



Environmental Technology Verification (ETV) Program Site Characterization and Monitoring Technologies Center

ABOUT THE ENVIRONMENTAL TECHNOLOGY VERIFICATION PROGRAM AND THE SITE CHARACTERIZATION AND MONITORING TECHNOLOGIES CENTER

The U.S. Environmental Protection Agency's Environmental Technology Verification Program is designed to accelerate the development and commercialization of improved environmental technology through third-party verification and reporting of performance. The goal of ETV is to verify the performance characteristics of commercial-ready environmental technologies through the evaluation of objective and quality-assured data. This verification will provide purchasers and permitters with an independent and credible assessment of the technology that they are buying or permitting. ETV is intended to expand the environmental technology choices of public and private decision-makers, both in our country and abroad.

ETV is a voluntary program that seeks to make objective performance information available to all of the actors in the environmental marketplace for their consideration and to assist them in making informed technology decisions. ETV does not rank technologies nor compare their performance, label or list technologies as acceptable or unacceptable, nor seek to determine "best available technology", nor approve or disapprove technologies. The program does not evaluate technologies at the bench- or pilot-scale and does not conduct or support research.

The program now operates ten centers covering a broad range of environmental areas. ETV began with a 5-year pilot phase (1995-2000) to test a wide range of partner and procedural alternatives in various pilot areas, as well as the true market demand for and response to such a program. In these pilots, EPA utilized the expertise of partner "verification organizations" to design efficient processes for conducting verification tests of innovative technologies. EPA has

selected its partners from both the public and private sectors including Federal laboratories, states, industry consortia, and private sector facilities. Verification organizations oversee and report verification activities based on testing and quality assurance protocols developed with input from all major stakeholder/customer groups

associated with the technology area.



The Site Characterization and Monitoring Technologies (SCMT) Center is one of ten centers operating under ETV. The U.S. EPA National Exposure Research Laboratory, Environmental Sciences Division in Las Vegas manages the center. Their partner verification organizations are the U.S. Department of Energy's Oak Ridge National Laboratory and Sandia National Laboratories. The SCMT Center

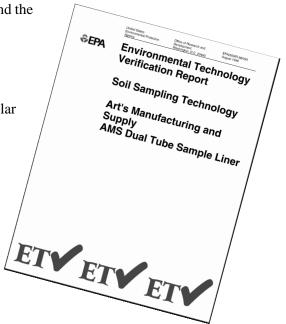
Visit the Center home page http://www.epa.gov/etv/02/02_main.htm

conducts verification testing of environmental characterization and monitoring technologies. Commercial-ready technologies are evaluated to provide potential technology users and permitters with an independent and credible assessment of technology performance. The verification process includes the development of formal test protocols, on-site field testing, and data evaluation. One of the end products of the verification process is an Environmental Technology Verification Report (ETVR). The ETVR contains a Verification Statement that is signed by EPA and the Verification Organization.

VERIFICATION PROCESS

Each technology verification test follows a similar process that includes the steps listed below.

- ❖ Identification of user-community needs
- Solicitation and selection of technology
- S Planning of demonstration
- ❖ Field demonstration
- Reporting of results
- ❖ Information dissemination



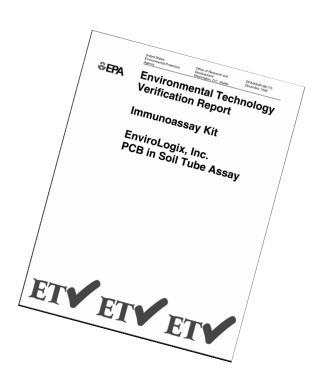
VERIFICATION REPORTS

Cone Penetrometer-Deployed Sensors

The Site Characterization and Analysis Penetrometer System (SCAPS) LIF	
Sensor and Support System; U.S. Navy, SPAWAR	EPA 600-R-97-019
The Rapid Optical Screening Tool (ROST) LIF System for Screening of Petroleum	
Hydrocarbons in Subsurface Soils; Fugro Geosciences, Inc.	EPA 600-R-97-020
Decision Support Systems	
ArcView GIS Version 3.1; ESRI, Inc.	EPA 600-R-99-094
SitePro™ Version 3.0; Environmental Software, Inc.	EPA 600-R-99-093
Spatial Analysis and Decision Assistance (SADA); University of Tennessee	
Research Corporation	EPA 600-R-00-036
Groundwater FX; Decision FX, Inc.	EPA 600-R-00-037

