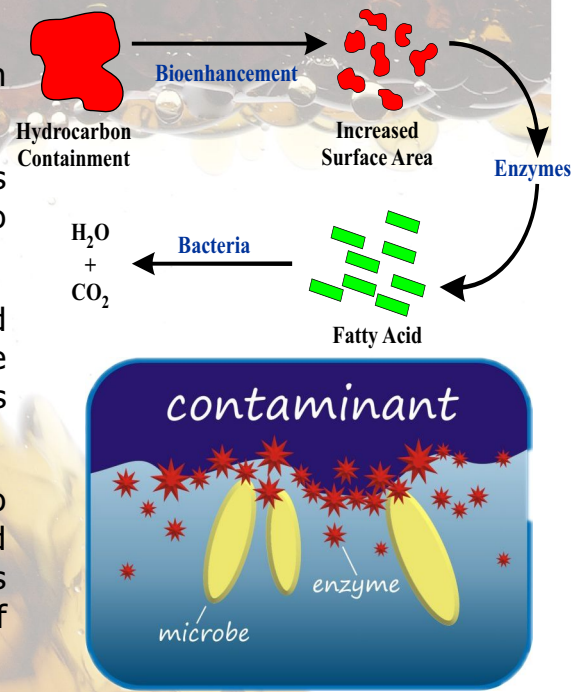
BENEFITS

- ◆ Designed to eliminate a variety of hydrocarbons in oil/water separators through a powerful blend of microbes, enzymes and nutrients.
- ◆ Converts hydrocarbons into carbon dioxide and water.
- ◆ Reduces sludge levels and pumping frequency.
- ◆ Lowers BOD, COD and TSS levels in oil/water separator effluent.
- ◆ Creates a clear division between oil and water.



TECHNOLOGY INFORMATION

- ◆ **Biodispersion:** The hydrocarbons are dispersed from macroscopic clumps into smaller droplets.
- ◆ **Solubilization:** The surface area of the hydrocarbons is increased, converting them from hydrophobic to hydrophilic, into a soluble state for cell transport.
- ◆ **Assimilation:** The microbes secrete extra-cellular and intra-cellular enzymes that begin the process of cleavage chopping the long chains of the solubilized hydrocarbons into two carbon units.
- ◆ **Mineralization:** The microbes convert the carbon units into carbon dioxide and water as a source of food for growth and reproduction. Once the reaction is complete, the microbes and enzymes break free and attach to another chain of hydrocarbons in order to repeat the same process.



TYPICAL HYDROCARBONS

Crude Oil	Aviation Fuels	Diesel	Marine Fuels	Cutting Fluids
Gasoline	Synthetic Oils	Methanol	ATF Fluids	Food-Grade Oil
Grease	Brake Fluid	Solvents	Hydraulic Fluids	Mineral Spirits
Ethanol	Antifreeze	Naphtha	Glycols	Stamping Fluids
Kerosene	Lubricating Oil	Motor Oil	Drilling Fluids	Heating Oil

SPECIFICATIONS

Usage	Dilution Ratio	RTU	Microbial Count	TNTC
	Appearance	Liquid	Microbial Characteristic	All GRAS Listed
Physical Properties	Color	Amber	Enzyme Activity	6,000 u/mg.
	pH	7	pH Activity Range	3-11
	Shelf Life	3 Years	Appearance	Amber Liquid
Primary Packaging	8888-005	5 gal.	Salmonella	Negative
	8888-015	15 gal.	Listeria	Negative
	8888-055	55 gal.	Phosphorous	Non-Detect

DIRECTIONS

Shock the OWS System: Add 2-gallons.

Maintenance Dosage: Add 1-gallon per week.

For best results add product at the slowest flow rate and use when temperatures are between 35°F -120°F. (based on 1,000-gallon oil/water separator).