



## HP Standard 007-2 Vendor Requirements for Hardware Recycling

<b>Owner</b>	Steve Rockhold
<b>Responsible Group</b>	Corporate Environmental Strategies
<b>Document Identifier</b>	HX-00007-02
<b>Revision and Date</b>	C, 13-Oct-2008
<b>Abstract</b>	This standard defines the requirements for vendors who recycle or dispose of HP electronic hardware products or materials.
<b>Applicability</b>	The requirements in this standard apply to all vendors worldwide who are contracted by HP and all subvendors used by such vendors to perform recycling or disposal of electronic hardware products, components or materials, including vendors and subvendors engaged in handling, storage, transportation, or processing of those products, components or materials.
<b>Status</b>	APPROVED

This document is a version of HP-00007-02, *HP Standard 007-2 Vendor Requirements for Hardware Recycling*, for external use.

© Copyright 2004-2008 Hewlett-Packard Development Company, L.P.

**This is an uncontrolled copy when in printed form.**

### Table of Contents

1	Introduction
2	Compliance with HP Supplier Code of Conduct and Ethical Business Practices
3	Reuse, Resale, or Donation of Whole Units, Parts, or Components
4	Reuse and Recycling
5	Landfill Avoidance
6	Insurance
7	Use of Subvendors
8	Audits of Vendors and Documentation
9	Processing Requirements
10	Product and Materials Tracking and Accountability
11	Transboundary Shipment
12	Information Security
13	Site Security
14	Approved Dispositions
15	Definitions
16	References



## 1 Introduction

The requirements in this standard apply to all vendors contracted by HP and all subvendors used by such vendors to perform recycling or disposal services for HP electronic hardware products, components or materials, including vendors and subvendors engaged in any of the following associated activities: handling, storage, transportation, and processing.

## 2 Compliance with HP Supplier Code of Conduct and Ethical Business Practices

- 2.1 Vendors must understand the HP Supplier Code of Conduct (Electronic Industry Code of Conduct) and sign the Supplier Social and Environmental Responsibility Agreement. These documents are available at [http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/supcode.pdf#\\_new](http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/supcode.pdf#_new) and <http://www.hp.com/hpinfo/globalcitizenship/environment/pdf/supagree.pdf>.
- 2.2 Vendors must demonstrate a history of regulatory compliance based on government agency or independent input (such as environmental facility reports from Environmental Data Resources or Dun & Bradstreet).
- 2.3 Vendors must notify their designated HP vendor manager within 24 hours of any occurrence that could materially affect or interrupt the vendor's ability to perform services for HP. In addition, any occurrences that involve security, health, safety, environmental, or labor issues that could negatively impact HP's interests must be reported to the HP vendor manager without delay.
- 2.4 Vendors must obtain and maintain all applicable permits, licenses, approvals, agreements, and other required government or regulatory documents.
- 2.5 Vendors must implement and maintain an emergency response plan to prepare for and respond to emergency situations, including fires, medical emergencies, and uncontrolled releases of hazardous or harmful materials.
- 2.6 Vendors must agree to implement and comply with the HP Hardware Recycling requirements set forth in this document.

## 3 Reuse, Resale, or Donation of Whole Units, Parts, or Components

- 3.1 Vendors engaged in any reuse, resale, or donation of hardware whole units, parts, or components must comply with *HP Standard 007-3 Vendor Requirements for Hardware Reuse*.
- 3.2 All units, components, and parts must be tested and inspected to ensure they are in working condition prior to resale or donation. If a subvendor is providing testing and inspection services, documentation must be maintained to provide assurance to HP that all items are being sold or donated in working condition.

## 4 Reuse and Recycling

Unless otherwise specified by HP, materials are to be reused or recycled to the extent technically and economically practical.

## 5 Landfill Avoidance

The following products and components must not be land-filled: whole monitors; central processing units (CPUs); televisions; printers; printed circuit boards containing lead; mercury lamps and switches; cathode ray tubes (CRTs); CRT glass; batteries; liquid crystal displays (LCDs); plasma screens; and any materials containing lead, mercury, cadmium, hexavalent chromium, or polychlorinated biphenyls (PCBs).



