

1st Questionnaire (Clarification Questionnaire)

Exemption for „Use of lead in welds for gas detectors”

Abbreviations and Definitions

EEE	electrical and electronic equipment
Pb	lead
PWB	printed wiring board/printed circuit board

Background

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

Oldham SAS has submitted a request for a new exemption, which has been subject to a first evaluation. The information Oldham has referred has been reviewed and as a result we have identified that there is some information missing. Against this background the questions below are intended to clarify some aspects concerning the request your request.

We ask you to kindly answer the below questions until 23 August latest.

Questions

1. Please be so kind to provide a version of your exemption request from which it is possible to copy text, e.g. an appropriate PDF or a Word version of your request.
2. For how long do you request the exemption? **Until end of July 2018**
3. What kind of gases do the sensors detect? **All types but mostly Hydrocarbons (Methane,propane,butane,etc...) H2S, CO, NH3**
4. How are the cards you produce linked to the gas detector? **Yes they are the main boards of the gas detection device or the sensor board**
5. Are the “welds” solder joints? **Yes**

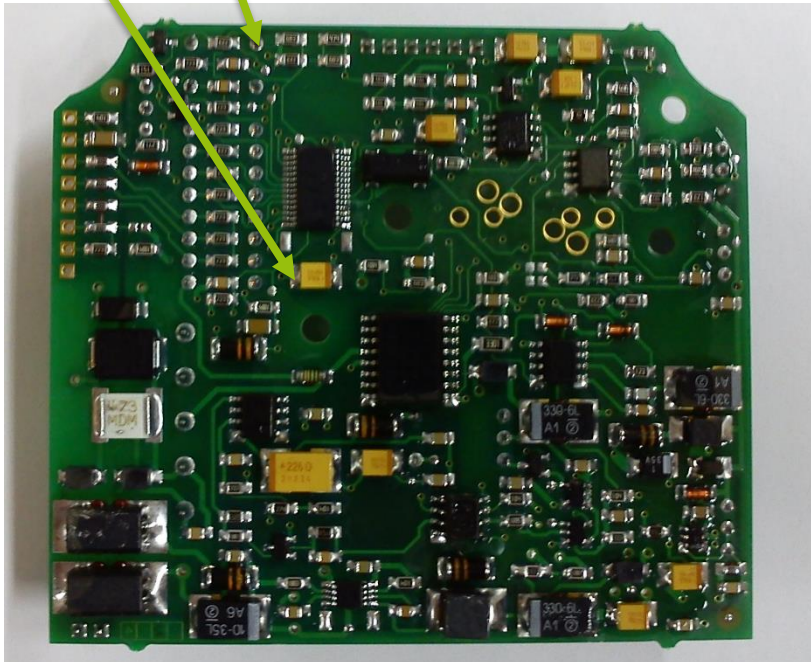
¹ The contract is implemented through Framework Contract No. FWC ENV.A.2/FRA/2015/0008 of 27/03/2015, led by Oeko-Institut e.V.

6. Please provide an outline of the detector including the cards and indicating the lead-containing welds.

e.g below

SMT process → non Lead Free → requires 200K€ investment

Through hole components → 50% ROHS compliant (selective soldering) / 50% non ROHS compliant



7. Directive 2011/65/EU (RoHS 2) was enacted in 2011. Please explain which steps Oldham undertook since 2011 to achieve RoHS compliance and why RoHS compliance cannot be achieved in time.

Components moved to ROHS compliant

Partial transfer of activity to vendor who is ROHS compliance (30%)

Investment into a selective Lead-free soldering

The main reason why Oldham has not achieved yet the ROHS compliance is that OLDHAM has faced 4 changes of ownership since 2013. Actions were put on hold due to some changes in strategy and the freeze of investments as part of successive shareholder changes.

8. Oldham indicates that it produces 16 t of EEE every year.

- a. Please provide a rough calculation showing the amounts of lead in the application for which Oldham requests the exemption. *We have estimated the lead qty at around 3% of the weight of the boards – around 500 kg / year*
 - b. Are these values for the EU or worldwide? If possible, please provide both. *Worldwide – 75% is for EU*
9. Oldham states that 5,447 t of lead are accumulated in WEEE which is sent for energy return.
- a. Please explain the background for this figure. *This includes leaded sensors for which an exemption exists until 2021 and which are not part of the exemption then*
 - b. Are these values for the EU or worldwide? If possible, please provide both. *Worldwide – 75% is for EU*
10. 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. Volume of electrical and electronic equipment (EEE) concerned, which is placed on the EU market annually; *35,000 gas detectors and 8,000 gas controllers are placed by OLDHAM on the market (75% is delivered to EU). Oldham has about 15-20% of the EU market share in fixed Gas detection systems.*

The overall Worldwide market for fixed gas detection is about 600 M\$ and about 150 M\$ in Europe, which represents overall close to 300,000 units per year (estimation) on the market

- b. Please estimate possible impacts on employment in total, in the EU and outside the EU, should the exemption not be granted. Please detail the main sectors for which impacts are expected, i.e. manufacturers, supply chain, retail, etc. *The Electronic boards manufacturing represents 11 employees at OLDHAM. The business discontinuity would have also an impact on distributors business and overall OLDHAM business which represents about 200 jobs in EU.*
- c. Please provide a list of manufacturers in and outside the EU of your EEE for which you apply for the exemption; *Here is a list of fixed gas detection Manufacturer represented in the EU market. However, our understanding is that many of them do not require the exemption*

Honeywell
MSA
Det-Tronics
Dräger
GMI
Scott

Oldham SAS

RKI

RAE

- d. Please quantify additional costs (money expenditure) through substitution of the restricted substance – or replacement of the EEE by other, RoHS-compliant EEE if feasible - divided into sectors (private, industry, public) if the exemption request is granted compared to the situation that it is rejected; [This will require investments for about 300 K€](#)
- e. Is there any generation of additional waste to be expected if the exemption is granted compared to the situation that it is rejected? [No](#)

Please note that answers to these questions are to be published as part of the available information relevant for the stakeholder consultation to be carried out as part of the evaluation of this request. If your answers contain confidential information, please provide a version that can be made public along with a confidential version, in which proprietary information is clearly marked.