Questionnaire Exemption Request No. 15

Exemption Request No. 15 "Hand crafted luminous discharge tubes (HLDT) used for signs, decorative or general lighting and light-artwork."

Background

The Öko-Institut together with Fraunhofer IZM has been appointed within a framework contract for the evaluation of applications for granting, renewing or revoking an exemption to be included in or deleted from Annexes III and IV of the new RoHS Directive 2011/65/EU (RoHS 2) by the European Commission.[1]

The European Sign Federation (ESF) has applied for an exemption for "Hand crafted luminous discharge tubes (HLDT) used for signs, decorative or general lighting and light-artwork."

The applicant puts forward the following main arguments.

- There is almost no light output in HLDT without or with insufficient mercury in the lamp, hence a minimum small quantity of mercury needs to be added. As these HLDT are used for indoor and outdoor applications and with an individual colour spectrum composition they have to work reliably in sensitive and cold conditions with very high life expectations because they are often difficult to access.
- The longevity of HLDT is closely related to its mercury content. HLDT can operate for up to 20 years which is equivalent to 130 000 hours without replacement, thereby outperforming any other light source in efficiency, life span and versatility regarding shape and light spectrum.
- HLDT are individually handcrafted products to which standardised requirements cannot be applied. They can thus not be considered to be classified as CCFL falling under exemption 3.

The applicant suggests covering the scope of indoor and outdoor applications for which he has been made following two wordings:

Mercury in hand crafted luminous discharge tubes (HLDT) used for signs, decorative or general lighting and light-artwork until the end of 2015:

- For **outdoor applications and indoor applications** exposed to temperatures **below 20°C,** 20 mg mercury per pair of electrodes plus 15 mg mercury per 50 cm of tube length, but not exceeding 80 mg mercury per tube.

[1] Contract is implemented through Framework Contract No. ENV.C.2/FRA/2011/0020 led by Eunomia

- For **Indoor applications** exposed to temperatures **above 20°C;** 15 mg mercury per pair of electrodes plus 8 mg mercury per 50 cm of tube length, but not exceeding 80 mg per tube.

For details, please check the applicant's exemption request at http://rohs.exemptions.oeko.info/index.php?id=158. This exemption request has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information (c.f. link above).

The objective of this consultation and the review process is to collect and to evaluate information and evidence according to the criteria listed in Art. 5 (1) (a) of Directive 2011/65/EU (RoHS II), which you can download from here:

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT.

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

Questions

1. Please state whether you either support the applicant's request or whether you would like to provide argumentation against the applicant's request.
    a. 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.
    b. 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 provide detailed technical argumentation / evidence in line with the criteria in Art. 5 (1) (a) to support your statement

2. The applicant sates that "In general, when HLDT are to be repaired (or an old installation is dismantled), the complete tubes are taken back and the mercury is then recycled. However, it is not clear whether there are take-back agreements / binding regulations (e.g. under the WEEE Directive) to support this or whether the fate of waste HLDT is not regulated and thus no evidence can be given on the proper waste treatment of the contained mercury. Is there any supporting / contradicting evidence that you can provide in this regard?

3. Please provide information concerning possible substitutes/alternatives (i.e. LED) or developments that may enable substitution, reducing the quantity of mercury in a tube or elimination at present or in the future.

4. Please indicate if the negative environmental, health and/or consumer safety impacts caused by substitution are likely to outweigh the environmental, health and/or consumer safety benefits. If existing, please refer to relevant studies on negative impacts caused by substitution.

5. Do you consider any other aspects or details to be of importance, which have not yet been taken into account?

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.