## 6 Insurance

- 6.1 Vendors must maintain general liability, comprehensive liability, and pollution liability insurance that is sufficient to comply with applicable regulatory requirements or a minimum of \$1 000 000 (U.S.) per occurrence/ \$2 000 000 (U.S.) in aggregate. Exceptions may be granted by HP where coverage is not available in a particular country or where processes and volumes do not justify the levels of coverage specified above.
- 6.2 Vendors must maintain financial insurance or bonding instruments to cover the maximum facility closure costs.
- 6.3 Closure cost estimates must be reassessed and documented at least once every two years.
- 6.4 Closure plans documenting how materials will be managed and how the facility will be properly decommissioned at the time of closure must be maintained and updated at least every two years.

## 7 Use of Subvendors

- 7.1 Subvendor disclosure must include all tiers of the disposition chain; that is, the subvendor of the subvendor and their subvendors, continuing until the final disposition of any HP material.
- 7.2 Vendors must verify and maintain documentation that any subvendors they employ to provide recycling or disposal services for designated materials originating from HP will and do comply with this standard, including the HP Supplier Code of Conduct. Vendors must agree that any such subcontract will impose on the subvendor all requirements to which the vendor is subject in its contract with HP. Vendors will ensure that subvendors comply with these requirements.
- 7.3 Vendors must conduct annual audits to document conformance to HP standards at all subvendor sites and operations, regardless of their locations, that are used for handling, storage, or processing designated materials managed on behalf of HP. Such audits may be conducted by the vendor, an auditor selected by the vendor, HP, or an auditor selected by HP. HP reserves the right to conduct annual audits of subvendors itself or through a designated third party.
- 7.4 At a minimum, an audit must be conducted on-site for every three-year period in which a vendor uses a subvendor's services for handling, storage, or processing designated materials managed on behalf of HP. The on-site audit must include, but is not limited to, inspection of the subvendor's facilities, review of the subvendor's EHS management systems, materials tracking, export compliance and tracking, emergency management plan, closure plan, insurance documents, relevant permits, licenses, approvals, agreements and other required government or regulatory documents, and interviews with subvendor employees. The vendor shall make available to HP, upon request, documentation of all on-site audits of subvendors.

## 8 Audits of Vendors and Documentation

- 8.1 HP reserves the right to conduct annual audits and assessments of all vendor sites and operations, regardless of their location, that are used for handling, storage, or processing of designated materials managed on behalf of HP to document conformance to HP standards. Such audits may be conducted by HP or an auditor selected by HP. HP reserves the right to conduct these annual audits on-site.
- 8.2 Vendors must make audit results available to HP upon request, make records and information related to the HP audit and assessment process available to HP, and supply copies of records and relevant information to HP upon request. Records and information include, but are not limited to,



material tracking documents, material balances, unit counts, materials analysis, shipping records, disposal records, emissions monitoring, employee medical testing, inspection reports, regulatory notices, training records, spill or release reports, preliminary audit questionnaires, supplier self-assessments, and so forth.

## **9 Processing Requirements**

Vendors providing recycling services for HP products, components or materials must ensure that those operations occur in a timely fashion and under appropriate security conditions to prevent unnecessary stockpiling of products or material and to ensure that products, components, and materials are recycled or disposed as specified and are not diverted. HP reserves the right to witness recycling or disposal operations at any time.

## **10 Product and Materials Tracking and Accountability**

- 10.1 Vendor Storage and Processing—Vendor storage and processing areas must be secured to prevent theft or unauthorized access or removal. All HP products, components, and materials must be stored and processed in covered or contained areas to prevent releases to the environment. Specifically, batteries, mercury lamps, printed circuit (PC) boards, and monitors and CRTs must be protected from weather (such as wind, rain, or snow) during storage, and must not be stored for more than 90 days unless a longer period of time is authorized under applicable law and approved by the HP vendor manager.
- 10.2 Materials Accounting—Upon request, vendors must provide an accounting to HP of all HP products, components, and materials they have processed. Accountings may include, but are not limited to, material balance reports on materials received and material processed or disposed; outlines of the downstream flow of materials through the point of final processing and disposition; and information on the amount of materials received, processing methods, commodity generated, where sent, and transaction receipts.

