



Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

March 14, 2000

Mr. Michael Walsh
Chem-Tel, Inc.
1313 8th Avenue, Suite 300
Tampa, Florida 33605

Re: **Pulsed Sparge Product Recovery**

Dear Mr. Walsh:

The Bureau of Petroleum Storage Systems hereby recognizes Pulsed Sparge Product Recovery (PSPR) as a method of Light Non-Aqueous Phase Liquid (LNAPL) recovery at petroleum contaminated sites. There may also be applications for this process in areas outside the regulatory jurisdiction of this bureau, such as sites where LNAPL-forming non-petroleum contaminants with suitable physical properties are present. LNAPL is also known as phase-separated hydrocarbons (PSH), and it is sometimes referred to as "free product".

As indicated by Chem-Tel, PSPR uses pulsed air sparging to augment vacuum extraction. The layout of the system, in combination with the method of operation, enables both plume control and a more efficient recovery of LNAPL than would otherwise be possible by either method alone.

The bureau recognizes PSPR as a technically feasible method for the recovery of free product at petroleum contaminated sites in Florida. There are no objections to its use provided its layout and operation at a site are such that the contamination plume is controlled and the free product is collected, as stated, and the situation is not exacerbated by any further undesirable migration than that which has already occurred. Applicable rules set forth in Chapter 62-770, Florida Administrative Code, must be observed, including air emissions control requirements, and operating and fire safety precautions are taken into account during design and operation of the system.

Since the process makes use of two existing technologies, in situ air sparging and vacuum extraction, it should be relatively easy for both Chem-Tel and the state's technical reviewers to identify and observe appropriate safety precautions for each site where the system is used. Information about safety devices and fire safety can be found in sections of the bureau's Remedial Action Plan Checklist pertaining to in situ vacuum extraction, in situ air sparging, and air emissions control.

While the Department of Environmental Protection does not endorse specific or brand name remediation products or processes, it does recognize the need to determine their acceptability from an environmental standpoint with respect to applicable rules and regulations, and the interests of public health, safety, and welfare. Vendor's must then market the products and processes on their own merits

Mr. Michael Walsh
March 14, 2000
Page Two

regarding performance, cost, and safety in comparison to competing alternatives in the marketplace.

Preparers of Source Removal Plans or Remedial Action Plans prescribing PSPR may include a copy of this letter in the appendix of plans they submit, and call attention to it in the text of their document. In this way, technical reviewers throughout the state will be informed that you have contacted the Department of Environmental Protection to inquire about its acceptability from a regulatory standpoint.

The Department reserves the right to revoke its acceptance of a product or process if any aspect of its nature, components, constituents, or performance has been falsely represented. Additionally, Department acceptance of any product or process does not imply it has been deemed applicable for all cleanup situations, or that it is preferred over other treatment or cleanup techniques in any particular case. A site specific evaluation of applicability and cost-effectiveness must be considered for any product or process, whether conventional or innovative, and adequate site specific design details must be provided in plans prescribing the product or process. You may contact me at 850/487-3299 if there are any questions.

Sincerely,

Rick Ruscito, P.E.
Bureau of Petroleum Storage Systems

cc: T. Conrardy - FDEP/Tallahassee