

M-1000 PRODUCTS FOR BIOREMEDIATION

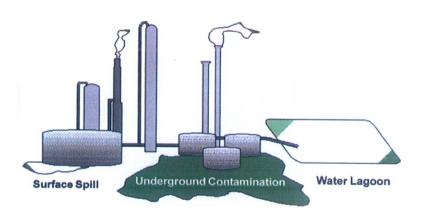
Introduction:

Hydrocarbon contamination of soil and groundwater comes from dozens of sources but all of them can be transformed or broken down into simple elements that no longer pollute. When this clean-up of hydrocarbon-based substances (oil, solvents, gasoline) must take place in less than one year, Micro-Bac's M-1000 line of products should be considered. If site conditions, time constraints, business interests or risk evaluations require a thorough yet inexpensive solution, the M-1000 line can be utilized to achieve site-specific target levels of remediation.

Range of Solutions

The M-1000 line of products and nutrients are designed to degrade a wide range of contaminants in an even wider range of conditions. Each of the products has been developed to contain as many as a dozen strains of specific hydrocarbon degrading bacteria. Whether your application is a chlorinated hydrocarbon in subsurface aquifer or a diesel spill in a transportation yard or gasoline leak from an underground storage tank, the M-1000 line has the proper product to degrade the contaminant right on site. These microbial solutions offer:

- Thorough degradation down to less than one PPD.
- Easy applications including injection or spraying.
- Optimal effectiveness in all oxygen zones.



USE M-1000 FOR:

Oil Spills
Fuel Spills
Hazardous Waste
Abandoned Sumps
Tanks
Brownfield's
Land farming
Biopiles
Bioreactors
Oil Lagoons
Car Wash Systems

The Benefits:

The M-1000 products have a greater than 95% success rate of bioremediation projects around the world, assuring that you will achieve project closure approvals more quickly, easily and economically than mechanical or chemical technologies. Again, the Micro-Bac remediation products are specially targeted for the contaminant groups most frequently encountered; including products TPH, PAH, PCBs, other aromatics, other chlorinated compounds, gasoline, crude oil and jet fuels, to name a few. Compared to almost every other approach, M-1000 products are cost-effective. They work either anaerobically or aerobically. They require no expensive machinery and by remediating the site more quickly, they will save you time and money on monitoring expenses, escrow fees, bank interest, penalties, and lack of revenue from idle property.

Application and Acceptance:

The M-1000 products can be applied *in situ* or *ex situ*, as part of the bioreactor process, in land farms, in biopiles, in pumps and treatment scenarios and in numerous other ways. They work well as an augmentation to other methods or as a stand-alone solution. Our client is backed up by our modern lab facilities and excellent technical support of Micro-Bac International, developer of environmental biotechnology products for industries throughout the world. The application of Micro-Bac microbes and nutrients is simple. There is no need for special equipment or handling.

The product line M-1000 is not pathogenic, it is non-toxic and non-chemical. Micro-Bac distributes these products throughout the world.

Custom Nutrients:

Micro-Bac also provides a proprietary blend of vitamins, trace minerals and specialized nutrients to ensure maximum performance of the M-1000 products. These are available in granulated and liquid formats.

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M-1000H*

broad spectrum product to remediate kerosene, diesel, lube oil,

Heating oil, fuel oil, jet fuel, TCE, PCP and others

M-1000PCB

chlorinated compounds, solvents, PCB's

M-1000BX

gasoline range organics, benzene, toluene, xylene, naphthalene, MTBE

M-1000CO

crude oils

M-1000LF

for land farming applications, biopiles

M-1000PAH

polyaromatic hydrocarbons

OSNF #1

granulated nutrient amendment

Tri-Phasic 12

Liquid nutrient amendment