

CD287 – Carcinogens and Mutagens – Revision of limit values in EH40/2005 “Workplace Exposure Limits”

Institution of Occupational Safety and Health (IOSH)
response to the Health and Safety Executive consultation



Submission

06/06/19



Introduction

The Institution of Occupational Safety and Health (IOSH), the Chartered body for health and safety professionals, with around 48,000 members worldwide, welcomes the opportunity to comment on HSE's consultation *CD287 – Carcinogens and Mutagens – Revision of limit values in EH40/2005 "Workplace Exposure Limits"* to implement EU Directive 2017/2398. IOSH is pleased to respond to this important consultation, based on comments from IOSH members.

In our submission, we provide background; summary IOSH position and recommendations; IOSH responses to the consultation questions; other IOSH comments; and close with references and further information about IOSH.

Background

IOSH is keen to help organisations prevent occupational ill health, including disabling and fatal diseases. We support the implementation of new and revised Workplace Exposure Limits (WELs) by the Health and Safety Executive (HSE). We believe that as new information and research becomes available, new limits should be introduced and existing limits should be questioned and reviewed to ensure the health of workers is adequately protected. Preventing occupational cancer is one of our six strategic priorities and is the focus for our No Time to Lose Campaign (NTTL).

Summary IOSH position and recommendations

While IOSH generally accepts the impact assessment that there is unlikely to be any significant additional cost to business from compliance with these changes in WELs, this is with the exception of Chromium VI (process-generated), where we feel there is likely to be significant impact.

IOSH recommends that promptly updating EH40/2005 should be the primary, but not only, communication method for providing updates on WELs. Other mechanisms such as HSE bulletins, webinars, blogs, and presentations to industry bodies, together with multi-communications (including social media), targeted campaigns and, where appropriate, safety alerts should also be considered to communicate such changes.

Although not part of this consultation, IOSH also recommends that Elemental Carbon should be included in EH40/2005. This follows the 2018 European Parliament and Council agreement on the European Commission's proposal to add a workplace exposure limit for Elemental Carbon from all diesel engines and that Directive (EU) 2019/130, which entered into force on 20 February 2019, is to be transposed into national laws within two years. We further recommend that the HSE's guide *Control of diesel engine exhaust emissions in the workplace* HSG187 better reflects diesel engine exhaust's classification as a Group 1 carcinogen in 2012 and the recent proposals from Europe for a workplace exposure limit for it.

IOSH responses to the consultation questions

We note that this impact assessment focuses on the initial 2020 limits only (table 1, p.31 of CD287) and that a further impact assessment will be completed ahead of the 2023-25 implementation dates. We also note that HSE are interested in any information on substance-use that has not been accounted for in its impact assessment, or costs and benefits associated with implementation of these OELVs (such as additional costs from taking necessary additional measures) and invite answers to the following two consultation questions:

Q1. Do you agree with the impact assessment suggestion that there is unlikely to be any significant additional costs to business from compliance with these changes? Yes / No / Unsure. If No, please provide your reasons and any supporting evidence.

Yes	<input type="checkbox"/>
No	<input checked="" type="checkbox"/>
Unsure	<input type="checkbox"/>

If you 'disagree' with the IA finding, please detail why and supply any information or evidence supporting your view (e.g. which substance[s] your response relates to, the type[s], number and cost of additional control measures required, etc.).

Q1 – IOSH comments on the impact assessment

IOSH do not have additional information on usage and therefore accept the rationale that most of the updates to the WEL limits in this consultation should have no or minimal impact on GB industries, because of the reasons given in CD287: businesses should already be meeting the WEL, the WEL change is minor or there is limited use of the substance in GB.

However, we believe the impact of the revised WEL for one of the substances, Chromium VI (process-generated), may be under-estimated. This is based on the new IARC evidence on health-risks from welding fume and the improved control standards required to prevent exposure. We believe that the effective communication and enforcement of these changes should help to fundamentally improve the way that organisations manage welding operations.

Large-scale indoor welding such as tanks and structures will require the use of more innovative Local Exhaust Ventilation (LEV) solutions, rather than seeking to rely on the use of Respiratory Protective Equipment (RPE) to mitigate exposure.

The impact on smaller scale or static welding that can be undertaken in a welding booth or using flexible arm extraction would be less affected.

It is also currently unknown how many fabrication organisations (or organisations that do some welding within their operations) conduct occupational hygiene monitoring to ensure that existing engineering controls are sufficient to control exposure. It is similarly also unknown whether they conduct health surveillance or ensure that employees use LEV in the correct way – both weaknesses found in HSE-commissioned research (*A small survey of exposure to stainless steel welding fume*, RR770) in 2010. 

We note that HSE is seeking to validate its current assessment with exposure measurements and that research is being undertaken by The Welding Institute (TWI), together with public consultation responses (CD287, p.39).