## **11 Transboundary Shipment**

- 11.1 HP products, components or materials exported across country borders must have prior approval from the HP vendor manager.
- 11.2 Any required permits or government consents for transboundary shipments must be secured before shipment.
- 11.3 Hazardous or regulated materials shall not be exported from developed countries to developing countries.

## **12 Information Security**

- 12.1 All data-containing devices such as hard drives, and recording media such as CDs, DVDs, tapes, or other similar items must either be fully erased or destroyed by shredding, crushing, shearing, melting, incinerating, or perforating the memory resident material.
- 12.2 When requested by the HP vendor manager, vendors must maintain documents verifying destruction of data devices, including device serial numbers and date of destruction.



### 13 Site Security

- 13.1 Physical Security—Security controls must be in place to protect HP products, components, and materials from the time entrusted to the vendor - including any transit and or third-party transfer - until final disposition. Protection systems should be based on the degree of risk and may include facility security protections (access control, alarm system, closed-circuit television (CCTV), building construction, fencing and gates, lighting), security process controls (badging and identification, HR processes, concealed theft prevention, incident reporting and escalation, training, yard controls), business process controls (disposition, inventory control, loading and unloading), and in-transit controls (driver requirements, routes controls, security seals, and truck security).
- 13.2 Workforce—The vendor will perform pre-employment screening for criminal convictions (unless prohibited by law) before assigning any employee or contractor work or access to HP products or components. Work rules will be documented and enforced to facilitate the security of HP products and components and to prevent unauthorized use or resale of HP branded materials. Employees will be trained on the requirements for all HP materials and transactions.

### 14 Approved Dispositions

- 14.1 Mercury lamps must be processed by vendors capable of and experienced in handling and recycling mercury. The mercury-containing components must be recovered and not be sent to landfills.
- 14.2 Batteries must be processed by vendors capable of and experienced in recovering and recycling lead, acid, cadmium, nickel, copper, zinc, and other metals present in batteries.
- 14.3 CRTs (cathode ray tubes) must be processed by a leaded-glass recycler or a lead smelter.
- 14.4 LCDs (liquid crystal displays) must be processed by vendors capable of and experienced in recovering mercury in backlights.
- 14.5 PC (printed circuit) boards must be processed by a smelter (or other thermal process) capable of and experienced in recovering precious metals (gold and so forth) and heavy metals (lead and so forth) for reuse or by a chemical recovery process. Circuit components may be extracted for reuse prior to smelting.
- 14.6 Plastics should be recycled for use in new products, components and materials, as substitutes for other raw materials, or recycled in another beneficial manner. When recycling is not economically practical, plastics should be processed for energy recovery at a facility that is designed to control and monitor emissions from the process. See section 14.9 for related information.
- 14.7 Printing supplies collected as part of hardware recycling (for example, a print cartridge present in a printer at the time of its collection): Original HP printer cartridges must be processed using the HP Inkjet cartridge and LaserJet toner cartridge return and recycling programs in countries where HP programs are available. All other print supplies must be recycled or disposed of in an environmentally responsible manner compliant with applicable laws and regulations.
- 14.8 Metal (other than in PC boards): Acceptable processing includes liberation of metal items (manually or mechanically), volume reduction for transport (shredding, baling, and so forth), and refining by smelters or foundries (or similar) for the purpose of preparing the metal for reuse. To maximize recycling rates, sending whole products to a smelter is not authorized without approval from HP and demonstration that the smelter is capable of capturing all of the following for reuse: copper, precious metals (such as gold and silver); steel and aluminum; and, for CRT devices, lead.



