

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

**1.0 Purpose**

The purpose of this Standard is to define minimum requirements for electronics disposition programs.

**2.0 Applicability**

These requirements apply to all Dell environmental partners providing electronics disposition services. Dell reserves the right to unilaterally amend, supplement, or change these requirements. This performance standard pertains to all Electronic Waste generated by Dell's global operations and programs, including, but not limited to, corporate e-waste/equipment, takeback and returns programs, and manufacturing/assembly waste.

**3.0 Definitions**

| <b>Term</b>                              | <b>Definition</b>   |
|--|---|
| <b>Broker</b>                            | Vendor who acts as an intermediate agent in an electronics disposition transaction but does not carry out any value-added services (testing, grading, sorting, recycling, etc.) as part of the transaction.   |
| <b>Dell Data Destruction Policy</b>      | Dell Data Destruction Policy, 2009 (pending approval)   |
| <b>Dell Reuse Hierarchy</b>              | Most preferred method of reuse is whole system reuse. When that is not feasible, refurbishment of whole system for reuse is next priority. If both are not economically feasible, component-level piece part reuse is next preferred method of reuse. If none of these methods are feasible, commodity materials reuse is preferred. Not until all of the above methods are exhausted shall the disposal be considered. |
| <b>Disposition Channel</b>               | The route of End-of-First-Use Electronics that begins with Dell or Dell Customer and ends at the Reuse or Refurbishment facility for processing and continues through resale or final disposition.  |
| <b>End-of-First-Use Electronics</b>      | Any electronic product or part that is still functional and turned over to a refurbishing or reuse handler for repurposing by the first owner.  |
| <b>End-of-Life Electronics</b>           | Any electronic product or part that can no longer be used as intended, or that contains material that may be recycled or processed in order to reclaim a substance for further use.   |
| <b>Equipment</b>                         | Whole units of electronics, accessories and parts.  |
| <b>Materials</b>                         | Any new, used, defective and/or scrap Equipment parts, electronic equipment and components, sub-assemblies and other equipment and parts including, but not limited to, PC's, sub-assemblies and/or parts from PC's, external or peripheral PC devices (e.g. hard drives, keyboards, video cards, memory), electronic equipment and components and any other surplus equipment..  |
| <b>Minimum Technology Specifications</b> | Minimum standards for which an end-of-first use electronic product can be adequately reused with current compatible peripherals and in line with its core useful purpose.   |

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

| <i>Term</i>             | <i>Definition</i>  |
|-------------------------|--|
| <b>Refurbishment</b>    | Activities include any disassembly or physical modifications to the equipment, including part removal and upgrades   |
| <b>Reuse</b>            | Activities limited to performing non intrusive operation verification, data clearing, and software installation  |
| <b>Electronic Waste</b> | <p>Dell defines “Electronic Wastes” as non-working parts or devices, irrespective of material composition.</p> <p>The definition of “Electronic Waste” does not include:</p> <ul style="list-style-type: none"> <li>• Basel Convention non-hazardous wastes;</li> <li>• Working equipment and parts that are tested, certified and labeled as working and that are not intended for disposal or recycling, but for donation, reuse or resale;</li> <li>• Components being returned under warranty to the original equipment manufacturer;</li> <li>• Materials that are to be used as a direct feedstock in manufacturing without further processing or preparation, and the “Competent Authority” of an importing country makes a written determination that the material is acceptable. “Competent Authority” means the entity (usually a government agency) that is responsible for overseeing their country’s compliance with the Basel Convention.</li> </ul> |
| <b>Sorting</b>          | The process for differentiating materials or equipment for the purposes of identifying what is refurbishable, reusable and/or recycleable.   |

**4.0 Requirements**

All applicable laws and regulations will be followed. If any requirement in this document is contrary to applicable law or regulation, the applicable law or regulation will supersede that requirement.

*In addition:*

**4.1 Environmental Partner On-boarding**

4.1.1 All Dell Environmental Partners (EPs) who provide electronics disposition services shall be on-boarded through Dell’s globally standardized on-boarding process, including:

4.1.1.1 A comprehensive environmental, health, safety, security, logistics, downstream channel, and data destruction audit using Dell’s prescribed audit protocol conducted by a third party.

