



MicroBlower™ Soil Vapor Extraction License Agreement

Tersus Environmental, LLC, located in Wake Forest, NC, a developer and marketer of advanced, innovative technologies for the remediation of soil and groundwater, and Savannah River Nuclear Solutions, LLC recently announced the signing of an Exclusive Patent License Agreement for the MicroBlower™. This royalty-based agreement grants Tersus Environmental an exclusive worldwide license to manufacture, use, and sell the MicroBlower™, a passive soil vapor extraction technology developed at the U.S. Department of Energy's Savannah River National Laboratory, which is operated for DOE by SRNS.

"This license agreement with Savannah River Nuclear Solutions enables us to expand our strong foundation of intellectual property," said Gary Birk, Managing Partner of Tersus Environmental. "Working with the outstanding researchers at Savannah River National Laboratory will provide our associates at Tersus Environmental and inVentures Technologies more design freedom as we develop the next generation of remediation technologies to meet the demands of this ever-expanding environmental sector. Our customers will benefit as we continue to implement an expanding array of uniquely effective remediation strategies."

Targeting the "vadose zone" during remediation traditionally has been considered difficult and the researchers at the Savannah River National Laboratory have developed a MicroBlower™ assisted barometric valve specifically for remediation of organic compounds in the vadose zone.

MicroBlower™ uses a small, low power vacuum blower to extract or inject gases into the subsurface for characterization or remediation. While similar in design to an active soil vapor extraction (ASVE) blower, the MicroBlower™ is a low-cost

alternative designed to run on renewable sources of energy such as solar and wind energy to treat volatile organic compound (VOC) contamination in the unsaturated zone. MicroBlowers offer the advantage of a reduced carbon footprint and very low operating and maintenance expenses.

A growing trend in environmental remediation is the use of natural processes. Researchers at SRNL are developing remedial approaches that take advantage of natural phenomena. These approaches are reducing the costs of cleanup and intruding less on the environment. The MicroBlower™ technology is an example of such an approach, based on natural venting cycles between the surface and subsurface. When atmospheric pressure is higher than the subsurface's pressure, air is induced to flow through wells into the subsurface. Conversely, when atmospheric pressure is lower than subsurface pressure, air flows out of wells into the atmosphere, taking with it organic contaminants such as chlorinated solvents in the gas phase.

Savannah River National Laboratory
Dale Haas, Commercialization Manager

Submitted by Debbie Patterson
Savannah River National Laboratory
Research and Technology Partnerships