

# BENCH-SCALE TREATABILITY STUDY

## TREATMENT OF PESTICIDES/HERBICIDES USING VERUTEK'S S-ISCO™ COELUTION TECHNOLOGY™

Soil samples were collected from a farm with moderate pesticide contamination. These samples were characterized to determine initial pesticide contamination levels prior to using in three laboratory tests:

- Test 1: No treatment (control column)
- Test 2: Alkaline persulfate and VeruSOL™
- Test 3: Iron-activated persulfate with VeruSOL™

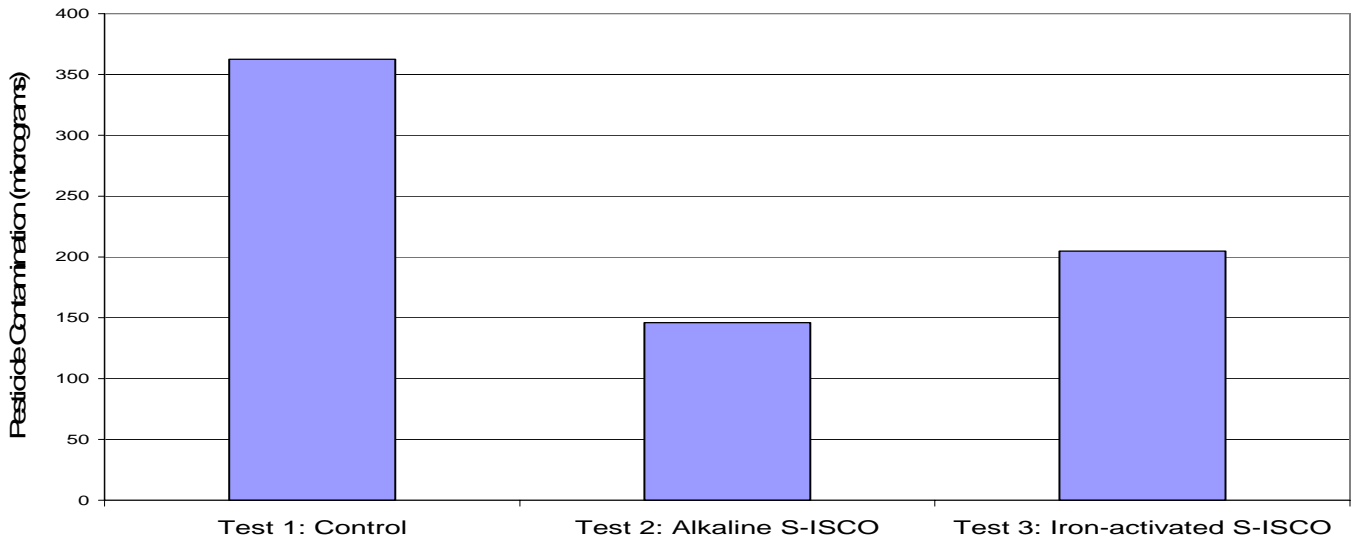
Each test contained the same amount of soil and groundwater. Each test also contained approximately the same amount of contaminants initially; the table and graph below demonstrate the effectiveness of S-ISCO in destroying pesticide contamination after just 7 days:

Pesticide Contaminant Concentrations

Pesticide Chemical	Test 1: Control	Test 2: Alkaline S-ISCO	Test 3: Fe-activated S-ISCO
Dieldrin, µg/kg	910	160	500
4,4' – DDT, µg/kg	1,000	50	850
Endrin, µg/kg	890	150	510
Endrin ketone, µg/kg	710	ND	320

*ND – Non Detect*

Pesticide Contaminant Destruction Tests



Treatment with the Alkaline S-ISCO technology led to the destruction of over 60% of the pesticide contamination in 7 days. Typical reaction times for VeruTEK's S-ISCO chemistry to completely destroy contamination range from two to four weeks. The tests are currently on-going for evaluation of results after 14 days and 30 days.