4.1.1.2 All recycling, refurbishment and processing vendors shall be audited at least annually to ensure conformity with Dell’s

## Electronics Disposition

|               |           |
|---------------|-----------|
| Document #    | ED-STD-01 |
| Revision #    | A02       |
| Revision Date | 5/08/09   |

Electronics Disposition Policy<sup>1</sup> and Environmental Partner Performance Standards<sup>2</sup>.

4.1.1.3 A comprehensive financial and business processes review.

### 4.2 Asset Recovery Services Agreement

#### 4.2.1 Compliance

4.2.1.1 EPs shall sign and comply with all requirements of the Dell Asset Recovery Services Agreement.

4.2.1.2 EPs shall comply with Dell's Electronics Disposition Policy and this Standard.

4.2.1.3 EPs shall comply with Dell's Data Destruction Standard.

4.2.1.4 EPs shall comply with all requirements set forth the following documents:

4.2.1.4.1 Electronics Industry Code of Conduct (EICC)

4.2.1.5 EPs shall obtain and maintain all operating permits, licenses and authorizations required to carry out electronics disposition operations.

4.2.1.6 EPs shall require and ensure that that their downstream vendors comply with this Standard.

4.2.1.7 EPs shall maintain ISO 9001, ISO 14001 and OSHAS18001 certifications.

#### 4.2.2 Insurance

4.2.2.1 EP shall obtain and maintain, with insurance companies acceptable to DELL, the minimum insurance coverages set forth below unless these are superseded by national insurance requirements:

4.2.2.1.1 Statutory workers compensation insurance or similar non-subscribers insurance in the jurisdictions in which EPs operate and employer's liability insurance with limits of not less than US\$500,000: (i) for each accident; and (ii) for each employee for occupational disease; or (iii) policy limit for disease.

4.2.2.1.2 Commercial General Liability insurance with limits for bodily injury and property damage

<sup>1</sup> [http://www.dell.com/downloads/global/corporate/environ/recovery\\_policy.pdf](http://www.dell.com/downloads/global/corporate/environ/recovery_policy.pdf)

<sup>2</sup> [http://www.dell.com/downloads/global/corporate/environ/Dell\\_Recovery\\_and\\_Waste\\_Disposition\\_Guide\\_lines.pdf](http://www.dell.com/downloads/global/corporate/environ/Dell_Recovery_and_Waste_Disposition_Guide_lines.pdf)

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

liability of not less than US\$1,000,000, personal injury each occurrence, US\$2,000,000 general aggregate and products/completed operations coverage.

4.2.2.1.3 Business automobile liability insurance with a limit of not less than US\$1,000,000 per occurrence for bodily injury and property damage liability.

4.2.2.1.4 Casualty Insurance with respect to the Equipment and/or Materials for “all risks” of physical loss or damage, including, without limitation, loss by fire (including extended coverage), theft, collision and other such risks as are customarily carried by prudent operators of businesses similar to that in which EP is engaged and in an amount not less than the full replacement value of the Equipment and/or Material.

4.2.2.1.5 Contractor’s Operations and Professional Services Environmental insurance, including coverage for Professional Liability and Contractor’s Pollution Liability with a limit of not less than US\$10 million. This policy shall include a waiver of subrogation favor of Dell, be endorsed to include Dell as an Additional Insured, and shall state that such insurance is primary insurance as respects any insurance carried by Dell.

4.2.3 Data Security

4.2.3.1 Data on Equipment shall be responsibly handled by EPs in compliance with Dell’s Data Destruction Standard.

4.2.3.2 All data-containing devices shall be completely erased or physically destroyed. If all sectors cannot be successfully erased per the Dell Data Destruction Standard, the device must be physically destroyed.

4.2.3.3 EPs shall store all data-containing devices in a secured, access controlled location prior to destruction.

4.2.3.4 EPs shall maintain documentation verifying data destruction, including serial numbers, dates, and methods of destruction.

