## **Letter to Suppliers from Director of Global Procurement**

Subject: European Union Restriction on Hazardous Substances (RoHS) – Materials Declaration

Dear Valued Supplier,

Because European Union Directive 2002/95/EC on the Restriction on the use of certain Hazardous Substances in electrical and electronics equipment ("RoHS") becomes effective July 1, 2006, it is imperative that planning be completed quickly. As such, we are now requesting our Suppliers to begin sending IPC Materials Declarations or equivalent for **each part sold to Benchmark**.

As a reminder, RoHS bans the importation of products into the EU where the Homogenous Material in each Restricted Substance exceeds the Maximum Concentration Value for that particular Substance.

<u>RoHS Restricted Substances</u>: lead, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, and cadmium.

<u>Homogeneous Material</u>: material of uniform composition throughout that cannot be, in principle, separated into different materials by mechanical actions including, but not limited to, unscrewing, cutting, crushing, grinding, and/or abrasive processes.

Maximum Concentration Value: highest allowable concentrations of lead, mercury, hexavalent chromium, polybrominated biphenyls, polybrominated diphenyl ethers, or cadmium measured by weight in Homogenous Materials, currently, 0.1 percent for lead, mercury, hexavalent chromium polybrominated biphenyls, and polybrominated diphenyl ethers; and 0.01 percent for cadmium.

Benchmark both prefers and encourages the use of the IPC 1751/1752 Class 6 Materials Declaration standards. Alternatively, a Certificate of Compliance may be accepted, on a case-by-case basis and at Benchmark's discretion. At a minimum, any Materials Declaration or Certificate of Compliance forms must include: date, company name, part name, part number, mfg, mfg PN, identification of the Processing Information (see below), a statement of compliance with RoHS, signature (may be electronic) and title of authorized certifier, and an indication of whether the mfg part number is a distinct RoHS compliant mfg part number. Acceptable date/lot codes or date/lot code range must be included if there is not a distinct RoHS compliant mfg part number. It is preferred that the Supplier also list all of the Homogenous Materials containing the six Restricted Substances along with the substance/material ppm or percentage of each material by weight.

The Processing Information required is as follows for PCB Electrically Mounted Components:

- 1. JEDEC JESD-97 E Code:
- 2. Terminal plating/ball grid array solder;
- 3. Terminal sub-plating for barrier layer;
- 4. Terminal base metal;
- 5. Maximum time at peak temperature;
- 6. JEDEC J-STD-020-MSL rating;
- 7. Tin Whisker test and qualification data if appropriate; and
- 8. Types of reliability testing and qualification data if appropriate.

Each Supplier is responsible for using applicable third party testing to obtain the Maximum Concentration Values for each substances where: a) internal testing is not sufficient; b) the validity of a sub-tier supplier's declaration is uncertain; c) or a claim exists that disputes the existing data.

Benchmark thanks each Supplier for its assistance in ensuring a smooth transition to RoHS, and asks that these Materials Declarations and/or Certificates of Compliance are sent to Benchmark no later than [~date~]. Please remember that RoHS goes into effect on **July 1, 2006**. It is imperative that Benchmark receive this information quickly so that on that date, each and every part that lands in a RoHS-regulated area will be compliant with its specifications. This information is vital in organizing and preparing for such a transition. Benchmark must know which Suppliers will be capable of providing RoHS-compliant products, and which Suppliers can best serve the needs of Benchmark's customers. A Supplier's failure to provide the requested information may make it difficult for Benchmark to continue working with this Supplier in the future. As such, your cooperation in complying with these requirements and providing prompt responses is greatly appreciated as an important part of being a Supplier to Benchmark. If you have any questions related to this letter, do not hesitate to email your concerns to rohs@bench.com with a subject line of "RoHS Materials Declaration Question."

Thank you again for your cooperation.

Sincerely,

Jon Allen Director, Global Procurement Benchmark Electronics, Inc. (979) 849-6550, X-1283