



# Restriction of Hazardous Substances In Electrical and Electronic Equipment ( RoHS )

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## 1. RoHS Compliance Introduction

The following data outlines Portwell Inc. compliance strategy with the goal to meet WEEE - RoHS requirements of EC Directive on Waste Electrical Equipment (WEEE) and Electronic and EC Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment ( RoHS).

### **RESTRICTED (RoHS) MATERIAL**

1. Cadmium ( Cd )
2. Hexavalent Chromium ( Cr VI )
3. Lead ( Pb )  
( Pb Proposition65 )
4. Mercury ( Hg )
5. Polybrominated Biphenyl ( PBBs )
6. Polybrominated Diphenylethers (PBDEs)

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## 2. RESTRICTED ( RoHS ) MATERIALS STANDARD

| Item  | Controlled Chemicals and Substances          | Controlled Value    |                                     |
|---|--|---------------------|-------------------------------------|
|   |  | RoHS * 4 MCV Limits | For Packaging & Wiring (for *1--*3) |
| 1   | Cadmium ( Cd )                               | RoHS: 100ppm        | 100ppm(package) *1 75ppm *2         |
| 2   | Hexavalent Chromium ( Cr VI )                | RoHS: 1000ppm       | 100ppm(package) *1                  |
| 3   | Lead ( Pb )                                  | RoHS: 1000ppm       | 100ppm(package) *1                  |
|   | Pb Proposition65:<br>Restricted Value 300ppm | -----               | 100ppm *3                           |
| 4   | Mercury ( Hg )                               | RoHS: 1000ppm       | 100ppm(package) *1                  |
| 5   | Polybrominated Biphenyl PBBs                 | RoHS: 1000ppm       | Not Allow                           |
| 6   | Polybrominated Diphenylethers (PBDEs)        | RoHS: 1000ppm       | Not Allow                           |
| <b>Note:</b> * 1. For packaging material: < 100ppm. * 3. For wire material<br>* 2. For Resin, Coating material, Ink : Cd < 75 ppm. * 4. RoSH Standard |  |                     |                                     |

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| Item | Controlled Chemicals and Substances   | Controlled Value  |                                     |
|------|---|-------------------|-------------------------------------|
|      |   | Portwell Standard | For Packaging & Wiring (for *1--*3) |
| 7    | TBTO(Oxide)   | Not Allow         | Not Allow                           |
| 8    | Triphenyl (TBT & TPT)   | Not Allow         | Not Allow                           |
| 9    | POLYCHLORINATED BIPHENYLS (PCBs) (CAS: 1336-36-3) & POLYCHLORINATED TERPHENYLS (PCTs) (CAS: 61788-33-8) | Not Allow         | Not Allow                           |
| 10   | Polychlorinated Naphthalene (PCNs)  | Not Allow         | Not Allow                           |
| 11   | Chloride Paraffin(CP)   | Not Allow         | Not Allow                           |
| 12   | Asbestos (CAS: Various-77536-66-4, 12172-73-5, 77536-5, 12001-29-5, 12001-28-4, 77536-68-6)             | Not Allow         | Not Allow                           |
| 13   | Azo compounds with Carcinogenic amino compounds Plastics  | Not Allow         | Not Allow                           |
| 14   | CFCs - Chlorofluorocarbons: & Halons Bromofluorochlorocarbons & HCFCs – Chlorofluorohydrocarbons        | Not Allow         | Not Allow                           |
| 15   | RadioactiveComponents/Substances  | Not Allow         | Not Allow                           |

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### 3. RESTRICTED ( RoHS ) MATERIALS CONTROL POINT

- a. Data Change of RoHS material system
- b. RoHS Vendors qualification
- c. Purchase material from RoHS compliant qualify vendor
- d. RoHS compliant product & pilot production
- e. RoHS compliant product & mass production
- f. Follow up the performance of RoHS compliant
- g. Implementation / Audit / Review the Performance of RoHS compliant