Q2. Do you agree that updating HSE's EH40/2005 (<http://www.hse.gov.uk/pubns/priced/eh40.pdf>) is the most appropriate way of updating the WELs?

- Yes
- **No (please see below)**
- *Unsure/don't know*

If you answered 'no', please detail why and what would be a more appropriate way.

Q2 – IOSH comments on communication methods for GB WELs

While IOSH agrees that EH40/2005 should be the primary document for communicating GB's WELs, we recommend that other mechanisms should also be considered to communicate these changes, such as HSE bulletins, webinars, blogs, and presentations to industry bodies. Many organisations favour a multi-communication approach to receiving information. Social media can also be used to facilitate this, which can help, especially with the younger demographic.

IOSH would also welcome targeted communication-campaigns focussed on relevant trade associations, trade unions, professional bodies and insurers, to help raise early awareness of the proposed changes – so that appropriate plans, preparations, training and investment decisions are made. Where there is new information about serious health-risks, we would support appropriate use of 'HSE Safety Alerts', as recently deployed for welding fumes.

Additionally, we advocate that the HSE's guide *Control of diesel engine exhaust emissions in the workplace* (HSG187) should better reflect diesel engine exhaust's classification as a Group 1 carcinogen in 2012 and the recent proposals from Europe for a workplace exposure limit for it. Also, that EH40/2005 includes an appropriate WEL for Elemental Carbon (see details below).

Other IOSH comments

Although not part of this consultation, IOSH also feels that Elemental Carbon (a constituent of Diesel Engine Exhaust Emissions) should be included within EH40/2005 and have an appropriate WEL. This follows the 2018 European Parliament and Council's agreement on the European Commission's

proposal to add a WEL for Elemental Carbon from all diesel engines and that Directive (EU) 2019/130 entered into force on 20 February 2019 and is to be transposed into national laws within two years. It also reflects IARC's 2012 classification³ of diesel engine exhaust as carcinogenic to humans (Group 1) and subsequent research in the trucking industry, which used Elemental Carbon as a marker of exposure.⁴

References

1. iosh.co.uk. (2019). *HSE changes to welding fume control standards what you need to know*. [online] Available at: <https://www.iosh.co.uk/News/HSE-changes-to-welding-fume-control-standards-what-you-need-to-know.aspx> [Accessed 23 May 2019].
2. Hse.gov.uk. (2010). *A small survey of exposure to stainless steel welding fume*. [online] Available at: <http://www.hse.gov.uk/research/rrpdf/rr770.pdf> [Accessed 23 May 2019].
3. Iarc.fr. (2012). *IARC: DIESEL ENGINE EXHAUST CARCINOGENIC*. [online] Available at: https://www.iarc.fr/wp-content/uploads/2018/07/pr213_E.pdf [Accessed 23 May 2019].
4. Garshick, E., Laden, F., Hart, J., Davis, M., Eisen, E. and Smith, T. (2012). *Lung Cancer and Elemental Carbon Exposure in Trucking Industry Workers*. [online] National Center for Biotechnology Information, U.S. National Library of Medicine. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3440130/> [Accessed 23 May 2019].

About IOSH

Founded in 1945, the Institution of Occupational Safety and Health (IOSH) is the largest body for health and safety professionals in the world, with around 48,000 members in over 130 countries, including over 13,000 Chartered Safety and Health Practitioners. Incorporated by Royal Charter, IOSH is a registered charity, and an ILO international NGO. The IOSH vision is

“A safe and healthy world of work”

The Institution steers the profession, providing impartial, authoritative, free guidance. Regularly consulted by Government and other bodies, IOSH is the founding member to UK, European and International professional body networks. IOSH has an active research and development fund and programme, helping develop the evidence-base for health and safety policy and practice. Summary and full reports are freely accessible from our website. IOSH publishes an international peer-reviewed journal of academic papers twice a year titled *Policy and practice in health and safety*. We have also developed a unique UK resource providing free access to a health and safety research database, as well other free on-line tools and guides, including resources for business start-ups; an occupational health toolkit; and a risk management tool for small firms.

IOSH has 41 Branches worldwide, including the Caribbean, Hong Kong, Isle of Man, Oman, Qatar, the Republic of Ireland, Singapore and UAE, 18 special interest groups covering aviation and aerospace; broadcasting and telecommunications; construction; consultancy; education; environment and waste management; financial services; fire risk management; food and drink industries; hazardous industries; health and social care; logistics and retail; offshore; public services; railway; rural industries; sports grounds and events; and theatre.

IOSH members work at both strategic and operational levels across all employment sectors. IOSH accredited trainers deliver health and safety awareness training to all levels of the workforce from shop floor to managers and directors, through a professional training network of over 2,000 organisations. We issue around 180,000 certificates per year.

For more about IOSH, our members and our work please visit our website at www.iosh.com. Our five-year strategy WORK 2022 can be viewed at www.ioshwork2022.com and our resources specifically tailored for business can be found here www.iosh.co.uk/ioshmeansbusiness.

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