4.2.3.5 EPs shall, at Dell’s request, provide this documentation to Dell.

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

4.2.4 Site Security

4.2.4.1 EPs shall maintain systems to ensure the security and control of all Equipment and Materials storage, processing and disposition activities associated with electronics disposition activities carried out for Dell.

4.2.4.2 EPs shall perform pre-employment screens for all employees carrying out Dell electronics disposition activities.

4.2.4.3 EPs shall maintain systems to ensure that only authorized employees have access to electronics disposition activities carried out for Dell.

4.2.5 Disposition Operations

4.2.5.1 All disposition operations shall be carried out in a timely manner utilizing environmentally sound management practices.

4.2.5.2 No prison or child labor will be utilized for any handling of Electronic Waste.

4.2.5.3 All disposition operations shall be carried out in accordance with Dell’s Reuse Hierarchy.

4.2.5.4 Electronic Waste processed by Dell’s disposition chain shall be tracked and documented. Electronic Wastes shall be managed throughout the entire chain of custody until final disposition.

4.2.5.5 Reuse

4.2.5.5.1 All Equipment with potential reuse capacity shall be fully tested, and functional per Dell specifications detailed in EP’s scope of work prior to being marketed or distributed as a refurbished product.

4.2.5.5.2 No non-functional product shall be marketed or distributed as refurbished for reuse or shipped either domestically or internationally.

4.2.5.5.3 Data on refurbished Equipment shall be responsibly handled by refurbishers through the use of Dell’s Data Destruction Standard. Equipment that fails to meet this Standard or is presorted to be recycled shall be adequately stored and protected from theft until disk drives are rendered inoperable and unreadable

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

4.2.5.6 Resource Recovery

4.2.5.6.1 EPs shall endeavor to use processes that maximize the recovery of recyclable Materials and shall document the evaluation and determination of process options

4.2.5.6.2 EPs shall employ environmentally responsible processes and practices as defined in this standard in the recycling of Materials.

4.2.5.6.3 Materials Recovery Requirements

4.2.5.6.3.1 Mercury lamps shall be processed by vendors capable of and experienced in the environmentally sound management and recycling of mercury. Mercury-containing Equipment and/or Materials shall not be disposed of in a landfill.

4.2.5.6.3.2 Printed circuit boards shall be processed in a smelter capable of and authorized by the country where it is located to recover precious and heavy metals.

4.2.5.6.3.3 Cathode Ray Tubes (CRTs) shall be processed by a leaded-glass recycler or smelter capable of and authorized by the country where it is located to process leaded glass.

4.2.5.6.3.4 Batteries shall be processed by recyclers in a smelter capable of and authorized by the country where it is located to recover metals present in batteries.

4.2.5.6.3.5 Every reasonable effort will be made to control all Electronic Wastes and to avoid Electronic Wastes from entering landfills or incinerators.

4.2.5.7 Disposal

4.2.5.7.1 EPs shall employ environmentally responsible processes and practices as

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

specified in this standard in the disposal of wastes.

4.2.5.7.2 No Equipment or Materials shall be exported from developed countries to developing countries for disposal.

4.2.6 Export

4.2.6.1 Prior to export from EPs, all Equipment and Material shall be tested and physically divided into three categories: (1) reusable; (2) recyclable; or (3) repairable / refurbishable / disposable / waste. A visual inspection is not a sufficient test to determine whether Equipment and Materials is reusable/repairable/refurbishable.

4.2.6.2 No Equipment or Materials that are co-mingled between the categories described in 4.2.6.1 shall be exported.

4.2.6.3 No Equipment or Materials classified per 4.2.6.1 as recyclable or disposable/waste shall be sold to Brokers.

4.2.6.4 No Equipment or Materials that are classified per 4.2.6.1 as disposable/waste shall be exported from developed (OECD) countries to developing countries (countries designated as non-OECD). Dell does not permit Electronic Waste to be exported from developed (OECD/EU) to developing (non-OECD/EU) countries either directly or through intermediaries.

4.2.6.5 Prior to the EP shipping any Equipment or Material which falls into the first or second category, the EP shall verify and document that all required permits, licenses and authorizations are in place. All exports and imports of Electronic Waste handled by Dell and its authorized environmental partners will comply with existing international waste trade agreements and legal requirements.

