



**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](mailto:NUSTL@hq.dhs.gov)

Website: [www.dhs.gov/science-and-technology/SAVER](http://www.dhs.gov/science-and-technology/SAVER)

## CBRN Air-Purifying Respirators

(AEL reference number 01AR-02-APR)

Chemical, biological, radiological, and nuclear (CBRN) air-purifying respirators (APRs) consist of a facepiece with a head harness and a CBRN canister that filters air to remove contaminants upon inhalation. These devices are worn by responders to protect them from inhaling harmful contaminants that may be present when responding to CBRN incidents.

As a SAVER Program Technical Agent, Savannah River National Laboratory conducted a comparative assessment of CBRN APRs 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. A market survey was also conducted to provide a snapshot of the commercial marketplace.

As they become available, all reports in this series, including the *Chemical, Biological, Radiological, and Nuclear Assessment Report* and *Market Survey Report*, will be placed in the SAVER section of the DHS Science and Technology website, [www.dhs.gov/science-and-technology/SAVER](http://www.dhs.gov/science-and-technology/SAVER). Information on other technologies evaluated by the SAVER Program can also be found on the website.