VERIFICATION REPORTS (CONTINUED)

Sampling FX; Decision FX, Inc.	EPA 600-R-00-038
Environmental Visualization System Pro (EVS-PRO); C Tech Development	
Corporation	EPA 600-R-00-047
Explosives Detection Technology	
GC-IONSCAN™; Barringer Instruments	EPA 600-R-00-046
FAST 2000™; Research International, Inc.	EPA 600-R-00-045
Field Portable Gas Chromatograph/Mass Spectrometers	
SpectraTrak [™] 672; Viking Instruments Corporation	EPA 600-R-97-148
EM640™; Bruker-Franzen Analytical Systems, Inc.	EPA 600-R-97-149
HAPSITE with Headspace Sampling Accessory; Inficon, Inc.	EPA 600-R-98-142
Field Portable Gas Chromatographs	
Model 4100 Vapor Detector; Electronic Sensor Technology (PCBs)	EPA 600-R-98-114
Model 4100 Vapor Detector; Electronic Sensor Technology (VOCs)	EPA 600-R-98-141
Voyager (GC/ECD); Perkin-Elmer Corporation (Photovac Monitoring Instruments)	EPA 600-R-98-144
Scentograph Plus II; Sentex Systems, Inc.	EPA 600-R-98-145
Multi-Gas IR Monitor	
Type 1312 Multi-gas Monitor; Innova AirTech Instruments	EPA 600-R-98-143
Field Portable X-Ray Fluorescence Analyzers	
Scitec MAP Spectrum Analyzer; EDAX Portable Products (formerly Scitec, Inc.)	EPA 600-R-97-147
SEFA-P Analyzer; HNU Systems, Inc.	EPA 600-R-97-144
TN 9000 and TN Lead Analyzer; KevexSpectrace Instruments	EPA 600-R-97-145
X-MET 920-MP; Metorex, Inc.	EPA 600-R-97-151
X-MET 920-P and X-MET 940; Metorex, Inc.	EPA 600-R-97-146
XL Spectrum Analyzer; Niton Corporation	EPA 600-R-97-150
Immunoassay Test Kits	
EnviroGard PCB Test Kit; Strategic Diagnostics Inc.	EPA 600-R-98-113
PCB in Soil Tube Assay; EnviroLogix, Inc.	EPA 600-R-98-173
RaPID Assay System for PCB Analysis; Strategic Diagnostics Inc.	EPA 600-R-98-111
D Tech PCB Test Kit; Strategic Diagnostics Inc.	EPA 600-R-98-112
PCB Immunoassay Kit; Hach Company	EPA 600-R-98-110
Ion Selective Electrode	
L2000 PCB/Chloride Analyzer; Dexsil Corporation	EPA 600-R-98-109
Soil Gas/Soil Gas Sampling Technologies	
AMS Dual Tube Liner Sampler; Art's Manufacturing and Supply	EPA 600-R-98-093
JMC Environmentalist's Subsoil Probe; Clements Associates, Inc.	EPA 600-R-98-091
EMFLUX Soil Investigation System; Quadrel Services, Inc.	EPA 600-R-98-096
Gore-Sorber Screening Survey Passive Soil Gas Sampling System;	
W.L. Gore & Associates, Inc.	EPA 600-R-98-095
Core Barrel Sampler; Simulprobe Technologies, Inc.	EPA 600-R-98-094
Large Bore Soil Sampler; Geoprobe Systems, Inc.	EPA 600-R-98-092
Groundwater Sampling Technologies	
Kabis Sampler Models I and II; Sibak Industries Ltd., Inc.	EPA 600-R-00-054
Well Wizard Dedicated Sampling System; QED Environmental Systems, Inc.	EPA 600-R-00-062
Multiprobe 100; Burge Environmental Technologies	EPA 600-R-00-074
Micro-Flo Bladder Pump Model 57400; GeoLog, Inc.	EPA 600-R-00-075
SampEase Bladder Pump; Clean Environment Equipment	EPA 600-R-00-078
GORE-SORBER Water Quality Monitoring; W.L. Gore & Associates, Inc.	EPA 600-R-00-091



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URL: http://www.epa.gov/ncepi

FOR MORE INFORMATION ON THE SITE CHARACTERIZATION AND **MONITORING TECHNOLOGIES CENTER:**

http://www.epa.gov/ etv or http://www.ornl.gov/etv

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