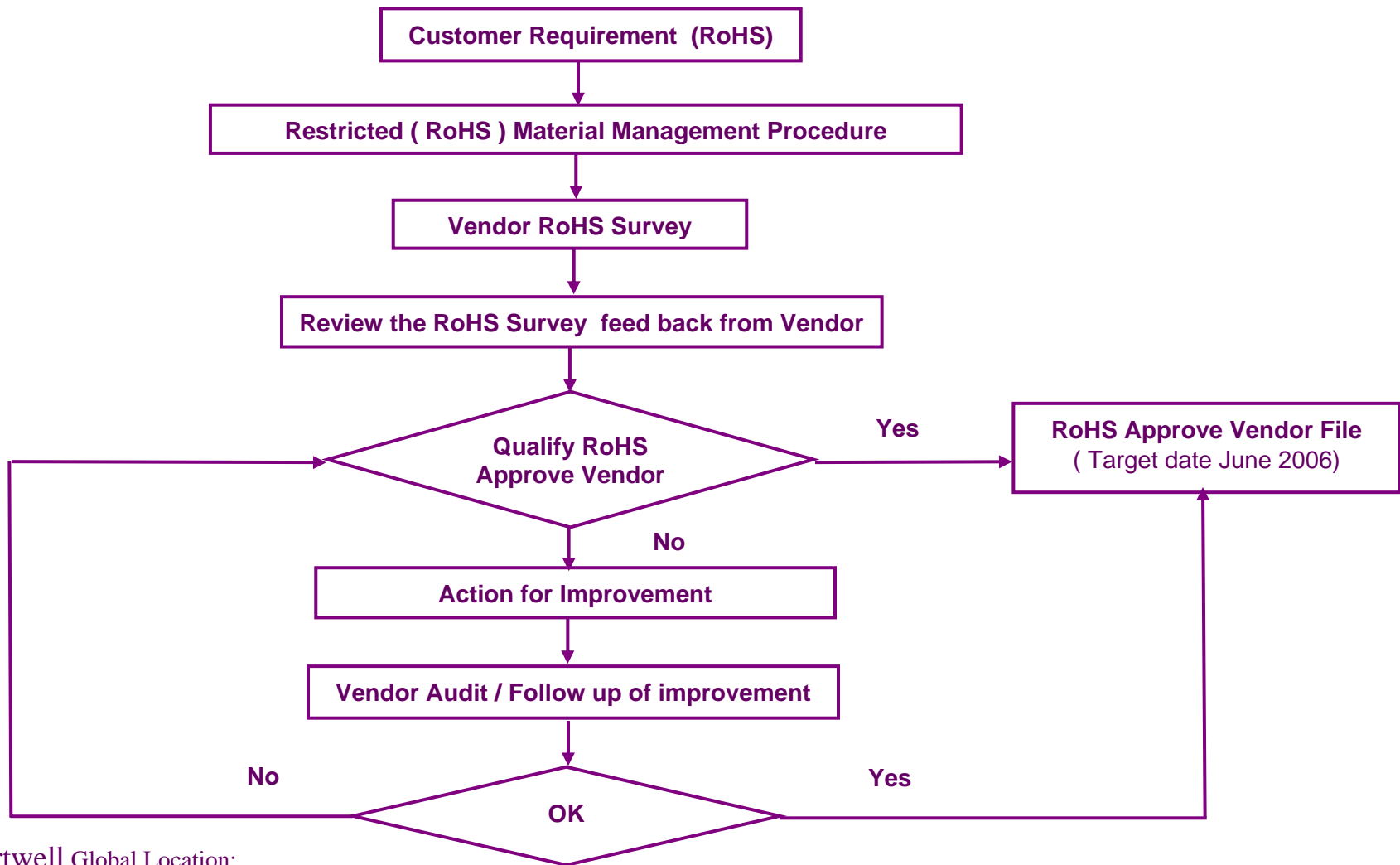
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## 5. RoHS Vendor Qualification Flowchart.



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## 6. ISO-14001 Environmental Management System certified since 1999.



Today's companies are committed to preserving the environment in their local communities and around the world by developing environmental management systems that guide their performance.

ISO 14001 defines the organizational Structure and responsibilities needed for managing a company's environmental objectives.

Expected to be the most widely recognized international benchmark for environmental system development, ISO 14001 facilitates a company's commitment and implementation of its environmental management policy.

Portwell is now under ISO14001 application. The related documentation can be Downloaded from the website: <http://www.portwell.com.tw>

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