



Oil Spill Eater II (OSE II) Use of & contaminants that OSE II can or has bioremediated

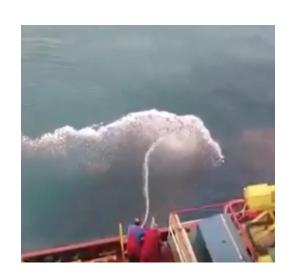
What Is It?

Oil Spill Eater II (OSE II), is the world's most environmentally safe and cost-effective bioremediation product, for the mitigation of hazardous waste, spills and contamination.

OSE II is an environmentally safe clean-up method because it uses nature's own bioremediation process to effectively eliminate hazardous materials.

OSE II is <u>not</u> a bacteria (bug), fertilizer or dispersant product. It is a biological enzyme that converts the waste into a natural food source for the native bacteria found in the environment. The end result is only CO_2 and water.

OSE II will reduce clean-up costs and permanently eliminate the hazardous waste problem with no secondary clean-up required.



OSE II & NATURAL BIOREMEDIATION PROCESS:

- When OSE II is applied to an oil spill, the oil's molecular structure begins to breakdown immediately and in a short time, visually disappears.
- Bio surfactants help by connecting with the oil molecules and breaking down the covalent and ionic bonds, creating small micelles (oil droplets).
- The process rapidly reduces the toxicity of the oil, making it more bioavailable to indigenous bacteria that then utilize the oil as a food source.
- OSE II contains nutrients which attract indigenous bacteria that rapidly colonise/grow in numbers, speeding up spill remediation.
- OSE II does NOT contain any foreign bacteria or nonindigenous organisms.
- The bacteria rapidly consume the oil with the help of OSE II nutrients and enzymes until all is converted to CO₂ and water, permanently removing the oil from the environment.

User Benefits?

- Final result is simply: CO₂ and water
- A one step cleaning procedure; usually there is no need for additional cleaning processes, such as having to collect and dispose of effluent.
- Oil spill quickly visibly disappears.
- OSE II is a fire retardant: Mixture flammability is greatly reduced or completely diminished.
- OSE II can treat underground spills.
- OSE II can treat all kind of hydrocarbon spills from jet fuel, lubricants and heavy fuel oils, including crude oil. (full table of contaminants on following page)





OSE II can bioremediate most organic based compounds OSE II can bioremediate almost all hydrocarbon-based compounds

Some of the hazardous material that OSE II has bioremediated:	
<u>Fuels</u> :	Hydraulic Oil
All types of gasoline	Brake Fluid
Diesel Fuel	 Power Steering Fluid
Low sulfur diesel fuel	Motor Oils
Jet A	Deicing agent
• JP 4	Radiator Fluid (Ethylene Glycol)
• JP 5	Dry Cleaning Fluid (Perchloralethylene)
• JP 8	• Kerosene
	 No 2 & No Heating Oils
	• Creosote
	PCB's: (Poly Chlorinated Biphenols)
Crude Oils:	Numerous Solvents:
 Alaskan North Slope Crude Oil 	• Zylene
Texas Sweet Crude Oil	Toluene
South African Crude Oil	Ethyl Benzene
Bunker C Crude Oil	• Chrysene
Venezuelan Crude Oil	Hopane
Mexican Crude Oil	Hexadecane
Louisiana Crude Oil	Naphthalene
Kuwait & Saudi Arabian Crude Oil	Fluorene
	Phytane
	Phenanthrene
	Pristane
<u>Pesticides</u> :	• C18
• DDT	• C30
Malathion	• Dioxins
 Organo pesticides 	• Furans
 Glyphosate 	
Picloram	
 Spectracide 2,4-D, 	
Lamda-Cyhalotrin	
Other compounds:	TNT & Gunpowder
Tert Butyl Ether	Grease from Animals
Benzene	Grease from Vegetables