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Adaptation to scientific and technical progress of Annex II Directive 2000/53/EC

Project description

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1 Background and Objectives

Following the requirements of Article 4(2)(a) of Directive 2000/53/EC on end-of-life vehicles (ELV Directive), Member States of the European Union have to ensure that materials and components of vehicles put on the market since 1 July 2003 do not contain lead, mercury, hexavalent chromium and cadmium. A limited number of applications exempted from the provision of this article are listed in Annex II to the Directive as well as scope and expiry date of the exemption and labelling requirement according to Article 4(2)(b)(iv)[1] (if applicable).

Based on Article 4(2)(b), Annex II is to be adapted to scientific and technical progress by the Commission on a regular basis. This is done in order to check whether existing exemptions are still justified with regard to the requirements laid down in Article 4(2)(b)(ii), whether additional exemptions have been proposed on the basis of the same article and whether exemptions are not anymore justified and need to be deleted from the Annex with regard to Article 4(2)(b)(iii). Furthermore, the adaptation procedure has to - where necessary - establish maximum concentration values up to which the restricted substances shall be tolerated (Article 4(2)(b)(i)) and designate those materials and components that need to be labelled. Annex II was last adapted by Council Decision 2005/673/EC in September 2005.

The Commission services are currently running the third adaptation of Annex II to Directive 2000/53/EC (ELV Directive) to technical and scientific progress. In this context, the Öko-Institut e.V. has been assigned with the evaluation of the exemptions contained in Annex II, as a follow-up of the stakeholder consultation under the ELV Directive for the purpose of a possible amendment of this Annex (closed 20 December 2006)[2]. The Öko-Institut will be collaborating with Fraunhofer IZM (Institute on Reliability and Microintegration).

The objective of this work is to perform a clear technical and scientific evaluation of the justification of existing and new exemptions leading to recommendations to the Commission. Detailed generic evaluation criteria are currently under agreement with the European Commission in order to build a common evaluation basis for all exemptions.

[1] Article 4(2)(b)(iv) provides that designated materials and components of vehicles that can be stripped before further treatment have to be labelled or made identifiable by other appropriate means.

[2] Cf. http://ec.europa.eu/environment/waste/elv_index.htm (“Events in 2006”)

2 Scope

Table 1 below gives an overview on the exempted applications listed in Annex II to Directive 2000/53/EC that will be evaluated by Öko-Institut.

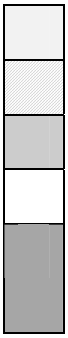
Table 1: Exemptions listed in Annex II to Directive 2000/53/EC and request for new exemption

Exemption no.	Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable	Evaluation task
Lead as an alloying element				
1	Steel for machining purposes and galvanised steel containing up to 0.35 % lead by weight			Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
2(a)	Aluminium for machining purposes with a lead content up to 1.5% by weight	1 July 2008		Revision of expiry date in relation to the availability of substitutes.
2(b)	Aluminium for machining purposes with a lead content up to 0.4 % by weight			Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
3	Copper alloy containing weight			Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
4	Bearing shells and bushes	1 July 2008		Revision of expiry date in order to ensure that lead-free technology can be applied without harming proper functioning.
Lead and lead compounds in components				
5	Batteries		X	Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
6	Vibration dampers		X	Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
7(a)	Vulcanising agents and stabilisers for elastomers in fluid handling and powertrain applications containing up to 0.5 % lead by weight	1 July 2006		Date of expiry has already been reached. Exemption will be deleted.
7(b)	Bonding agents for elastomers in powertrain applications containing up to 0.5 % lead by weight			Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
8	Solder in electronic circuit boards and other electric applications		X(i)	Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
9	Copper in friction materials of brake linings containing more than 0.4 % lead by weight	1 July 2007	X	Date of expiry has already been reached. Exemption will be deleted.
10	Valve seats	Engine types developed before 1 July 2003: 1 July 2007		Date of expiry has already been reached. Exemption will be deleted.