- 14.9 Incineration: If lead-bearing electronic components (such as circuit boards), batteries, polyvinyl chloride (PVC) plastics, mercury lamps, or any material classified as hazardous waste under applicable regulations are disposed of by incineration, the incinerator must meet 99.99% destruction removal efficiency (DRE) for all regulated hazardous contaminants and 99.9999% DRE for dioxins.
- 14.10 Other Dispositions: Any other disposition for the above materials is not authorized unless approved in advance by HP.

## 15 Definitions

- 15.1 Designated materials—Any electronic products and components containing or consisting of circuit boards, shredded circuit boards, cathode ray tubes (CRTs), batteries, and mercury- and PCB-containing lamps and devices. The requirement for auditing recyclers ends when the materials need no further processing to be used as a direct feedstock and are processed into a reusable state.
- 15.2 Developed Country—A country that is either a member of the Organization for Economic Cooperation and Development (OECD) or a member state of the European Union plus Singapore and Lichtenstein.
- 15.3 Developing Country—Any country that is neither a member of the OECD nor a member state of the European Union.
- 15.4 Disposal—Landfill, incineration without energy recovery, and any other disposition of electronics hardware products, components or materials that is not for resale, reuse, recycling, or energy recovery.
- 15.5 Disposition—Management of unwanted electronic hardware products, parts, or components for resale, reuse, recycling, or disposal.
- 15.6 Electronic hardware—All electrically powered computer, printer, monitor and flat-panel television equipment manufactured by HP and similar equipment from other manufacturers that is owned, leased, managed for customers, or otherwise under the management of HP for disposition. This includes, but is not limited to, products for sale or lease, sample and prototype products, factory scrap managed by HP, obsolete inventory, customer or reseller returns, trade-in, components, subassemblies, and whole units.
- 15.7 Energy Recovery—Burning of electronic hardware products or components, or of materials derived from recycling of these products or components, for collection and recovery of energy.
- 15.8 Hazardous Materials—Materials that include, but are not limited to, printed circuit boards containing lead, mercury lamps and switches; cathode ray tubes (CRT) and CRT glass; or any materials containing lead, mercury, cadmium, or hexavalent chromium (including batteries and LCDs that contain such substances); and any materials regulated by law as hazardous.
- 15.9 Recycling—Processing of electronic hardware products for the retrieval of usable components or for recovery of plastic or metal materials, including processing of plastics-bearing materials for reuse in plastics manufacturing and processing of metals bearing materials for the recovery of precious metals or for resale as commodity scrap metal.
- 15.10 Resale—Sale of a used electronic hardware product for its original intended purpose with or without prior repair or refurbishment.



- 15.11 Reuse—Use of an electronic hardware product for its original intended purpose with or without prior repair or refurbishment.
- 15.12 Subvendor—Any third party who provides second or subsequent-tier recycling services to HP to or on behalf of a vendor with respect to the vendor's recycling of electronic hardware products or materials.
- 15.13 Vendor—Any third party who provides first-tier services to or on behalf of HP with respect to recycling, reuse, or disposal of electronic hardware products or materials, including third parties that provide the processing services directly or through third-party recycling, reuse, and/or disposal providers.
- 15.14 Vendor Manager—The designated HP employee or representative responsible for managing HP's relationship with a vendor.

**16 References**

HP Standards of Business Conduct

[HP Supplier Code of Conduct](#) [pdf file]

[Supplier Social and Environmental Responsibility Agreement](#) [pdf file]

[HP Standard 007-3 Vendor Requirements for Hardware Reuse](#)

**Revision History:**

<b>Revision, Date, Change Number</b>	<b>Brief Description of change</b>
A, 28-May-2004	Initial document.
B, 13-Apr-2007, DCN 02827	Added new requirements in each existing section and new sections regarding reuse, landfill, insurance, and security. Added new definitions as needed.
C, 13-Oct-2008, DCN 02919	New standard owner identified. Added new requirements in use of subvendors (section 7) and information security (section 12), and new definitions (section 15).