



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 **not** 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 CO₂ 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 non-indigenous 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:

<p><u>Fuels:</u></p> <ul style="list-style-type: none"> • All types of gasoline • Diesel Fuel • Low sulfur diesel fuel • Jet A • JP 4 • JP 5 • JP 8 	<ul style="list-style-type: none"> • Hydraulic Oil • Brake Fluid • Power Steering Fluid • Motor Oils • Deicing agent • Radiator Fluid (<i>Ethylene Glycol</i>) • Dry Cleaning Fluid (<i>Perchloroethylene</i>) • Kerosene • No 2 & No Heating Oils • Creosote • PCB's: (<i>Poly Chlorinated Biphenols</i>)
<p><u>Crude Oils:</u></p> <ul style="list-style-type: none"> • Alaskan North Slope Crude Oil • Texas Sweet Crude Oil • South African Crude Oil • Bunker C Crude Oil • Venezuelan Crude Oil • Mexican Crude Oil • Louisiana Crude Oil • Kuwait & Saudi Arabian Crude Oil 	<p><u>Numerous Solvents:</u></p> <ul style="list-style-type: none"> • Zylene • Toluene • Ethyl Benzene • Chrysene • Hopane • Hexadecane • Naphthalene • Fluorene • Phytane • Phenanthrene • Pristane
<p><u>Pesticides:</u></p> <ul style="list-style-type: none"> • DDT • Malathion • Organo pesticides • Glyphosate • Picloram • Spectracide 2,4-D, • Lamda-Cyhalotrin 	<ul style="list-style-type: none"> • C18 • C30 • Dioxins • Furans
<p><u>Other compounds:</u></p> <ul style="list-style-type: none"> • Tert Butyl Ether • Benzene 	<ul style="list-style-type: none"> • TNT & Gunpowder • Grease from Animals • Grease from Vegetables