

**NEW *IN-SITU* OXIDATION TECHNOLOGY MAKES
CONVENTIONAL SITE CHARACTERIZATION OBSOLETE**

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Extraordinary amounts of money and time are expended every year in the hunt for contaminant source areas at polluted sites. The conventional method of locating these hidden problems is probing and sampling. Unfortunately, unless the consultant is lucky enough to place a boring where the source resides, it remains unaccounted for. These undiscovered sources make it impossible to accurately calculate the mass of contaminants present at the site. Subsequently, all attempts at mass balance calculations are inaccurate.

A new technology has been developed that has the ability to locate contaminant sources during remediation of the site. This has given rise to a new concept in site characterization. That is, that when attempting to develop a remedial design, "The mass of the contaminants present in a site is unimportant; locating the contaminants is all important." This underpins a second premise that "unless the soil sources are located and remediated, attempts to mitigate groundwater contaminants are destined for failure."

A key feature of the Cool-Ox® in-situ chemical oxidation technology is that its reaction with contaminants can be controlled. When the reagent reacts with target contaminants, a lather, resembling dirty shaving cream is produced. This occurs only where contaminants have adsorbed to the soil and especially where they have been "smeared" by groundwater fluctuations. When the injection probe is withdrawn, this lather rises to the surface of the injection point thereby, revealing the location of source. Among other sites, the process has been used successfully at service stations, pipeline releases, product terminals and industrial sites. The technology is considered to be a very useful and economical tool to delineate contamination problems.

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