



شركة الكويت للنفط والغاز
 Kuwait Oil Company
 SUBSIDIARY OF KOC



Date: 19 MAY 2010

Ref. H&E/W/737/2010

To: M/s. GAS & OILFIELD SERVICES COMPANY (GOFSCO)
 P.O. Box 9277
 Ahmadi 81003, Kuwait
 Fax No. 23985261

Attn: Abdul Rahman Al Mulla
 Projects Manager

Sub: To introduce to KOC, ACT Terra Firma the Latest Technology in the Bioremediation that requires No Water.

This is in reference to the technical write-up forwarded of M/s. ACT Terra Firma technology vide your letter GOF/KOC/10/04/109 dated 26th April 2010 to us. At the outset, we appreciate your initiative of introducing the Bioremediation technology set apart from the conventional ones where water usage to maintain the moisture content is an important ingredient. Water being a scarce commodity in the desert environment, your technology conceptualized without water would indeed provide a great relief to the companies working in the region.

However reviewing your technology information and previous experience, we could not ascertain the performance and effectiveness for following conditions applicable to KOC.

- * Application on working with highly contaminated soils (5 to 20% of TPH) with dominating heavier fractions of hydrocarbons (eg. Tarcrete).
- * Technology functioning in desert soils where the moisture content are tend to be low with harsh climatic conditions (high summer temperatures followed by low winter temperatures).
- * Treatment of large areas or volumes of contaminated soil running into hundred thousand's m3 or Cubic yards or Tons of contaminated soil.
- * Treatment of soil strata beyond 12 inches without requirement of water.

The above information assumes importance for acceptance of pilot test. As any pilot in KOC requires commitment of resources for day to day monitoring of pilot, the detailed information is usually sought to ascertain the likely success of the technology by the vendor. Alternately, we also recommend you to apply for Pre-Qualification 09/03 Soil Remediation Services to enroll in KOC approved vendor's list.

This is for your information and further action.

for Kuwait Oil Company (K.S.C)

Mohd. Al-Fodari
 Manager (HSE)

cc TL H&E
 File

