Appendix 3 Product End-of-Life Disassembly instructions

Product Identification:

<table>
<thead>
<tr>
<th>Marketing Name / Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HP Compaq dx6120 Business PC Series - MT</td>
<td>HP business desktop PC – Microtower chassis</td>
</tr>
</tbody>
</table>

**Purpose:** The document is intended for use by end-of-life recyclers or treatment facilities. It provides the basic instructions for the disassembly of HP products to remove components and materials requiring selective treatment.

**1.0 Items Requiring Selective Treatment**

1.1 Items listed below are classified as requiring selective treatment.

1.2 Enter the quantity of items contained within the product which require selective treatment in the right column, as applicable.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Notes</th>
<th>Qty items in product.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)</td>
<td>With a surface greater than 10 square cm</td>
<td>2 (system board, power supply PCA)</td>
</tr>
<tr>
<td>Batteries</td>
<td>All types including standard alkaline &amp; lithium coin/button style</td>
<td>1</td>
</tr>
<tr>
<td>Mercury containing components</td>
<td>For example, mercury in lamps, display backlights, scanner lamps, switches, batteries</td>
<td></td>
</tr>
<tr>
<td>Liquid Crystal Displays (LCD) with a surface greater than 100 square cm</td>
<td>Includes background illuminated displays with gas discharge lamps</td>
<td></td>
</tr>
<tr>
<td>Cathode Ray Tubes (CRT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacitors / condensers (PCB / PCT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>External electrical cables and cords</td>
<td>PSU, IDE, SATA cables.</td>
<td></td>
</tr>
<tr>
<td>Gas Discharge Lamps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastics containing Brominated Flame Retardants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components and parts containing toner and ink, including liquids, semi-liquids (gel/paste) and toner</td>
<td>Include the cartridges, print heads, tubes, vent chambers, and service stations.</td>
<td></td>
</tr>
<tr>
<td>Components and waste containing asbestos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components, parts and materials containing refractory ceramic fibers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components, parts and materials containing radioactive substances</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2.0 Tools Required
List the type and size of the tools that would typically be used to disassemble the product to a point where components and materials requiring selective treatment can be removed.

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Tool Size (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat blade screwdriver</td>
<td></td>
</tr>
<tr>
<td>Phillips screwdriver</td>
<td></td>
</tr>
<tr>
<td>Diagonal cutters (dikes)</td>
<td></td>
</tr>
</tbody>
</table>

3.0 Product Disassembly Process
3.1 List the basic steps that should typically be followed to remove components and materials requiring selective treatment:

**SYSTEM BOARD**

1 To remove the access panel (see Figure 1 below):
   a) Loosen the captive thumbscrew that secures the access panel to the computer chassis.
   b) Slide the access panel back about 1 inch (2.5 cm), then lift it off the unit.

2 To remove the front bezel (see Figure 2 below):
   a) Press in on the two bottom tabs on the left side of the bezel so that they release from the chassis. Then press in on the upper tab on the left side of the bezel so that it releases from the chassis. The bezel will rotate out slightly from left to right.
   b) Press down on the upper right corner of the bezel to release the hook that secures the top of the bezel to the chassis. Continue to rotate the bezel, then push the bezel to the left to release the right side latches and rotate the bezel off the chassis from left to right.

3 Remove all expansion cards, cables, and any other devices from the system board.

4 Remove the 3-1/4-inch drives from the drive cage to make it easier to handle the system board. See the drive positions illustration to determine the location of these drives (see Figure 3 below). Drive locations are as follows:
   1 - Two 5.25-inch, half-height bays for optional drives
   2 - Two standard 3.5-inch, one-third height bays (1.44-MB diskette drive shown)
   3 - Two internal 3.5-inch, one-third height bays for hard drives
   To remove the drives (see Figure 4 below):
   a) Disconnect the power and data cables from the back of the drive.
      NOTE: Some products use straight cable connectors while others use right angle connectors.
   b) A latch drive bracket with release tabs secures the drives in the drive bay. Lift the release tab on the latch drive bracket for the drive you want to remove, and then slide the drive from its drive bay.

5 To remove the system board (see Figure 5 below):
   a) Remove the eight screws that secure the system board to the chassis.
   b) Slide the system board toward the front of the chassis to remove it.

**BATTERY**
Locate the battery and battery holder on the system board. Depending on the type of battery holder on the system board, complete the following instructions to remove the battery:

**TYPE 1 BATTERY HOLDER** (see Figure 6 below)
- Lift the battery out of the holder.

**TYPE 2 BATTERY HOLDER** (see Figure 7 below)
- To release the battery from its holder, squeeze the metal clamp that extends above one edge of the battery. When the battery pops up, lift it out.

**TYPE 3 BATTERY HOLDER** (see Figure 8 below)
- Pull back on the clip that holds the battery in place, and then remove the battery.

### POWER SUPPLY

1. Disconnect all power cables from the mass storage devices and from the system board.
2. Remove the screws (1) that connect the power supply to the chassis (see Figure 9 below).
3. Pull the power supply towards the front of the chassis while depressing the two sets of retaining clips (1) to allow the power supply to move far enough to lift it (2) from the chassis (see Figure 10 below).

### POWER SUPPLY PRINTED CIRCUIT ASSEMBLY

1. Remove the six screws from the bottom of the power supply (see Figure 11 below).
2. Snip the plastic cable clamp that secures the wires to the power supply cover (see Figure 12 below).
3. Remove the power supply cover.
   **NOTE:** A device is screwed into the underside of the cover that is wired to the PCA.
4. Cut the wires that connect the device connected to the cover to the PCA (see Figure 13 below).
5. Using diagonal cutters (dikes), cut the following wires (see Figure 14 below):
   a) Green/yellow wire.
   b) Gray wire to power outlet.
   c) Mass of wires (to gain access to capacitor).
6. Remove the four screws that secure the main printed circuit assembly to the power supply chassis (see Figure 15 below).
7. Lift the PCA out of the power supply chassis.
3.2 ILLUSTRATIONS

FIGURE 1: Removing the access panel

FIGURE 2: Removing the front bezel

FIGURE 3: Drive positions

FIGURE 4: Removing drives
FIGURE 5: Removing the system board

FIGURE 6: Type 1 battery holder

FIGURE 7: Type 2 battery holder

FIGURE 8: Type 3 battery holder

FIGURE 9: Removing power supply screws

FIGURE 10: Removing the power supply
FIGURE 11: Power supply screw locations

FIGURE 12: Cut plastic clamp

FIGURE 13: Cut cable

FIGURE 14: Cables to cut
FIGURE 15: PCA screw locations