

Consultation Questionnaire Exemption Request 2017-3

for „Lead in solders of alpha spectrometers, pulse-processing electronics, scintillation detectors and spectroscopy systems used in equipment to identify radiation”, requested for 7 years

Abbreviations and Definitions

AMETEK	AMETEK–Advanced Measurement Technology
EEE	electrical and electronic equipment
Pb	lead

Background

The Oeko-Institut and Fraunhofer IZM have been appointed by the European Commission, within a framework contract¹, for the evaluation of applications for exemption from Directive 2011/65/EU (RoHS 2), to be listed in Annexes III and IV of the Directive.

AMETEK has submitted a request for the above mentioned exemption, which has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information, available on the request webpage of the stakeholder consultation (<http://rohs.exemptions.oeko.info/index.php?id=285>).

According to the applicant, alpha spectrometers, pulse-processing electronics, scintillation detectors and spectroscopy systems are designed and used in the nuclear and laboratory environments. The life cycle of these products is considered long term, reaching seven or more years of continuous sustained service and are manufactured under IPC class II electronics assembly standards. Where possible, the electronic components have been replaced with lead-free substitutes. The use of a tin-lead solder is required due to the potential effects of tin whisker growth from utilizing a solder mixture of less than 3 % Pb. These instruments primarily operate in environments where the risk for tin whiskers could cause a failure in identifying or classifying radioactive materials which would be more harmful to the environment than allowing these instruments to utilize tin-lead solder. Since these instruments are designed for long term use in nuclear environments, where replacement is not fiscally reasonable, an exemption is requested for these product lines.

For details, please check the applicant's exemption request at:
<http://rohs.exemptions.oeko.info/index.php?id=285>

¹ The contract is implemented through Framework Contract No. FWC ENV.A.2/FRA/2015/0008 of 27/03/2015, led by Oeko-Institut e.V.

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 II), 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 applicant has requested an exemption, proposing the following formulation:
“Lead in solders of alpha spectrometers, pulse-processing electronics, scintillation detectors and spectroscopy systems used in equipment to identify radiation” for 7 years
 - a. Do you agree with the scope of the exemption as proposed by the applicant?
 - b. Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.
 - c. Please explain why you either support the applicant’s request or object to it. To support your views, please provide detailed technical argumentation / evidence in line with the criteria in Art. 5(1)(a) to support your statement.
2. Please provide information concerning possible substitutes or developments that may enable reduction, substitution or elimination, at present or in the future, of lead in the applications/products in the scope of the requested exemption;
 - a. In this regard, please provide information as to alternatives that may cover part or all of the applicability range of the applications/products in the scope of the requested exemption;
 - b. Please provide data as to application specifications to support your view.
3. Please provide information as to research initiatives which are currently looking into the development of possible alternatives for some or all of the application range in the scope of the requested exemption.
 - a. Please explain what part of the application range is of relevance for such initiatives (in what applications may substitution be possible in the future).
 - b. Please provide a roadmap of such on-going research (phases that are to be carried out), detailing the current status as well as the estimated time needed for further stages.
4. Which other manufacturers produce alpha spectrometers, pulse-processing electronics, scintillation detectors and spectroscopy systems for equipment used to identify radiation? Please provide company names and, if possible, contact details.
5. As part of the evaluation, socio-economic impacts shall also be compiled and evaluated. For this purpose, please provide details in respect of the following:
 - a. Annual volume of EEE in the scope of the requested exemption made available on the EU market and worldwide.
 - b. Estimations as to possible additional waste to be generated should the exemption not be granted;

- c. Estimations of impacts on employment in total, in the EU and outside the EU, should the exemption not be granted. Please detail the main sectors in which possible impacts are expected – manufacturers of alpha spectrometers, pulse-processing electronics, scintillation detectors and spectroscopy systems for equipment used to identify radiation, manufacturers in the supply chain, retail, etc.
- d. Please estimate additional costs associated should the exemption not be granted, and how this is divided between various sectors (e.g. private, public, industry: manufacturers, suppliers, retailers).

In case parts of your contribution are confidential, please provide your contribution in two versions (public /confidential). Please also note, however, that requested exemptions cannot be granted based on confidential information!

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