

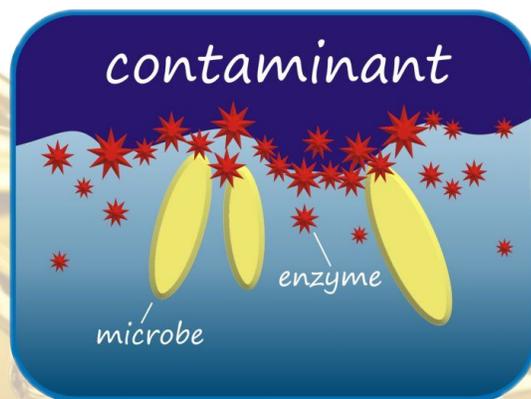
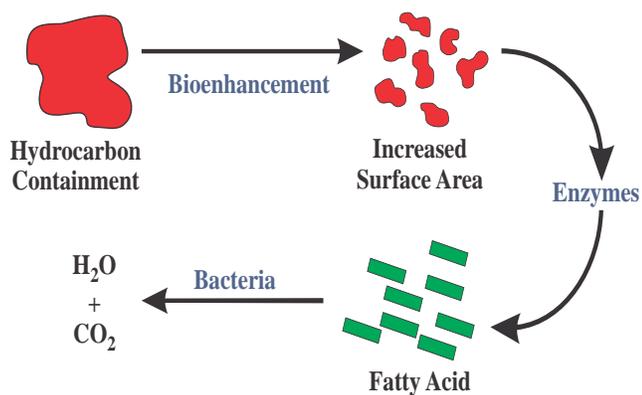
# BioRem 2000™ OIL DIGESTER

## BENEFITS

- ◆ Designed to digest hydrocarbons in groundwater, open water and soil remediation applications through a powerful blend of microbes, enzymes and nutrients.
- ◆ Effective over a wide range of hydrocarbons, including free-product.
- ◆ Biologically converts hydrocarbons into carbon dioxide and water.
- ◆ Available in a ready-to-use liquid formula.
- ◆ Can be combined with other technologies (e.g., bioventing, SVE) to be introduced during any phase of clean-up cycle to enhance site remediation.
- ◆ Listed on the EPA's National Contingency Plan Product Schedule as a bioremediation agent.

## TECHNOLOGY

- ◆ **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 extracellular and intracellular enzymes that begin the process of cleavage chopping long chains of 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.



# BioRem 2000™ OIL DIGESTER

## GROUNDWATER TREATMENT

- ◆ Bioremediates both contaminated soil (source) and groundwater (side-effect).
- ◆ Highly-effective at treating non-aqueous phase hydrocarbons ("NAPL") and dissolved hydrocarbons from the subsurface.
- ◆ Assists in the mobilization of non-aqueous phase hydrocarbons ("NAPL") from the vadose zone into the dissolved phase.
- ◆ Successful on high sorption where pump-and-treat does not work efficiently.
- ◆ It changes the surface of the oil particles from hydrophobic to hydrophilic.
- ◆ Compatible with biosparging and multi-phase extraction.

## OPEN WATER TREATMENT

- ◆ Oil consumption begins instantaneously.
- ◆ Effective on weather oils.
- ◆ Can be introduced during any phase of the clean-up life cycle.
- ◆ Compatible with skimmers, floating barriers, dispersants, solvents, detergents and burning techniques.

### Uses:

- ◆ Shoreline clean-up.
- ◆ Remediation of sheen in ports.
- ◆ Contained open water spills.
- ◆ Containment ponds.
- ◆ Storm water retention ponds.

## SOIL TREATMENT

- ◆ Designed to rapidly loosen trapped contaminants while imparting stabilized oxygen and nutrients.
- ◆ Can be applied topically or injected for bioremediating at any depth on open land or under buildings, pavement, or train tracks.
- ◆ Ideal for use in and around pipe racks, tank farms and leaking underground storage tanks "LUST" sites.
- ◆ Applications include land farming, composting, bioreactors and soil washing.

## PRODUCT PROPERTIES

|                   |                    |
|-------------------|--------------------|
| Appearance:       | Amber              |
| Physical State:   | Water-Like Liquid  |
| Boiling Point:    | 212° F             |
| Freezing Point:   | 32° F              |
| Flash Point:      | Non-flammable      |
| Specific Gravity: | 1.08               |
| Fragrance:        | None               |
| Solubility:       | Completely Soluble |

## ORDERING INFORMATION

| Item No. | Unit Size |
|----------|-----------|
| 8611-005 | 5 gal.    |
| 8611-015 | 15 gal.   |
| 8611-055 | 55 gal.   |

Distributed By:  
Smith & Jones Janitorial Supplies &  
Equipment, Inc.

1 Biloxi Square West Columbia, SC 29170  
Phone: 803-822-8500  
Fax: 803-822-2500  
[www.snjjan.com](http://www.snjjan.com)