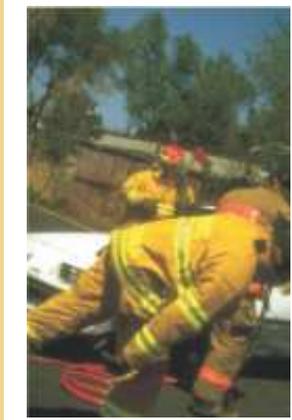


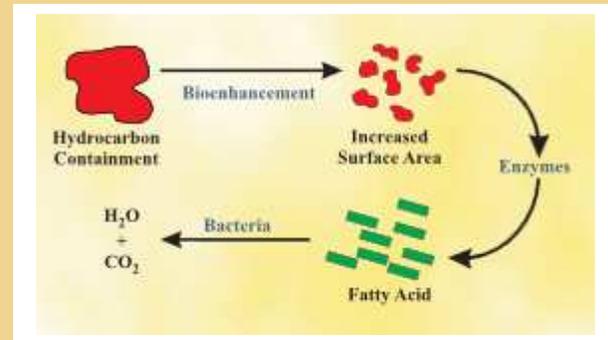
Baad Bugs™ Fuel Eliminator



- ◆ Ground-breaking Microbe Technology remediates hydrocarbons into water and CO₂.
- ◆ Renders volatile fuels (gasoline, diesel, etc) and many solvents non-flammable and biodegradable within minutes.
- ◆ Significantly reduces VOC's and lower LEL's.
- ◆ Replaces AFFF, granular absorbents (Speedy Dry, Oil Dri), socks and pads.
- ◆ Reduces clean-up time, disposal costs and liabilities associated with land-fill waste.
- ◆ Eliminates sheens and leaves a non-slip surface for safe clean-up efforts.
- ◆ Safe to use on concrete, asphalt and painted surfaces.
- ◆ Non-toxic, non-hazardous and is completely harmless to human, plant, animal and marine life.

Baad Bugs™ Fuel Eliminator significantly reduces the ability of volatile fuels to ignite. It inerts the VOC's on initial application and lowers LEL's within minutes eliminating the potential of ignition. AFFF "Foaming" residues create an environmental challenge, as many are considered hazardous waste resulting in high, long-term clean-up costs. Spills of less than 55 gallons have current standard operating procedures that include using absorbents such as "Speedy Dry", "Oil Dri" and absorbent socks and pads. These treatment options unavoidably leave untreated fuel residue which creates issues for run-off into storm drains as well as creating sheens and damaging surfaces such as asphalt. These treatment options "move" rather than treat the contaminants. Additionally, the treated fuel solution can be recovered by vacuum equipment without ignition or damage to the equipment. Any residual "unrecoverable" effluent is encapsulated in a microbe-laden solution that allows for significant acceleration of the remedial process.

- ◆ Bioremediation uses microbes and enzymes to biologically transform hydrocarbons into non-toxic substances, Co₂ and H₂O.
- ◆ It increases the surface area of the oil while the enzymes break down the contaminants into smaller molecules.
- ◆ The enzymes then attract the microbes, which use oxygen, to oxidize part of the carbon in oil to carbon dioxide while the rest of the carbon is used to produce new cells and the oxygen gets reduced, producing water.



Baad Bugs™ Fuel Eliminator at work to the left – A 1,000 gallon underground storage tank containing jet fuel residue and flammable vapors. Before this tank could be dismantled with cutting torches, the tank needs to be thoroughly cleaned to remove the residue and flammable vapors. Two gallons were applied and circulated throughout the tank. The remaining jet fuel was remediated, rendering the fuel non-flammable and neutralizing any flammable vapors. The tank was rinsed with pressurized water leaving a clean, vapor-free environment.



Before
After



Hydrocarbon Degrade Chart

| | | | |
|--------------------|-----------------|----------------|---------------|
| Crude Oil | Gasoline | Diesel Fuel | Xylene |
| Kerosene | Fuel Oils | Jet Fuel | Toluene |
| Transmission Fluid | Motor Oil | Anti-Freeze | Glycols |
| Paraffin | Lubricating Oil | Grease/Tars | Carbon Black |
| Skydrol | Hydraulic | Cutting Fluids | Benzene |
| Acetone | Mineral Spirits | Paint Thinners | Animal Grease |
| Methanol | Vegetable Oils | Heating Oil | Solvents |