The Importance of the Awareness of Ecologically Sensitive Factors When Designing Remediation Solutions for Petroleum Related Releases

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Who is DTI?

DeepEarth Technologies, Inc. was chartered in 2003 to bring new innovation in chemical oxidation (hydrocarbons) and reduction (halogenated organics) to the environmental remediation marketplace.

Unlike most companies that simply sell products, DTI is a total turn-key company offering:

- Proven Technology
- Experienced Personnel
- Innovative Application Machinery

Resulting in:

- Economical life cycle costing
- Accelerated Site Closures (NFA Tombstone Remedies)
- **Know-How!**

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Ecology

The branch of biology that deals with the relations of organisms to one another and to their physical surroundings.

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The political movement that seeks to protect the environment, especially from pollution.

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Objectives

The presentation will provide examples where these ecologically sensitive projects have been successfully executed and examples of what to be aware of that will impact the remedial design.

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Study Areas

Ecologically sensitive receptors

- water
- wetland
- tundra
- native grasses & prairie
- wildlife habitat
- top soils
- wilderness

Primarily rural or government set-aside land

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Oil Production

Ecologically sensitive receptors

- water
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E - Battles

"Fought to save the Countryside
The cities are already screwed up!"

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Introduction

- Although there are numerous products and/or processes that are touted as the best, the strongest, or the most effective at remediating releases that occur in all sectors of the petroleum industry, not all are apropos when considering the media that was impacted by the spilled contaminant.

- Many of these amendments can actually convert the released materials to acceptable non-toxic compounds or more likely, simply just wash them deeper into the soil, as is the rule with surfactants, it is becoming more and more important to consider the effect that these reagents have upon the environment or organisms that were the recipient of the release.

- Remedial design can be quite complex and limit alternatives.

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Prairie Well Blow-Out

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Well Blow Out

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Truck Release

Cool-Ox® Application

"scar" in the ditch where the crude was released.

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4 Weeks Post

Cool-Ox® Assisting with Re-Vegetation

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The Everglades

- National Park Service
- Privately owned oil production well site.
- Diesel release that breached the production berm. Diesel spilled onto the preserve. Saturated in soil.
- The Florida Park Service recommended DTI service and Cool-Ox (The only product currently approved).
- The Spill is located on preserve land off of US Highway 41 between Miami and Naples.
- The spill area is 10 x 20 ft x 2ft deep excavated by hand.
- Equipment prohibited - DTI Spill Kit used with hand mixing.
- Contaminant free after six (6) months.
- No damage to plants – area was greener!

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The Site

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Fuel & Remedy

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Reactions

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Questions?

Thank You!

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