

## **Used Environmental Remediation Equipment**

**“Used Remediation Equipment can save you money without added risk of increased downtime...”**

**“New equipment combined with used equipment will still save you money and allow more flexibility in equipment selection...”**

### **And Why Used Equipment Can Give You a Leg Up on the Competition”**

Dear Environmental Professional,

Entering the remediation phase of a project can be difficult for the typical hydrogeologist or environmental engineer because selection of remediation technologies and equipment is rarely something covered in school. Given the large capital expenditures associated with a remediation project the last thing you want to do is purchase something and then have trouble with it. Pilot testing is one of the best ways to determine if a certain remediation technology is right for your site. With soil vapor extraction (SVE) and air sparging (AS) pilot tests can typically be run using monitoring wells (Type 2 and Type 3) installed during the assessment phase of your project. In some cases, test wells may have to be installed specifically for the pilot test. How to perform pilot tests will be discussed in a future white paper and posted on the Pilot Test Equipment page of this website.

Once you have decided on a remediation technology and have your pilot data to help you size your equipment, it is time to prepare your budget and get quotes. If you are not sure if you should allow a bidder to bid used equipment or a combination of new and used equipment have them bid it both ways. If you are bidding against other consultants on the project, saving the Customer on initial capital cost may be the edge you need to beat your competitors. To decide you need to consider the length of time projected to clean up the site, the durability of the equipment you are specifying, and the warranty (if any) provided by the company selling the equipment. You should also consider the age of the equipment, run time in hours, general appearance, and if the equipment has been refurbished. You may find that you can save money, get good equipment and still have the same warranty as new equipment. In most cases only the cost of the replacement part will be covered by the warranty and not the shipping cost or labor to install it.

In my experience used equipment such as stainless steel air strippers, thermal and catalytic oxidizers, SVE systems with Roots® and Rotron® blowers, dual phase extraction systems (DPE) with Dekker® oil-sealed liquid ring pumps and AS systems with rotary claw or rotary screw compressors have life spans of 5 to 10 years or more with normal use and scheduled maintenance. These types of equipment may be used at three to five remediation sites before being retired. Equipment that is installed in trailers or buildings typically will outlive equipment which is constantly exposed to outdoor elements. There are many other quality equipment manufacturers in addition to those listed above. Another example of where money can be saved without worry of getting

worn out equipment is explosion proof (XP) control panels and fittings. A typical explosion proof SVE\AS control panel can cost between \$10,000 and \$20,000 with a third of that cost being the control enclosure. Several thousand dollars can be saved by allowing used XP enclosures and fittings.

Finally, as an environmental professional myself, I consider the use of used equipment as a form of conservation by recycling equipment that might otherwise end up in our landfills. With raw material and manufacturing cost continuing to increase it would be a shame to not get the most we can out of the useable equipment just sitting in those back lots.

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Still have questions? Email me at [brianchew@enviroequipment.com](mailto:brianchew@enviroequipment.com)