

## **Questionnaire Exemption Request No. 2013-6**

**Lead and hexavalent chromium in reused spare parts, recovered from industrial monitoring and control instruments placed on the global market before 22 July 2017 and used in category 9 equipment placed on the market before July 22 2024, provided that use and reuse takes place in auditable closed-loop business-to-business return systems, and that the reuse of parts is notified to the consumer**

### **Background**

The Öko-Institut has been appointed within a framework contract for the evaluation of applications for granting, renewing or revoking an exemption to be included in or deleted from Annexes III and IV of the new RoHS Directive 2011/65/EU (RoHS 2) by the European Commission.<sup>1</sup>

FEI has applied for an exemption of<sup>2</sup>

*Lead and hexavalent chromium in reused spare parts, recovered from industrial monitoring and control instruments placed on the global market before 22 July 2017 and used in category 9 equipment placed on the market before July 22 2024, provided that use and reuse takes place in auditable closed-loop business-to-business return systems, and that the reuse of parts is notified to the consumer*

The applicant puts forward the following main arguments:

- Manufacturers of electron microscopes regularly reuse parts that are removed from used equipment and these parts are refurbished and then used to repair other microscopes.
- Currently, some of these parts contain leaded solders and a few contain hexavalent chromium (CrVI). These can be used as spare parts for the repair of equipment

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<sup>1</sup> Contract is implemented through Framework Contract No. ENV.C.2/FRA/2011/0020 led by Eunomia

<sup>2</sup> To avoid confusion, the applicant updated its originally proposed exemption wording “Lead in solders used in boards of heart-lung machines” to include the centrifugal pump as well, which are part of the applicant’s exemption request.

before 22 July 2017 but without an exemption, could not be reused in equipment after this date. The types of parts that are reused by FEI include the following examples:

- Many types of printed circuit boards
  - High voltage power supply units
  - Microscope stages
  - Microscope column parts
  - Vacuum pumps and other vacuum components
  - Camera heads
  - Laser assemblies
  - Detectors
- The applicant explains that reuse of parts within a closed loop system by FEI will have a significantly smaller environmental impact than from the resources used and the creation of waste, if these parts are removed from the market and replaced with new parts. Thus this exemption is requested because the alternative (reuse of parts) has a less negative impact on the environment

For details, please check the applicant's exemption request at:

<http://rohs.exemptions.oeko.info/index.php?id=207>. This exemption request has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information (c.f. link above).

The objective of this consultation and the review process is to collect and to evaluate information and evidence according to the criteria listed in Art. 5 (1) (a) of Directive 2011/65/EU (RoHS 2), which can be found under:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT>.

If you would like to contribute to the stakeholder consultation, please answer the following questions:

## Questions

1. The above wording was suggested by the applicant for this exemption.

- a. Do you agree with the scope of the exemption? Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.
  - b. Please state whether you either support the applicant's request or whether you would like to provide argumentation against the applicant's request. In both cases provide detailed technical argumentation / evidence in line with the criteria in Art. 5 (1) (a) to support your statement.
2. It is understood that the request has been made to enable the further practice of refurbishment and reuse of components and spare parts from electron microscopes and other devices related to electron microscopy.
  - a. Please clarify if additional products and devices exist in the industrial monitoring and control category, for which similar practices are in place.
  - b. If so, please submit information to understand the scope of operations in terms of what components or spare parts may be reused; which RoHS substances are present in articles and in what quantities; how the market would be affected should an exemption not be granted; etc.
3. The applicant has stated that parts with passivation coatings containing CrVI have been phased out in current production, but may still be in circulation through the practice of refurbishment and reuse of parts. Please submit information as to the life-cycles applicable to such products and the time-lines as to when their circulation is expected to be discontinued.
4. Please provide evidence if the negative environmental, health and/or consumer safety impacts caused by substitution are likely to outweigh the environmental, health and/or consumer safety benefits. If existing, please refer to relevant studies on negative impacts caused by substitution.

In case parts of your contribution are confidential, please clearly mark relevant text excerpts or provide your contribution in two versions (public /confidential).

Finally, please do not forget to provide **your contact details** (Name, Organisation, e-mail and phone number) so that Oeko-Institut's staff can contact you in case there are questions concerning your contribution.