



EEB response to 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 – *Mercury in plasma displays*

2 August 2007

The European Environmental Bureau appreciates due notification of this technical adaptation consultation. However, it has to be noted that the timing for this consultation is not very appropriate, considering that most people are taking their annual leave – including NGO colleagues and experts who could have otherwise had the possibility to contribute to this response.

This response is focusing on one out of the submitted requests for exemptions, the one on *exempting mercury from plasma displays*.

The NGOs are deeply concerned that the ROHS directive be weakened by exemptions on the basis of article 5(1) without the necessary justification. The Commission's criteria for granting exemptions is based upon the following:

“Article 5(1)(b) of the Directive 2002/95/EC provides that materials and components can be exempted from the substance restrictions contained in Article 4(1) if their elimination or substitution via design changes or materials and components which do not require any of the materials or substances referred to therein is technically or scientifically impracticable, or where the negative environmental, health, and/or consumer safety impacts caused by the substitution outweigh the environmental, health and/or consumer safety benefits thereof.”

As we have noted repeatedly, in general, most of the applications for exemption are not justified and the necessary forms are not correctly filled in, or are incomplete or not filled in at all. It must be kept in mind that in drafting the RoHS Directive, the Commission fully intended that the burden of proof would explicitly rest with industry to demonstrate why any specific application should be exempted. Therefore, unless and until the applicants provide the detailed supporting data to demonstrate that an exemption for a specific application may be warranted, all other requests should be denied as a matter of course.

The EEB believes that an exemption for mercury from plasma displays should not be granted for the following reasons:

1. The applicant does not give a clear explanation on the specific physical use of mercury in the plasma display.
2. It is not clear whether mercury is added for a specific purpose – since the gas in plasma screens is usually neon and xenon.
3. The applicant does not specify whether mercury is needed for all their models or some specific ones.
4. Our limited research indicates mercury is not typically used in plasma displays currently available on the market, as the references below demonstrate; we invite the Commission to further consider and verify those references.

o <http://www.plasmahome.net/Mitsubishi%92s-Bright-New-Idea/Page/13894>

“...Now, Mitsubishi is pioneering a new way to approach the rear projection HDTV-they are using Lasers! With this new idea from Mitsubishi, a RPTV (Rear Projection Television) is

transformed because **a Laser replaces the usual mercury lamp in the rear of the set. *The model is still considered a DLP (Digital Light Projection) but the light comes from red, green and blue Lasers!*

- http://whychooseplasma.com.au/html/tpd_power_consumption.cfm

“...Its important to note that most LCD backlights contain Mercury while Plasma TVs do not...”

- <http://www2.panasonic.com/webapp/wcs/stores/servlet/prModelDetail?storeId=11301&catalogId=13251&itemId=104588&modelNo=Content01062007101346780&surfModel=Content01062007101346780>

“...Panasonic Plasma Displays have outpaced their flat panel competitors in an important area of environmental performance -- *the elimination of hazardous heavy metals such as cadmium, hexavalent chromium, mercury and lead.* The European Union and the State of California enacted legislation in 2003 that banned these four metals from electronic products, unless exempted due to technical reasons. All major TV and display technologies received exemptions from the European Union. Typically, CRT and Plasma displays have contained lead in the glass, while LCD and DLP projection displays contain mercury in their lamps. Cadmium and hexavalent chromium were used only minimally and easily eliminated from display products. Panasonic, however, recently developed alternative manufacturing processes and technologies that have allowed us to eliminate lead from Plasma display panels, making our displays the first in the world to eliminate these heavy metals...”

- <http://www.shoppingsolow.com/PlasmaTV.htm>

“...A **plasma display panel (PDP)** is an emissive flat panel display where visible light is created by phosphors excited by a plasma discharge between two flat panels of glass. *The gas discharge contains no mercury (contrary to the backlights of an Active matrix LCD); an inert mixture of noble gases (neon and xenon) is used instead....*”

- <http://www.yourplasmahelp.com/A-Guide-To-Plasma-Televisions/Article/200261>

“...Embracing a unique technology, Plasma televisions produce pictures from a combination of inert gases such as xenon and neon.

- <http://www.technologyproductreviews.com/plasmav.php>

“...As of 2007, plasma TVs have better contrast ratio than LCD TVs, can achieve darker black, and contains no mercury...”

As a result from the above, a few technical issues do not seem to be clear and furthermore well known producers are not using mercury in their plasma displays – or not enough mercury to need an exemption from the ROHS directive. We therefore see no reason why such an exemption should be granted. We invite the Commission to undertake a careful and comprehensive inquiry into this exemption request, given the above findings.

For more information please contact:

Elena Lymberidi, EEB Zero Mercury Project Coordinator, www.zeromercury.org, elena.lymberidi@eeb.org, T: +32 2 2891301