

## Summary of Field-Based Research Project Tasks

### Task 1. Facility Selection and Recruitment

- To aid in the logistics of testing, eight local jurisdictions have been selected in, six areas of the state, for the study. From each agency's electronic database, University California, Davis will randomly select 39 facilities. The selection will include single wall, double wall, and hybrid UST systems with both fiberglass and steel components.
- Facility access will be arranged with the owners by State Water Resources Control Board staff.

### Task 2. Initial Facility Testing

- Professional, licensed, and experienced employees from Tracer Research Corp. will visit the facility to review system compliance and verify items noted originally in the permit by using a SWRCB developed checklist.
- Upon confirmation of all information, Tracer Research Corp. employees will install test soil vapor probes at the facility and inoculate the UST systems with tracers.
- In 7-14 days, the Tracer Research employees will return to the facility and take soil vapor samples for analysis.
- If no tracer is found, the owner will receive a test report from Tracer Research and the study will be concluded at that facility.

### Task 3. Follow-up Facility Testing

If tracer is detected at the facility, a follow-up process will be conducted as follows:

- The facility owner will be notified and informed of the location of the possible leak by Tracer Research so that facility owner can arrange for repairs of potential leakage sources (e.g. tightening of a fill riser and loose fittings).
- Once the tank owner completes repairs, the tank will be inoculated again. If necessary, additional probes will be installed to delineate the source of the tracer.
- In 7 to 14 days another round of samples will be taken.
- If the repair eliminates the tracer detection it will be presumed that the leakage source has been properly repaired. If the tracer detection persists after repairs, a final report from the follow-up test will be provided to the tank owner to guide further repair or excavation efforts.