

Contribution submitted by NP Lighting to RoHS Stakeholder Consultation 4 September 2012

If you would like to contribute to the stakeholder consultation, please answer the following questions:

Questions

1. The applicant claims that CCFLs are used for **luminous sign for advertising or decorative purposes**. Do you agree with the scope of the exemption as proposed by the applicant? Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.

We support the wording suggested by Contribution by the European Sign Federation, submitted 3 September 2012

2. Please describe the different technical and performance characteristics as well as the different shape, for comparison between the lamps for **luminous sign for advertising or decorative purposes** and the **lamps for general lighting purposes** (see also exemption request 8 at <http://rohs.exemptions.oeko.info/index.php?id=138>).

We support the descriptions given by Contribution by the European Sign Federation, submitted 3 September 2012

3. Furthermore, the applicant suggests 1,3 mg mercury per 100mm length in cold cathode fluorescent lamps **for luminous sign for advertising or decorative purposes**. Please state whether you either support the applicant's request or whether you would like to provide argumentation against the applicant's request. In both cases please provide detailed technical argumentation / evidence to support your statement. What could be the pro and cons between a mercury limit per 100 mm length and a maximum mercury content for these lamps.

We support the descriptions given by Contribution by the European Sign Federation, submitted 3 September 2012 **and would like to add the attached article which was published in January 2012 in the "Werbetechnik" magazine. The article explains the minimum quantity needed for hand made cold and hot cathode tubes as being 80 mg.**

This amount of 80 mg is further based on field experience:

Back in 2001 we introduced a new electrode, the "HG + Philips Capsule Electrode" (see attachment) to the US and European Cold Cathode market. This electrode had been developed together with the Philips Corporation, the Netherlands, and contained 19 mg per electrode leading to a total of 38 mg per cold cathode tube. Substantial numbers of these electrodes were sold during the years 2002-04 (see article Werbetechnik)

At the end of 2002 we received the first complaints from our customers reporting premature dimming of the tubes manufactured with the new electrode. These complaints mounted during 2003 & 04 forcing us in 2005 to take corrective action by attaching two (2) instead of just one (1) Philips mercury capsule to each electrode. The total amount per tube was thus increased to around 80 mg. With this action, the complaints stopped and we have been successfully supplying the double capsule "HG++ Philips Capsule Electrode" ever since.

4. What is the influence of the application production technology on the amount of mercury needed for the lamp? How does the amount of mercury used in lamp production compare with the amount of mercury in the final product (lamp).

We support the descriptions given by [Contribution by the European Sign Federation, submitted 3 September 2012](#)

5. Please provide test results/protocols that clearly indicate that CCFLs containing mercury deliver significant technical advantages over LEDs.

We support the descriptions given by [Contribution by the European Sign Federation, submitted 3 September 2012](#)

6. Could you please elaborate more in detail the efforts which have been made to reduce mercury and/or respectively to manage the performance with the existing exemptions in CCFLs **for luminous signs for advertising or decorative purposes** during the last three years?

We support the descriptions given by [Contribution by the European Sign Federation, submitted 3 September 2012](#)

¹ In terms of ratio of light output versus energy absorption, colour spectrum, aesthetics and longevity
Finally, please do not forget to provide **your contact details** (Name, Organisation, e-mail and phone number) so that Öko-Institut/Fraunhofer IZM can contact you in case there are questions concerning your contribution.