Subject: Stakeholder Consultation RoHS II - **Exemption 4(f)**

Dear Sir/ Madam,

I am writing to you in my capacity as Executive Manager of the European Printing Ink Association (EuPIA) in support of the application by the Lighting Europe, VDMA for the extension of the existing exemption in Annex III 4f: Mercury in other discharge lamps for special purposes not specifically mentioned in the Annex.

Mercury discharge lamps are commonly used in the printing ink industry to dry inks, coatings and adhesives which are used on all types of packaging including a broad selection of food packaging, as well as magazines, books, advertising matter, credit and loyalty cards, business forms, labels and currency. Print produced with UV cured products have a number of unique aesthetic and performance properties and for this reason there are strong market drivers for the technology to continue to be used in the graphic arts sector.

In a recent market survey completed by Smithers Pira UK total sales of printed materials produced with UV products currently represent around €7.5 billion in Western Europe, this figure is predicted to increase to around €10 billion by 2019 this represents 10 % of total print sales in this market. In order to supply print to support this volume of sales it is estimated that 35% of sheetfed and wide web printing presses and 85%-90% of narrow web printing presses are fitted with UV curing units based on medium pressure mercury lamps. The loss of use of these lamps would clearly have a significant effect on the European printing industry to be able to produce print of suitable quality and would render a large amount of investments made on UV capable machinery redundant. It would also leave the European print industry open to non-European based competition where mercury lamp technology was still allowed.

The only technology which is currently capable of replacing medium pressure mercury lamps are UV emitting LED's (light emitting diodes). However, this technology has a number of drawbacks including a very limited range of output wavelengths. These drawbacks significantly limit the areas of printing where this technology can be used, especially in the area of surface drying of inks and the formulation of clear varnishes and white inks. These problems are closely related to the wavelength outputs of existing UV LED's, which do not activate the photoinitiators vital for surface drying, leaving print sticky, with no physical resistance properties and unsuitable for use and which tend to lead to yellowing of the products too, this effect has been accommodated in the formulation of coloured inks, but not in whites and clear coatings. This technology therefore does not currently represent a realistic replacement for medium pressure mercury lamps in the printing industry.

As the representative of European ink manufacturers we would ask that you take these factors into consideration when you make your decision with regard to extending the exemption for medium pressure mercury discharge lamps.

Best regards,

Dr Martin Kanert
Executive Manager

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