



Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

October 12, 2005

Carol Blakey
Cheiron Resources Limited
1624 Crescent Road N.W.
Calgary, Alberta, Canada T2M 4B2

Re: **OILSCREENSOIL™**

Dear Ms. Blakey:

The Bureau of Petroleum Storage Systems hereby accepts OILSCREENSOIL as a field screening tool for the detection of petroleum, petroleum light non-aqueous phase liquids, and dense non-aqueous phase liquids including perchloroethylene, trichloroethylene, and trichloroethane.

As you have indicated, OILSCREENSOIL is not a quantitative device but rather a simple and quick 2-minute, qualitative, "go, no-go" field kit for the detection of petroleum in soil, down to approximately 500 parts per million (ppm). The kit is designed for easy use in the field, and requires only that the user provide a small soil sample of approximately 20 cubic centimeters, and roughly the same volume of potable water, not cooler than 20 °C (68 °F).

The kit contains a red dye that is used to stain the petroleum, in order to indicate its presence to the user. It also contains a green dye that is used to enhance the contrast, thereby making it easier for the user to see the red-stained petroleum. The intensity of the red color increases as the amount of petroleum present increases. The test is not adversely affected by moisture in the soil, the type of soil, or its permeability. The soil, and the petroleum in it to be detected, however, must both be light enough in color for the red dye to be seen. Those that are extremely dark are not suitable for this colorimetric method.

This acceptance applies only to the jurisdiction of this Bureau, which is the cleanup of petroleum pursuant to Chapter 62-770, Florida Administrative Code (F.A.C.). Other bureaus within the Florida Department of Environmental Protection, or other state agencies and local governments may choose to recognize OILSCREENSOIL if their needs and requirements are similar, but this Bureau is not responsible for applications beyond its jurisdiction. We suggest that a copy of this letter be placed in the appendix of contamination assessment plans that propose the use of OILSCREENSOIL, and in reports pertaining to contaminated site cleanups where OILSCREENSOIL was used to screen for the presence of petroleum.

Users of OILSCREENSOIL must clearly understand that it shall be used only as a qualitative field detection tool, and not as a substitute for the laboratory analytical methods cited in the requirements of Section 62-770.600, F.A.C., for official Site Assessment purposes. It should also be kept in mind that OILSCREENSOIL detects the presence of petroleum down to approximately 500 ppm, which is not as low as the current 340 ppm total recoverable petroleum hydrocarbon (TRPH) cleanup target level for soil in Florida, per Chapter 62-777, F.A.C. This 340 ppm is the maximum allowable soil concentration that

will not cause an exceedance of the maximum allowable 5-ppm TRPH concentration for groundwater in the event that petroleum should leach from the soil.

The difference between the 500 ppm detection limit of OILSCREENSOIL and the 340 ppm soil cleanup target level of Chapter 62-777, F.A.C., should not be a problem in situations where OILSCREENSOIL is being used only for qualitative field-screening purposes. If the user, however, needs a quantitative measurement, for comparison with the 340-ppm soil cleanup target level, then a sample should be taken for actual laboratory measurement of TRPH by the analytical method cited in Chapter 62-770, F.A.C.

While the Bureau 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. Vendors must then market the products and processes on their own merits regarding performance, cost and safety in comparison to competing alternatives in the marketplace. In no way, however, shall this regulatory acceptance letter be construed as certification of product performance. Additionally, the Department emphasizes a distinction between its regulatory "acceptance" and an approval. Products and processes are accepted but they are not approved.

The Bureau reserves the right to revoke its acceptance of a product or process if it has been falsely represented. Additionally, Bureau 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 products in any particular case. A site-specific evaluation of the applicability must be considered, and adequate details must be provided in a site-specific document. You may contact me at (850) 877-1133, extension 29.

Sincerely,

Rick Ruscito, P.E.
Ecology and Environment, Inc.
Bureau of Petroleum Storage Systems
Petroleum Cleanup Section 6

Rebecca S. Lockenbach
FDEP Section Leader
Bureau of Petroleum Storage Systems
Petroleum Cleanup Section 6

c: T. Conrardy - FDEP MS 4530/Tallahassee