



**Homeland
Security**

Science and Technology

Highlight

U.S. Department of Homeland Security



System Assessment and Validation for Emergency Responders

The U.S. Department of Homeland Security (DHS) established the System Assessment and Validation for Emergency Responders (SAVER) Program to assist emergency responders making procurement decisions. Located within the Science and Technology Directorate (S&T) of DHS, the SAVER Program conducts assessments and validations on commercially available equipment and systems, and develops knowledge products that provide relevant equipment information to the emergency responder community.

SAVER Program knowledge products provide information on equipment that falls under the categories listed in the DHS Authorized Equipment List (AEL), focusing primarily on two main questions for the emergency responder community: "What equipment is available?" and "How does it perform?" These knowledge products are shared nationally with the responder community, providing a life- and cost-saving asset to DHS, as well as to Federal, state, and local responders.

The SAVER Program is supported by a network of technical agents who perform the assessment and validation activities and develop knowledge products. This highlight provides an overview of one such project.

For more information on this and other technologies, contact the SAVER Program Support Office.

E-mail: NUSTL@hq.dhs.gov

Website: www.dhs.gov/science-and-technology/SAVER

Portable Infrared Spectroscopy Chemical Detectors

(AEL reference number 07CD-01-FTIR)

Portable Fourier transform infrared spectroscopy chemical detectors are widely used by responders to identify unknown or suspect materials. Applications include chemical spills, suspicious package screening, clandestine labs, illegal dumping sites, arson investigations, and identification of unlabeled containers or drums. These devices may be used in combination with other technologies to improve confidence in detection and/or identification.

As a SAVER Program Technical Agent, Pacific Northwest National Laboratory conducted a comparative assessment of portable infrared spectroscopy chemical detectors to assist responders with procurement decisions. Prior to the assessment, a focus group was conducted to identify equipment selection criteria for the assessment, determine evaluation criteria, and recommend assessment scenarios.

As they become available, all reports in this series, including the *Portable Infrared Spectroscopy Chemical Detectors Assessment Report*, will be placed in the SAVER section of the DHS Science and Technology website, www.dhs.gov/science-and-technology/SAVER. Information on other technologies evaluated by the SAVER Program can also be found on the website.

