

Consultation Questionnaire Exemption Request No. 2018-2

for „Lead and hexavalent chromium compounds in electric and electronic initiators of explosives for civil (professional) use“

Abbreviations and Definitions

AUSTIN	AUSTIN DETONATOR s.r.o.
CrVI	Hexavalent chromium
EEI	Electric and Electronic Initiators
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.

AUSTIN DETONATOR s.r.o. (hereafter AUSTIN) 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=301>).

According to the applicant compounds of Pb and CrVI are basic raw materials to produce electric and electronic initiators (EEI) of explosives for civil (professional) use. The application range of EEI covers (among others) the mining of mineral resources (e.g. building stone, ores, rock salt), mining of fossil fuels (e.g. natural gas, oil, coal) as well as construction and demolition activities of buildings. Pb and CrVI compounds are required as oxidizers in assembled electric and electronic detonators as well as in individual components of electric detonators (electric fuse, electric fusehead and electric elemented cup), where they are contained in primary explosive charges (only Pb), pyrotechnic delay charges (Pb and CrVI) and primary explosives (only Pb). These three components are all included in assembled EEI and are ignited successively during the initiation process of the detonation.

For its own production of EEI entering the EU market AUSTIN currently calculates an annual consumption of 2.9 tonnes of Pb and 0.6 tons of CrVI (2016 values). EEI will be completely destroyed in practice and subsequently no waste can be reused, recycled or processed.

According to research and testing performed at AUSTIN, the substitution of Pb and CrVI in EEI is scientifically or technically impracticable. Especially, the reliability of possible substitutes (e.g. high nitrogen derivatives and their salts) could not to be ensured, since they do not meet essential requirements, such as the sensitivity to external stimuli and chemical / physical stability.

AUSTIN applies for an exemption for EEE falling under category 11 but did so far not specify a validity period.

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.

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

http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_Pack_16/AUSTIN_DETONATOR_Application_ex_request_public_version.pdf

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:NOT²>

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 wording formulation: *"Pb and CrVI compounds in electric and electronic initiators of explosives for civil (professional³) use"*.
 - 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 on the total annual consumption of Pb and CrVI used in EEI placed on the EU market.
 - a. If possible, provide a breakdown of the total annual consumption according to different manufacturers / importers.
 - b. Furthermore, please make sure that the numbers can be followed.
3. Please provide information concerning possible substitutes or developments that may enable reduction, substitution or elimination, at present or in the future, of *"Pb and CrVI compounds in electric and electronic initiators of explosives for civil (professional) use"*.
 - a. In this regard, please provide information as to alternatives that may cover part or all of the applicability range of electric and electronic initiators of explosives for civil (professional) use;
 - b. Please provide quantitative data as to application specifications to support your view.
4. 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 of electric and electronic initiators of explosives for civil (professional) use.

² A consolidated version is available under:

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02011L0065-20171211>

³ According to AUSTIN, professional use is defined as the final use of EEI for the extraction of minerals, fossil fuels and construction and demolition activities as well as the use of electric igniter in the film industry and in fireworks.

- a. Please explain what part of the application range is of relevance for such initiatives (in what applications substitution may 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.
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. Amount of Pb and CrVI compounds to be avoided should the exemption not be granted;
 - a. Estimation 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 electric and electronic initiators of explosives for civil (professional) use, companies in the supply chain, retail, etc.
 - c. Please estimate additional costs associated with a forced substitution 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.