

**Measurement of Soil Density and Moisture Characteristics on Contaminated Sites for Determination of Optimum Remediation Technique(s)** – Based on conversations with USEPA and NYSDEC officials, TransTech Systems feels that there is a very real possibility that the impedance spectroscopy technology being developed in their soils program (SQI™) will be relevant for helping to determine the contaminated site soil characteristics necessary for choosing the optimum remediation techniques. Since many cities worldwide have “brownfields” and other, less contaminated sites, the ability to provide a tool to measure things such as density, moisture and possible VOC levels would be a major benefit for environmental agencies and firms. In addition, it would be welcomed by municipalities that must deal with these sites in order to get them back on the tax rolls by making it possible to be used again by new commercial ventures. Environmental consulting companies that are involved in site assessments and NEPA or NYS SEQRA (or other State’s equivalent environmental review processes) would welcome a non-nuclear device like the one TransTech is developing because it would allow for virtually instantaneous density and moisture measurements in the field, and would do so without the training, licensing and handling headaches associated with nuclear densitometers. Partnering with TransTech in this area would ensure that future development would be directed at the specific applications most needed by these large environmental consulting firms. Impedance spectroscopy is also a technology that would be ideal for sensor fusion with acoustic, GPR and similar technologies that could lead to even more powerful instrumentation for the environmental field.