



# **REMEDIAL INVESTIGATION (RI)** **REMEDIAL DESIGN (RD)**

The remedial investigation (RI) and remedial design (RD) phases are critical to the success and closure of an environmental project since they almost always dictate the direction in which a project proceeds. Hagerty Environmental, LLC's personnel consist of highly experienced professional geologists, professional engineers and technical support staff. These personnel have extensive experience investigating environmental impacts to soil, surface water, groundwater, sediment and air and designing complex environmental remedies.

Hagerty Environmental understands the magnitude of an appropriately-planned and executed RI/RD and the consequences of not conducting these phases correctly. For the RI phase, there is a keen difference between collecting too much data, not enough data and altogether the wrong data.



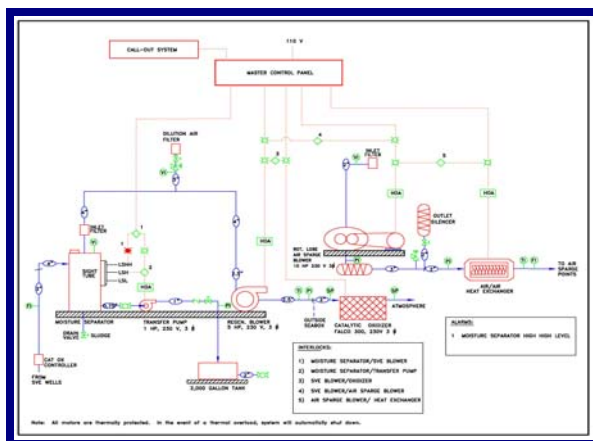
*Subsurface investigation to evaluate soil impacts around a known underground storage tank (UST)*

For the RD phase, the biggest pitfalls are preparing a design package that does not achieve the intended remedial goal or that looks good on paper but is not constructable.



*Pilot test of an air sparge / soil vapor extraction remediation system at a UST release site*

Once the RI is complete, the data are validated, evaluated and used to determine the most appropriate remedial options for the project. In many cases, bench-scale or pilot tests are conducted to confirm the appropriateness of the selected remedy and to generate design data. Once this phase is complete, our engineers prepare a detailed design package complete with construction details and bid documents. It is this information that is used to construct the actual remedy and to manage the project through closure.



*Piping and Instrumentation Diagram (P&ID) for an air sparge / soil vapor extraction (AS/SVE) remediation system*