Exemption no.	Materials and components	Scope and expiry date of the exemption	To be labelled or made identifiable	Evaluation task
11	Electrical components which contain lead in a glass or ceramic matrix compound except glass in bulbs and glaze of spark plugs		X(ii) (for components other than piezo in engines)	Proposal for removing existing exemption. It is to be checked whether the use of lead is avoidable due to the availability of substitutes.
12	Pyrotechnic initiators	Vehicles type approved before 1 July 2006 and replacement initiators for these vehicles		Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
Hexavalent chromium				
13(a)	Corrosion preventive coatings	1 July 2007		Date of expiry has already been reached. Exemption will be deleted.
13(b)	Corrosion preventive coatings related to bolt and nut assemblies for chassis applications	1 July 2008		Revision of expiry date in order to ensure that no accidental disconnection of essential mechanical parts can occur in the lifetime of the vehicle.
14	Absorption refrigerators in motorcaravans		X	Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv).
Mercury				
15	Discharge lamps and instrument panel displays		X	Proposal for removing existing exemption. It is to be checked whether the use of mercury is avoidable due to the availability of substitutes.
Cadmium				
16	Thick film pastes	1 July 2006		Date of expiry has already been reached. Exemption will be deleted.
17	Batteries for electrical vehicles	After 31 December 2008, the placing on the market of NiCd batteries shall only be allowed as replacement parts for vehicles put on the market before this date	X	Revision of expiry date in order to ensure the availability of alternative battery technologies and electrical vehicles.
18	Optical components in glass matrixes used for Driver Assistance Systems	1 July 2007	X	Date of expiry has already been reached. Exemption will be deleted.
Proposal for additional exemption				
	Lead in frit glass used in Vacuum Fluorescent Displays (VFD)			Proposal for additional exemption. Evaluation required in order to assess whether the exemption is justified according to technical and scientific progress and whether the use of lead in the requested case in indeed unavoidable.

(i) Dismantling if, in correlation with entry 11, an average threshold of 60 grams per vehicle is exceeded. For the application of this clause, electronic devices not installed by the manufacturer on the production line shall not be taken into account.

(ii) Dismantling if, in correlation with entry 8, an average threshold of 60 grams per vehicle is exceeded. For the application of this clause, electronic devices not installed by the manufacturer on the production line shall not be taken into account.



Revision of expiry dates: Exemptions 2(a), 4, 13(b) and 17

Proposal for additional exemption

Proposal for removing existing exemption: Exemptions 11 and 15

Evaluation in the light of the provisions contained in Articles 4(2)(b)(i), 4(2)(b)(iii) and 4(2)(b)(iv)

Exemptions that have already expired and will be deleted from Annex II without further evaluation:

Exemptions 7(a), 9, 10, 13(a), 16 and 18

3 Project set-up

The project is lead by Dr. Joachim Lohse, Director of the Öko-Institut; project management and co-ordination is done by Stéphanie Zangl.

The evaluation of the exemptions will be performed in close co-operation with the European Commission and stakeholders (automotive industry and its associations, NGOs, independent experts). This includes:

- Central communication access for stakeholders via elv@oeko.de.
- Project-specific CIRCA site on http://circa.europa.eu/Public/irc/env/elv/library?l=/stakeholder_consultation/evaluation_procedure&vm=detailed&sb=Title where relevant documents and project activities will be published.
- Information about the progress of the evaluation process via e-mail, telephone and / or announcements on the CIRCA website.
- Technical stakeholder workshop on 10 October 2007 to discuss those exemptions that are of special interest both for the Commission and the automotive industry and that have particular complexity. In a first step, exemptions 4, 8, 11 and 15 as well as the new exemption request (lead in frit glass used in Vacuum Fluorescent Displays - VFD) have been selected for this workshop. Relevant stakeholders will be addressed directly.

If necessary, a second technical stakeholder workshop may be held in November 2007 on exemptions that have appeared to be sensitive or particularly complex in the further course of the evaluation.

4 Time schedule

Assignment of evaluation to Öko-Institut started 10 August 2007 and will run over a period of 5 months. State of affairs concerning evaluation of exemptions will be reported monthly to the Commission. An interim report will be submitted to the Commission by 25 October 2007 and published on CIRCA. The draft final report will be submitted to the Commission by 10 December 2007. The final report will be submitted by 10 January 2008 and also published on CIRCA.