



Designation: **D6346 – 98 (Reapproved 2009) D6346 – 17**

Standard Guide for Accepting, Segregating, and Packaging Materials Collected Through Household Hazardous Waste Programs¹

This standard is issued under the fixed designation D6346; 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 covers Household Hazardous Waste (HHW) programs for accepting, segregating, and packaging materials collected through HHW programs to minimize the risk associated with managing these materials and to identify applicable regulations. This guide does not address storing, vehicle loading, or transporting collected and packaged materials. This guide does not attempt to define the hazardous nature of materials.

1.2 Certain existing local, state, and federal regulations apply to HHW program operations. This guide does not replace these existing regulations, and is not intended to be used as the basis for regulations for HHW Programs. This guide does not reference all applicable applications, since applicable regulations will vary. HHW Programs should research all applicable regulations before establishing a materials collection program.

1.3 *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 guide to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

[D5681 Terminology for Waste and Waste Management](#)

2.2 *Code of Federal Regulations (CFR):*³

[Title 49, Transportation, Parts 171–178](#) [100–185](#) [ASTM D6346-17](#)

[CFR Title 40, Protection of Environment, Part 261.5](#)

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions of general waste management terms used in this standard, refer to Terminology [D5681](#).

3.1.2 *bulking*—the act of emptying multiple containers of compatible materials and mixing those materials together in a single package unit destined for shipment. This would also include material placed in storage tanks to be packaged for shipment at a later date, or pumped into a bulk tank truck for shipment.

3.1.3 *consolidation*—the act of combining two or more materials to make a single package unit. Common types of consolidation packaging used by HHW programs include: bulking, lab packaging, and composite packaging.

3.1.4 *package or outside package*—a package plus its contents.

3.1.5 *packaging*—a receptacle and any other components or materials (drums, boxes, liners, absorbents, etc.) necessary for the receptacle to perform its containment function in conformance with the minimum packing requirements of 40 CFR 171, 172, 173.

¹ This guide is under the jurisdiction of ASTM Committee D34 on Waste Management and is the direct responsibility of Subcommittee D34.03 on Treatment, Recovery and Reuse.

Current edition approved Sept. 1, 2009; May 1, 2017. Published November 2009; May 2017. Originally approved in 1998. Last previous edition approved in 2004 as [D6346-1998\(2004\):D6346-98 \(2009\)](#). DOI: [10.1520/D6346-98R09](#); [10.1520/D6346-17](#).

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 Available from U.S. Government Printing Office, Washington, DC; Superintendent of Documents, 732 N. Capitol St., NW, Washington, DC 20401-0001, [http://www.access.gpo.gov](#).

4. Significance and Use

4.1 This guide is intended to provide general guidance to HHW programs for accepting and segregating materials, selecting a management method, and packaging materials collected by HHW programs.

5. Procedure

5.1 Accepting Materials—HHW Programs should establish a list of materials that will be accepted at its facilities or event collections. The list should be distributed to the public prior to the facility opening or event collection. Types of materials commonly collected by HHW Programs include:

5.1.1 Materials that exhibit a hazardous characteristic, as defined in 40 CFR 261.5, such as ignitability, toxicity, corrosivity, oxidizer, reactivity, or are a listed hazardous waste;

5.1.2 Materials prohibited from local municipal waste management systems; and

5.1.3 Materials collected to provide a convenience or public service to a community.

~~5.1.4 HHW Programs will need to establish traffic flow, vehicle unloading and safety procedures. All personnel involved with material acceptance should receive training in material identification, proper lifting procedures, safety and personnel protective equipment.~~

~~5.1.5 Leaking containers should be repackaged immediately into a container that is compatible with the material in the container.~~

~~5.1.6 Unlabeled containers should be segregated from other wastes. The individual who brought the container should be interviewed to assist in identification. Any further categorization and identification of the material should be completed as soon as possible. A hazardous materials contractor or trained staff could perform tests to identify the materials.~~

5.2 Personnel Training—HHW programs will need to establish traffic flow, vehicle unloading, and safety procedures. All personnel involved with material acceptance should receive training in material identification, proper lifting procedures, safety, and personal protective equipment.

5.3 Leaking Containers—Leaking containers should be repackaged immediately into a container that is compatible with the material in the container.

5.4 Unlabeled Containers—Unlabeled containers should be segregated from other wastes. The individual who brought the container should be interviewed to assist in identification. Any further categorization and identification of the material should be completed as soon as possible. A hazardous materials contractor or trained staff could perform tests to identify the materials.

5.5 Segregating Materials—As the materials are collected they should be segregated into general categories based on DOT incompatibility and packaging regulations.

5.5.1 Commonly Collected Materials—DOT classifies materials generated from households as a consumer commodity, which exempts them from DOT regulations. The materials listed below are sub-categories of DOT classes and are not intended to be all inclusive, but a guide to the most common materials collected by HHW programs.

Oil-Based Paint	Water-Based (latex) Paint/Sealer
Oil-Based Paint	Water-Based (Latex) Paint/Sealer
Fuels	Antifreeze
Corrosive Acids	Corrosive Bases
Cyanides	Dioxins
Pesticide Liquids (including herbicides)	Pesticide Solids (including herbicides)
Flammables and Chlorinated Products	Organic Peroxides
Oxidizers	Reactive Solids
Arsenic/Heavy Metals	Mercury Compounds
PCB-Containing Devices	Motor Oil
PCB-Containing Devices	Motor Oil
Compressed gas cylinders	Aerosols
Compressed Gas Cylinders	Aerosols
Batteries	Fluorescent and HID lamps
Batteries	Fluorescent and HID Lamps

5.5.1.1 Once a material is collected by a HHW program, it should be handled in an appropriate manner based on whether it exhibits a hazardous characteristic. A material that exhibits a hazardous characteristic or meets the definition of a listed hazardous waste or material should be transported in accordance with DOT regulations for its specific hazard class.

5.5.2 Materials Requiring Special Handling—The materials listed below require special handling. HHW Programs do not typically promote accepting these materials through their programs. However, these materials are brought to collection facilities and it is wise to be prepared to refer people to the appropriate local management option or to handle the materials at the facility. Management options are suggested below for these materials. The handling of these materials should be addressed in the site safety and emergency response plan for the facility.

5.5.2.1 Explosives, Ammunition or Fireworks—Contact local law enforcement or bomb squad.

5.5.2.2 Radioactive Materials—Refer to appropriate management option or contact Nuclear Regulatory Commission.

5.5.2.3 Friable Asbestos— Refer to local management facility or accept in accordance with local, state, and federal regulations.