



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

July 30, 2002

Mr. Jay H. Murland
Envirologic Inc./SpillAway Brands
827 Glenside Avenue
Wyncote, Pennsylvania 19095

Re: **HC-100**

Dear Mr. Murland:

The Bureau of Petroleum Storage Systems hereby accepts HC-100 as a product for in situ and ex situ bioremediation of petroleum and other suitable contaminants in groundwater and soil. It is a mixture of natural-occurring, non-pathogenic, aerobic microorganisms and a small amount of nutrients. The product is shipped as a concentrated liquid that is diluted in a 10:1 ratio by the user prior to application at a remediation site. The result of a dilution calculation performed by the bureau, using information provided by Envirologic Incorporated, indicates the concentration of nutrients in the concentrate, as shipped, even before dilution by the user, meets the State of Florida's underground injection control requirements.

Although this acceptance applies only to the jurisdiction of this bureau, other bureaus within the Department of Environmental Protection, or other state agencies and local governments may choose to recognize it if their needs and regulations are similar. This bureau, however, is not responsible for applications beyond its jurisdiction, which is primarily the cleanup of subsurface petroleum, pursuant to Chapter 62-770, Florida Administrative Code (F.A.C.), typically at gasoline service stations.

For soil remediation where the underlying groundwater will not be affected by the leaching of HC-100, there are no special concerns beyond those that normally need to be addressed in preparing a Remedial Action Plan and conducting a cleanup in accordance with the petroleum cleanup requirements of Chapter 62-770, F.A.C. For ex situ groundwater treatment, where an aboveground treatment system produces effluent meeting the petroleum cleanup criteria of Chapter 62-770, F.A.C., and the drinking water standards of Chapter 62-550, F.A.C., for disposal via recharge gallery or NPDES permit, there are no special concerns. But for in situ groundwater remediation, via direct injection of HC-100 into an aquifer, there are underground injection control (UIC) regulations that must be observed. Since in situ aquifer remediation via injection is likely to be the most common application of this product, the bulk of the regulatory requirements discussed herein will be directed to that topic.

The bureau recognizes HC-100 as a viable product for the bioremediation of petroleum contaminated sites in Florida. There are no objections to its use provided the considerations of this letter are taken into account, and a Remedial Action Plan is prepared in accordance with Chapter 62-770, F.A.C., for approval by the Department.