4.2.6.6 EP shall obtain all permits, licenses and authorizations required for export prior to initiating any shipment of Materials.

4.2.6.7 EP shall not sell, lease or otherwise transfer Equipment or Material to restricted end-users or to restricted countries.

4.2.6.8 EP shall not sell, lease or otherwise transfer Equipment or Material to end-user engaged in activities related to weapons of mass destruction, including activities related

|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

to the design, development, production or use of nuclear weapons, materials, or facilities, missiles or the support of missile projects, and chemical or biological weapons.

**4.2.7 Materials Tracking**

- 4.2.7.1 EPs shall track and document refurbished and end-of-life electronics throughout the complete product disposition channels.
- 4.2.7.2 Tracking information shall show the final disposition of all recyclable materials and wastes.
- 4.2.7.3 Refurbished electronics shall be tracked to first point of reuse over which EP has had direct oversight.
- 4.2.7.4 EPs shall maintain, and make available to Dell on request, source documents (i.e., waybills, shipping documents, invoices) verifying all Materials transfers.

**4.2.8 Subcontractors**

- 4.2.8.1 EPs shall require through contracts that all subcontractors (including downstream materials vendors) comply with this Standard.
- 4.2.8.2 EPs shall maintain documentation to demonstrate that subcontractors comply with this Standard.
- 4.2.8.3 EPs shall conduct and document annual audits to this Standard of all subcontractors utilized in providing electronics disposition services to Dell.
- 4.2.8.4 EPs shall make the results of subcontractor audits available to Dell on request.
- 4.2.8.5 EPs shall require that all subcontractors utilized by their subcontractors comply with this Standard.

**4.3 Audit and Inspection**

- 4.3.1 EPs shall grant to Dell, or its designee, access to, and copies of, any information requested by Dell with respect to Environmental Partner's performance of electronics disposition services, including but not limited to information related to downstream activities.
- 4.3.2 Dell, or its designee, shall have the right at any time to enter onto Environmental Partner's premises without notice during normal business hours, for the purpose of auditing EP's compliance with this Standard.



|                                |               |           |
|--------------------------------|---------------|-----------|
| <b>Electronics Disposition</b> | Document #    | ED-STD-01 |
|                                | Revision #    | A02       |
|                                | Revision Date | 5/08/09   |

- 4.3.3 EPs shall make available to Dell, or its designee, for purposes of such audits (a) EP's books and records of account, records relating to environmental health and safety and any other related records requested by Dell; (b) its receiving, staging, storing, refurbishing, marketing, data cleansing and reselling facilities; and (c) physical inventories of Equipment and/or Material held by EP.
- 4.3.4 Audits will extend to investigation of the material's downstream process, including but not limited to mass balancing of material transfers between Environmental Partner and all of its subsequent sub contractors and Vendors.
- 4.3.5 EP shall have access to and documentation to verify material final destination at all times and shall contractually require that its subcontractors and vendors have access to the final destination of all materials that they process at all times.
- 4.3.6 Environmental Partner shall comply with this Standard and require its subcontractors and vendors to comply with any such requests for information by Dell.
- 4.3.7 Environmental Partner shall conduct and document annual audits of its own sub-contractors and provide evidence of such to Dell upon request.

**5.0 Revision History**

| <i>Revision Number</i> | <i>Originator</i> | <i>Document Owner</i>   | <i>Approval(s)</i>      | <i>Reason for Change</i>                 | <i>Approval Date</i> | <i>Effective Date</i> |
|------------------------|-------------------|-------------------------|-------------------------|--|----------------------|-----------------------|
| A00                    | Kristyn Rankin    | Kristyn Rankin          | Takeback Global Council | New document                             | 01/23/09             | 01/31/09              |
| A01                    | Kristyn Rankin    | Kristyn Rankin          | Takeback Global Council | Added document number                    | 03/31/09             | 03/31/09              |
| A02                    | Mike Watson       | Takeback Global Council | Takeback Global Council | Clarifying language on Export provisions | 05/06/09             | 05/06/08              |