



Standard Guide for Air Monitoring at Waste Management Facilities for Worker Protection¹

This standard is issued under the fixed designation D4844; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide is intended to provide a standardized approach for establishing and carrying out an air monitoring program to protect workers at waste management facilities. This guide may apply to routine operations at an active treatment, storage, or disposal site or the extraordinary conditions that can be encountered in opening and cleaning up a remedial action site.

1.2 The user shall understand that it is impossible to predict all the issues that could arise at a waste management facility due to hazardous airborne emissions. Although air contaminant measurements obtained in accordance with this guide may indicate acceptable or tolerable levels of toxic agents are present, care and judgment must still be exercised before concluding that all atmospheric contaminants at the site are under control and that a reasonable safe work environment exists.

2. Referenced Documents

2.1 *ASTM Standards:*²

- D1356 Terminology Relating to Sampling and Analysis of Atmospheres
- D1605 Practices for Sampling Atmospheres for Analysis of Gases and Vapors (Withdrawn 1992)³
- D2820 Test Method for C Through C Hydrocarbons in the Atmosphere by Gas Chromatography (Withdrawn 1993)³
- D2913 Test Method for Mercaptan Content of the Atmosphere
- D3162 Test Method for Carbon Monoxide in the Atmosphere (Continuous Measurement by Nondispersive Infrared Spectrometry)

¹ This guide is under the jurisdiction of ASTM Committee D22 on Air Quality and is the direct responsibility of Subcommittee D22.04 on Workplace Air Quality. Current edition approved Feb. 1, 2016. Published February 2016. Originally approved in 1988. Last previous edition approved in 2009 as D4844 – 03(2009). DOI: 10.1520/D4844-16.

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.

³ The last approved version of this historical standard is referenced on www.astm.org.

- D3249 Practice for General Ambient Air Analyzer Procedures
- D3269 Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Manual Procedures) (Withdrawn 2010)³
- D3413 Test Method for Lead (Inorganic) in Workplace Atmospheres by Atomic Absorption Spectrometry (Withdrawn 1989)³
- D3449 Test Method for Sulfur Dioxide in Workplace Atmospheres (Barium Perchlorate Method) (Withdrawn 1989)³
- D3476 Test Method for bis (Chloromethyl) Ether (bis CME) in Workplace Atmospheres (Gas Chromatography-Mass Spectrometry) (Withdrawn 1989)³
- D3614 Guide for Laboratories Engaged in Sampling and Analysis of Atmospheres and Emissions
- D3686 Practice for Sampling Atmospheres to Collect Organic Compound Vapors (Activated Charcoal Tube Adsorption Method)
- D3687 Practice for Analysis of Organic Compound Vapors Collected by the Activated Charcoal Tube Adsorption Method
- D3824 Test Methods for Continuous Measurement of Oxides of Nitrogen in the Ambient or Workplace Atmosphere by the Chemiluminescent Method
- D4185 Practice for Measurement of Metals in Workplace Atmospheres by Flame Atomic Absorption Spectrophotometry
- D4240 Test Method for Airborne Asbestos Concentration in Workplace Atmosphere (Withdrawn 1995)³
- D4323 Test Method for Hydrogen Sulfide in the Atmosphere by Rate of Change of Reflectance
- D4490 Practice for Measuring the Concentration of Toxic Gases or Vapors Using Detector Tubes
- D4532 Test Method for Respirable Dust in Workplace Atmospheres Using Cyclone Samplers
- D4599 Practice for Measuring the Concentration of Toxic Gases or Vapors Using Length-of-Stain Dosimeters
- D4600 Test Method for Determination of Benzene-Soluble Particulate Matter in Workplace Atmospheres
- D4687 Guide for General Planning of Waste Sampling
- D5681 Terminology for Waste and Waste Management