



Bundesministerin Svenja Schulze
Bundesministerium für Umwelt,
Naturschutz und nukleare Sicherheit

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Topic: RoHS Directive and the Risk of an Anti-Environment and Illegal action

Sehr geehrte Frau Ministerin,
Dear Minister Schulze,

Every year fluorescent tubes and bulbs of the lighting industry are causing mercury pollution of the European environment. Since the launch of fluorescent lamps almost a century ago, the European environment has received over a hundred tons of mercury waste coming from these lamps.

Fortunately, during the past decade, LED based – mercury free - bulbs and tubes have become increasingly available for consumers, institutions and businesses. The compact fluorescent bulb / energy saving bulb of the 1990's has now quickly been taken over by LED based bulbs and the chances are that also the fluorescent tube will be replaced quickly by LED based tubes.

Recently your representative in the EU Member States' expert group meeting on RoHS prolongations (group number E02810) has indicated that Germany is in favour of prolongation of certain exemptions to the lighting industry to continue to use mercury standard light sources. All of the Nordic countries and several other environmentally conscious Member States are against these prolongations.

We find the German position incomprehensible, and we suggest that there are facts and circumstances not known to the German administration that might have led to a wrong decision making. We should like to make you aware of the following:

1. The issue is about allowing standard fluorescent lamps, such as the so-called T8 and T5 tubes and CFL-I bulbs to continue. No one is against prolonging mercury exemptions for specialty lamps, such as so-called long life tubes or a range of specialty lamps used by railroads and manufacturers of various machines.
2. There are less than a handful of standard fluorescent lamp producers in Europe. As you may know historically the market for light sources is an oligopoly dominated by Osram, GE

and Philips¹. During the last decade this oligopoly gradually lost its grip on light sources for the domestic consumer market, while the same does not apply for the professional light sources market – including fluorescent tubes. In Germany, if any, only the former Osram may maintain a limited manufacturing of standard mercury bearing T5 fluorescent tubes. This activity is in the meantime acquired by the Chinese company MLS.

3. Prior to the expiry of the 5 year RoHS 2011 exemption, the Commission hired the Öko Institute of Freiburg as consultant to investigate the availability of mercury-free substitute light sources. In its report of 2016, the Institute concluded that **adequate mercury-free replacement products for standard fluorescent lamps were or would be available prior to the end of 2017**, and the Institute recommended not to prolong these exemptions.
4. Subsequently, the light source oligopoly represented by the Trade Association Lighting Europe, instituted a massive lobbying program, advocating that the assessments of the Institute were wrong and would lead to excessive cost of lamp replacement and unemployment. This campaign resulted in the Commission requesting the Öko Institute to investigate the socio-economic consequences of its 2016 recommendation of ending the exemption. The industry successfully sabotaged this study by categorically refusing to make available any data about European manufacturing and employment. So, with much consequent delay, the socio-economic study was released in July 2019 and concluded that bringing an end to exemptions did not imply socio-economic consequences not foreseen in the original 2016 recommendation.
5. In the meantime the light source industry is benefitting from the rule of the 2011 RoHS Directive that allows existing exemptions to continue for as long as the Commission has not ruled on the industry's request for prolongation, and the intense lobbying appears to have influenced both the Commission and the German RoHS representative.
6. Recently the Swedish Ministry of Environment published a new study by the Swedish Energy Agency and the independent CLASP organization, that concludes that the

¹ In its official shareholder information Philips / Signify openly characterizes the professional lamp market as **“highly concentrated”** and **“dominated by Osram, Philips and GE”** (2016 IPO prospectus for Philips Lighting). The same prospectus also informs: **“The transition to LED lighting due to characteristics of the business including competition, technology and lower entry barriers, could have a material adverse effect on the company's -- operating results.”** In its 2017 Annual Accounts Philips Lighting (the largest lighting company) stated **its profits on conventional lamp sales to more than twice of its profits gained from LED lamp sales.** Philips also openly declares that it is pursuing a **“last man standing strategy to continue to extract value from the conventional business”**

Commission's assessment available substitutes for standard fluorescent lamps are based on an outdated study from 2015, and that today's market offers ample mercury free substitution products². In its response, the Lighting Europe pleads that as long as any conceivable combination of tube length, colour temperature and other features is not 100% available in today's market, the exemption should be prolonged.

7. We ask the German Minister for the Environment to consider whether, in the absence of a ban on mercury in standard fluorescent lamps, she holds that in these circumstances an oligopoly industry that makes twice the profit on these lamps, is likely to ever launch a complete portfolio of LED substitute mercury free lamps even though they could?
8. We have reason to believe that anything other than a Commission Draft Delegated Act that brings an end to the exemption for standard fluorescent lamps will result in rejection at least by the European Parliament. However, because of the RoHS Directive rule alluded to above, even a rejection of a potential prolongation would in effect imply, by default, a further prolongation of the exemption that technically expired in 2016. I am sure the light source oligopoly would celebrate if such a thing would happen.
9. Finally, and most importantly, the Swedish position also takes as its underlying strength, the fact that to extend this exemption when alternatives are available, is contrary to the Minamata Convention which has very similar demands to those in the Parliament and Council approved RoHS2 Directive. So, the only legal next step is for The Commission to present a Draft Delegated Act to end the mentioned exemption.

In addition to the elimination of the unnecessary mercury pollution, there is the energy saving effect of transitioning from fluorescent to LED solutions. This one single measure, when applied to standard tubes alone, already contributes more than 1.5 %, possibly as much as 3.2 % to the GHG reduction targets for the EU28 as agreed in the Paris treaty.

As a final point, we point out a recent finding by Slovakian scientists³ of increased level of Mercury found in bees.

We urge you to reconsider the position communicated by the German representative in the EU Member States' expert group, and back the views and assessments made by the Öko Institute, the Nordic and other EU countries. In this respect we suggest that maintaining the current position achieves nothing but protecting a lucrative business model of a few producers at the expense of

² In fact the Swedish government is pleading that a prolongation of the exemption for standard fluorescent lamps is not in conformity with the RoHS 2011 Directive and would imply a breach of the Minamata Convention.

³ T. Toth et al. "The evaluation of Mercury in Honey Bees and their Products from Eastern Slovakia", Animal Science and Biotechnologies, 2016, 49 (1)

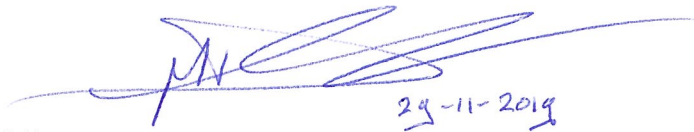
the European environment and food chain.

Who is Seaborough?

We are a small privately held green-tech company located in Amsterdam, The Netherlands. Seaborough has developed and is the licensor of technology that enables manufacturing of mercury free, universally interchangeable LED based tubes. As also represented in the reports of the Öeko Institute the major light source companies have also developed similar technology. Seaborough is not a monopolist!

We remain at your service should you require further information or documentation.

Regards



29-11-2019

Seaborough B.V.

Dr. Martijn Dekker

CEO