



Adaptation to scientific and technical progress under Directive 2002/95/EC

EXCERPT
of final report 2009

Final report

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Öko-Institut e.V.

Dipl.-Ing. Carl-Otto Gensch
Dipl.-Ing. Stéphanie Zangl
Dipl.-Geoök. Rita Groß
Dipl.-Biol. Anna K. Weber

Fraunhofer IZM

Dr.-Ing. Otmar Deubzer

Öko-Institut e.V.

Freiburg Head Office

P.O. Box 50 02 40
79028 Freiburg, Germany

Street Address

Merzhauser Str. 173
79100 Freiburg, Germany
Tel. +49 (0) 761 – 4 52 95-0
Fax +49 (0) 761 – 4 52 95-88

Darmstadt Office

Rheinstr. 95
64295 Darmstadt, Deutschland
Tel. +49 (0) 6151 – 81 91-0
Fax +49 (0) 6151 – 81 91-33

Berlin Office

Novalisstr. 10
10115 Berlin, Deutschland
Tel. +49 (0) 30 – 28 04 86-80
Fax +49 (0) 30 – 28 04 86-88

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4.5.10 Exemption 4b “Mercury in other discharge lamps for special purposes not specifically mentioned in this Annex”

Since there is a huge variety of lamps, probably not all lamps are covered by the above proposed exemptions. ELC requests an exemption for “mercury in other discharge lamps not specifically mentioned in this Annex” and justifies it as follows [1]: “The ELC believes that this exemption is absolutely necessary and justified due to the fact, that discharge lamps today need mercury for the generation of energy efficient light. Mercury limits in other than fluorescent and High Pressure Sodium (vapour) lamps would severely limit the development of new, better light sources in the future, if slightly more mercury would be necessary than allowed by an ambitious exemption.

Other discharge lamps include:

- Low or medium pressure mercury lamps for special purposes, like Hollow Cathode Lamps and pen-ray lamps
- High Pressure Sodium lamps for special purposes
- High Pressure Xenon lamps
- Projector lamps etc.

The ELC is also aware of the fact, that numerous very special lamps from other manufacturers, importers, equipment producers exist with small market shares for very special applications, that might be in the scope of RoHS. A narrow wording would exclude such lamps from the market making fixtures like measurement equipment unusable.”

Environmental NGOs [3] are in favour of further exemptions for special purpose lamps if there is a justified need. They request individual identification of such special purposes lamps and a maximum limit of 10 mg. For any higher mercury content they propose prior approval.

ELC has in [1] provided a definition of special purpose lamps:

“Lamps for special purposes are needed where application specific characteristics are prescribed. They generally have the following characteristics:

- Special purpose lamps are manufactured basically in accordance with a general-purpose lamp making technology.
- The use of special design, materials and process steps provide their special features.

Fluorescent and other discharge lamps for special purposes include for instance:

- Where the non-visible radiation has highest importance, including:
 - Black light lamps;
 - Disinfection lamps;
 - Medical/Therapy lamps;
 - Lamps designed for UV emission like sun tanning lamps;
 - Pet care lamps i.e. aquaria lamps.
- Where different looking lamp designs are relevant for use, including:
 - Long length lamps (length \geq 1800 mm);
 - Lamps with special components like integrated reflectors or with external ignition strip;
 - Lamps with special ignition features for example those designed for low temperatures.
- Where different applications require specific lamps, including:
 - Technical lamps for colour comparison;
 - Coloured lamps (incl. saturated colours);

- Lighting applications for food, such as bakeries etc.;
- Lamps used in horticultural lighting;
- Lamps designed for eye-sensitivity of birds and other animals”.

Environmental NGOs argue that there is no justification why such lamps would need a blanket exemption.

The Swedish study [4] has come to the conclusion that lamps for special purpose are estimated to have a small market relevance in comparison to other lamps discussed above.

As stated in section 4.1.3 also lamps belonging to category 8&9 would fall under this heading.

4.5.11 Critical review exemption 4b

Since in the ELC examples of lamps that could fall under a potential “miscellaneous” exemption most are of special purpose it appears to be a good approach to provide a general exemption for such types of lamps (this would also include e.g. high-wattage CFLs that are not used for general purposes). Over-regulating these types of lamps may not lead to environmental benefits since their market relevance is considered to be low. However, as the proposed definition is a non-exhaustive list and since there is no data available on such lamps and their mercury content, manufacturers should be requested to clearly identify such lamps when put on the market as “for special purpose” and at the same time disclose the maximum mercury content in a notification process in order to collect data and information for future revisions of the Directive.

4.5.12 Recommendation exemption 4b

Concluding on the above it is recommended to grant an exemption for lamps for special purposes. The recommended wording is thus:

<i>Mercury in other discharge lamps for special purpose not specifically mentioned in this Annex.</i>

The consultant, however, recommends a notification process for those exempted special purpose lamps to collect data and information for future revisions of the Directive. As expiry date the contractor recommends 31 July 2014.

4.6 General recommendation

Environmental NGOs [3] as well as the Swedish study [4] have requested that manufacturers should disclose the maximum mercury content of all mercury-containing lamps and lighting equipment sold in the EU and mark their products accordingly. Environmental NGOs

furthermore recommend to require information on the dosing method used as well as on the margins / accuracy of dosing.

This is not part of the RoHS exemption process as such but could be a valuable prerequisite for future evaluations and revisions.

4.7 References

- [1] ELC contribution to Öko-Institut regarding RoHS exemptions 1-4 review (follow-up after the stakeholder meeting on 24 September 2008 in Brussels); 15.10.2008

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- [3] Revised Environmental NGOs Response to Stakeholder consultation on mercury-containing lamps (EEB, Zero Mercury Campaign, Green Purchasing Institute); 10.11.2008

- [4] AF-Consult AB: Mercury in lamps – reviewing the RoHS exemptions; report commissioned by the Swedish Chemicals Agency (KEMI); Stockholm, 3.10.2008 (“Final Mercury Report 081003.pdf”)

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