



Standard Guide for Acquisition, Maintenance, Storage, and Use of Hazardous Material Detection Instrumentation¹

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INTRODUCTION

In today's environment there exists a serious, potential threat to the public and the safety personnel that protect them. This threat comes from chemicals, gases, biological agents, radiation, and explosive materials. In order for Safety officials to mitigate this threat, instrumentation designed to detect and measure their potential to inflict harm must be acquired, maintained, and used in a pre-defined manner.

1. Scope

1.1 This guide provides techniques that can be used to ensure the proper operation and use of Hazardous Material detection equipment. This document cannot replace education or experience and should be used in conjunction with professional judgment. Not all aspects of this guide may be applicable in all circumstances.

1.2 This guide is not intended to represent or replace any accreditation or certification documents by which the adequacy of a given professional service must be judged.

1.3 This guide does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this guide to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1.4 When using HAZMAT equipment follow the manufacturer's guidance and appropriate safety practices for the expected or suspected threat.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

E2411 Specification for Chemical Warfare Vapor Detector (CWVD)

E2458 Practices for Bulk Sample Collection and Swab Sample Collection of Visible Powders Suspected of Being Biothreat Agents from Nonporous Surfaces

E2770 Guide for Operational Guidelines for Initial Response to a Suspected Biothreat Agent

2.2 Other Documents:

NIJ Guide 100-99 Guide for the Selection of Commercial Explosives Detection Systems for Law Enforcement Applications, Sept. 1999

Guide 100-06 Guide for the Selection of Chemical Detection Equipment for Emergency First Responders, 3rd Edition, January 2007, Dept. of Homeland Security
Calibration, Philosophy in Practice, Second Edition, Fluke Corp.

A Directory of Standards Laboratories, NCSL annual publication

NCSL RP-7 Recommended Practices, Laboratory Design
Guide 101-06 Guide for the Selection of Biological Agent Detection Equipment for Emergency First Responders, 2nd Edition, March 2007

DHS Guide 101-04 The Guide for the Selection of Biological Agent Detection Equipment for Emergency First Responders, Volume I, March 2005

¹ This guide is under the jurisdiction of ASTM Committee E54 on Homeland Security Applications and is the direct responsibility of Subcommittee E54.01 on CBRNE Sensors and Detectors.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.