

To:
Öko-Institut e.V.
Carl-Otto Gensch
rohs.exemptions@oeko.de

Contribution to Stakeholder Consultation 2015-2 Request for extension of exemption 1(a-e)

The market for light sources is currently under a fast development. So called low energy lamps that were introduced to substitute traditional light bulbs, will soon be substituted by even more energy efficient LED lamps.

Criteria for public procurement and ecolabelling

As new standards in the establishing of ecolabelling and public procurement criteria are based on a real market situation, we can conclude that it is possible to find low energy light bulbs on the EU market with lower content of mercury than in the current limit values in some of the exemptions in the RoHS directive. The most recent document of this kind, including data comparable with the entries for RoHS exemptions, is the EU GPP Criteria for Indoor Lighting, See reference below. Therefore we recommend that the Oeko Institute in their evaluation of alternatives compares the values specified in the exemptions applied for with recommended values from the EU public procurement criteria for indoor lighting expressed either as a core criteria level or as a comprehensive criteria level, See Table 1 on next page.

Reference: http://ec.europa.eu/environment/gpp/pdf/criteria/indoor_lighting.pdf

Table 1. Limit values for some light sources in RoHS compared with recommended mercury levels in EU GPP Criteria for Indoor Lighting

	RoHS exemption request	Public procurement core criteria	Public procurement comprehensive criteria
Exemption 1(a-e) "Mercury in single capped (compact) fluorescent lamps not exceeding (per burner)":			
(a) For general lighting purposes < 30 W:	5 mg	2.5 mg	1.5 mg
(b) For general lighting purposes ≥ 30 W and < 50 W:	5 mg	3 mg	1.5 mg
(c) For general lighting purposes ≥ 50 W and < 150 W:	5 mg	3 mg	1.5 mg
(d) For general lighting purposes ≥ 150 W:	15 mg	3 mg	1.5 mg
(e) For general lighting purposes with circular or square structural shape and tube diameter ≤ 17 mm	7 mg		
Exemption 2(a)(1-5) "Mercury in double-capped linear fluorescent lamps for general lighting purposes not exceeding (per lamp):			
(1) Tri-band phosphor with normal lifetime and a tube diameter < 9 mm (e.g. T2):	5 mg		
(2) Tri-band phosphor with normal lifetime and a tube diameter ≥ 9 mm and ≤ 17 mm (e.g. T5):	5 mg	2.5 mg	2 mg
(3) Tri-band phosphor with normal lifetime and a tube diameter > 17 mm and ≤ 28 mm (e.g. T8):	5 mg	3.5 mg	4.5 mg
(4) Tri-band phosphor with normal lifetime and a tube diameter > 28 mm (e.g. T12):	5 mg		
(5) Tri-band phosphor with long lifetime ($\geq 25\ 000$ h):	8 mg		

Business initiatives

The public procurement criteria do not necessarily represent the best composition of articles available at the market today. With the current fast development, the market may already have changed to light sources with even better performance. One example of this development is IKEA which provides home furnishings and interior decorations all over the world. According to IKEA's webpage they have change this autumn to only sell LED lamps to the households in Sweden. For the UK market this change to 100% LED lamps will occur in 2016. The switch to 100% LED is accompanied not only by lower costs for use of electricity but also lower prices for the LED lamps themselves IKEA informs.

Reference: <http://www.ikea.com/gb/en/catalog/categories/departments/lighting/>

Reuse experience gained from the development of the Ecodesign directive

Connected to an update of the requirements for light sources within the Ecodesign Directive a study Prepared by VHK, in cooperation with VITO and JeffCott Associates was published in April this year. The study does not contain any background data or suggestions for stricter requirements on mercury content. However it refers to an effective phasing-out of mercury vapour lamps in the US. Citation from the report page 131: "There is value in highlighting the mechanism used by the US to phase-out mercury vapour lamps, i.e. through prohibiting sale of the ballast rather than the lamp itself." Our conclusion is that a phase-out of mercury in lamps is possible even if the means to reach there may vary.

We also recommend the commission to in general cooperate with the colleagues involved in the development of criteria for light sources under the Ecodesign directive in order to share their experience about the market development for various kinds of light sources.

Reference: http://ecodesign-lightsources.eu/sites/ecodesign-lightsources.eu/files/attachments/LightSources_Task1-Main_rev1_apr2015_Draft.pdf