

US EPA ARCHIVE DOCUMENT

“Bioremediation” of Oil Fields in Pennsylvania

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Outline

I. Natural Attenuation: The Passive Remedial Approachw

- aerobic biodegradationw
- anaerobic biodegradationw
- dispersionw
- volatilizationw
- adsorptionw

II. Natural Attenuation: The Aggressive Removal Approachw

- solidificationw
- aerobic biodegradationw
- volatilizationw
- organic loadw
- compostingw

III. Voodoo Versus Sciencew

Backgroundw

- NW PA Major Oil Spill Project (1985-1987)w
- Bar Room Brawls and Back Alley Debatesw

Practical Application of “Bioremediation” at Removal Response Actionsw

- PIC #1-6-0006, McKean County, PAw
- The Bryner Experiments, McKean County, PAw
- Mayburg Mountain, Forest County, PAw
- North Fork Minor Oil Spill, Allegheny National Forestw
- Park & Hungiville OPA Site, McKean County, PAw
- Allegro Oil & Gas Inc OPA Site, Potter County, PAw
- Melvin Farm OPA Site, McKean County, PAw
- Avery Farm OPA Site, McKean County, PAw
- Hess Farm OPA Site, McKean County, PAw
- Onofrio Estate OPA Site, McKean County, PAw

Also Worthy of Mentionw

- w Czech Embassy Spill, Washington, DCw
- High Rise Condo Spill, Washington, DCw

IV. Future Removal Response Bioremedial Plan of Actionw

- Site-Specific “Bio-Pod” Characterizationw
- Identification of Hydrocarbon-Degrading Microbesw
- Removal Response Application of Plant System Technologies??w