

Brussels, 31th March 2008

Ms Stephanie Zangl
Öko-Institut e.V.
Merzhauser Str. 173
79100 Freiburg
Germany

RE: ELC submission to RoHS exemptions review

Dear Ms Zangl,

Hereby we would like to submit the European Lamp Companies Federation (ELC) contribution to the stakeholder consultation on adaptation to scientific and technical progress under Directive 2002/95/EC of the European Parliament and of the Council on the restriction of the use of certain hazardous substances in electrical and electronic equipment for the purpose of a possible amendment of the Annex.

Our submission includes comments concerning the following exemptions: 1, 2, 3, 4, 5, 6, 7, 9a, 14, 15, 16, 17, 18, 19, 23, 24 and 26 (each exemption is attached in a separate file).

With kind regards,



Gerald Strickland
Secretary General

ELC submission to RoHS exemption #18

#	Question	Exemption #18
		Lead as activator in the fluorescent powder (1 % lead by weight or less) of discharge lamps when used as sun tanning lamps containing phosphors such as BSP (BaSi2O5:Pb) as well as when used as speciality lamps for diazo-printing reprography, lithography, insect traps, photochemical and curing processes containing phosphors such as SMS ((Sr,Ba)2MgSi2O7:Pb)
1	Please indicate whether there are other applications in the scope of RoHS where these kind of discharge lamps are used. Is lead also used in the same function in these lamps?	These fluorescent powders are also used in Pet Care fluorescent lamps (e.g. reptiles, birds). Lead in these lamps has the same function as for the lamps mentioned in the exemption 18.
2	Please state for both kind of lamps the amount of lead used per application, the lead content in the homogeneous material, the annual production volume as well as the number of applications related to exemption 18 put on the EU market annually.	Total annual volume less than 1 ton.
3	Could you provide data and information on the current situation regarding substitution efforts? What has changed since the last evaluation?	Development of powder without lead is under the investigation of the powder manufacturers. Proof of functionality and performance for different applications is needed. Changes since last evaluation: marking requirements according to Low Voltage Directive and standard IEC 60335-2-27.
4	Please provide evidence that manufacturers have put effort in research on alternatives for lead. What are the alternatives to lead and which ones are (likely to be) used as substitutes? Are there any results about strengths and weaknesses expressed in results relating to (technical) performance criteria?	Possible substitutes are Rare Earth phosphates activated by rare earth ions. For example YPO4:Ce is a lead-free UV emitting phosphor (see annex 1) as is La(PO4):Ce, which is a UV-B emitter. However a simple material substitution is not feasible, since a broad lamp product range and application range needs to be covered. The lamp industry (manufacturers and suppliers) search for alternatives. Technical feasibility has not been demonstrated so far beyond development work.
5	Specify the typical specific energy demand of these kind of lamps and quantify the changes in energy efficiency when using lead-free substitutes?	These powders are used in lamps between 4W and 200W. A change to lead free powder will not change the energy efficiency (powder is used in special applications and not in general lighting).
6	Are manufacturers still investigating alternatives?	Yes
6.a	If yes, please provide a roadmap or similar evidence showing until when they intend to replace lead in glass in the applications mentioned above.	Can only be answered by manufacturers of fluorescent powder. There is no interaction between elimination of lead as activator in powder and lead in glass.
6.b	If no, please explain and justify why no further research has been undertaken against the background that the RoHS Annex is subject to regular revisions.	Not applicable.
7	Assuming the current exemption will be given an expiry date, what date do you think is technologically feasible for industry?	For all applications, but for suntanning lamps, we think a feasible expiring date is 18 months after publication. For suntanning lamps the exemption needs to continue.