

Australian Industry Group

The role of chemical exposure  
standards in work health and safety

Discussion Paper

**Submission to**  
Safe Work Australia

**18 DECEMBER 2015**



# THE ROLE OF CHEMICAL EXPOSURE STANDARDS IN WORK HEALTH AND SAFETY LAWS DISCUSSION PAPER

## SUBMISSION TO SAFE WORK AUSTRALIA

### INTRODUCTION

The Australian Industry Group (Ai Group) is a peak industry association and has been acting for business for more than 140 years. Along with our affiliates, we represent the interests of more than 60,000 businesses employing more than 1 million staff. Our longstanding involvement with diverse industry sectors including manufacturing, construction, transport, labour hire, mining services, defence, airlines and ICT means we are genuinely representative of Australian industry.

Ai Group welcomes the opportunity to make a submission in response to the [\*The role of chemical exposure standards in work health and safety laws: Discussion Paper\*](#)

This submission, in addressing the specific questions asked, focuses on the manner in which exposure standards could be reviewed and updated and whether the exposure standards should be mandatory or advisory.

However, another option could be considered. As outlined on page 8 of the Discussion Paper “If there is no Australian exposure standard for a particular substance, the hazards of that substance should be managed in accordance with the duty to eliminate, or minimise risks to health and safety so far as is reasonably practicable. This may include using international standards as evidence of what is known about a hazard and how it should be controlled”. The third option for consideration then becomes: abandoning Australian exposure standards and utilising overseas standards as part of the “state of knowledge” to be considered when controlling chemical risks.

This option would allow more resources to be allocated to addressing the issue raised in the Discussion Paper that exposure standards “... are not used by small business and are not routinely used for compliance and enforcement” (p. 3).

If exposure standards are not used by small business (and it is our experience that this is correct and applies to a number of medium businesses as well) other approaches are required to improve the management of chemicals in workplaces.

One approach may be to further investigate development (or adoption) of an approach such as [\*COSHH Essentials\*](#), a generic risk assessment scheme utilised by the Health and Safety Executive in the UK, which results in the development of control guidance sheets for certain industry-specific tasks or processes. In the Australian context, a predecessor of Safe Work Australia applied the COSHH Essential approach to the printing industry; the outcomes of that work can be found at <http://www.safeworkaustralia.gov.au/sites/swa/whs-information/hazardous-chemicals/printers/pages/printers>

In the small to medium business context, another helpful approach may be control banding. The U.S. National Institute for Occupational Health and Safety (NIOSH) states that “control banding is a technique used to guide the assessment and management of workplace risks. It is a generic technique that determines a control measure (for example dilution ventilation, engineering controls, containment, etc.) based on a range or “band” of hazards (such as skin/eye irritant, very toxic, carcinogenic, etc) and exposures (small, medium, large exposure). It is an approach that is based on two pillars; the fact that there are a limited number of control approaches, and that many problems have been met and solved before. CB uses the solutions that experts have developed previously to control occupational chemical exposures, and suggesting them to other tasks with similar exposure situations. It is an approach that focuses resources on exposure controls and describes how strictly a risk needs to be managed. NIOSH considers CB a potentially useful tool for small businesses.”

Further information on control banding can be found at [NIOSH](#) or [ILO](#) (International Labour Organisation).

Whichever decision is made about the future of workplace Exposure standards in the Australian context, it is clear that succinct information about the control of chemical exposures is needed for small and medium sized businesses. Where the measurement of workplace exposure standards are part of the control measures, guidance which advises what to expect of an occupational hygienist, in measurement, reporting and advice, would also be useful.



## **The role of chemical exposure standards in work health and safety laws: Discussion Paper**

### **SUBMISSION TEMPLATE**

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#### **INSTRUCTIONS**

To complete this online submission template, please save it to your computer first.

Please use the saved version to enter your response in the box provided beneath each question. You can answer all or any of the questions.

If you would like to provide additional information, please provide this as an additional attachment when you submit your response.

Submissions will be accepted until **5.30 pm AEDT, Friday 18 December 2015**.

1. **Do you use exposure standards in your workplace?**  
**If yes—how do you use exposure standards? (e.g. to assess or control exposure, review controls etc.)**  
**If yes—do you meet exposure standards or seek to minimise chemical exposures further?**

**(Maximum 1000 words)**

As this question is directed at individual workplaces, it is not appropriate for Ai Group to respond directly to this question.

It is Ai Group's experience that many small and medium employers (SMEs) are not aware of their obligations under regulations to identify whether the chemicals they are using have a WES, or how to obtain assistance to measure the WES. We also find that some employers utilise Schedule 14 of the Regulations incorrectly, thinking that this is a full list of hazardous substances, rather than the list of health monitoring requirements for a small subset of hazardous substances. The view is often "if the chemical is on this list I have to do air monitoring, if it isn't I don't have to".

When engaging with SMEs on chemical issues for the first time we generally find that, if they are addressing chemical risks in the workplace, it is through the application of known controls; often those at the bottom of the hierarchy of controls. Risk management approaches do not generally consider the application of one or more WES.

Where an employer has undertaken air monitoring, we often receive feedback that "as long as the level of airborne contaminants is below the exposure stand, we are safe and do not need to do anything else to control risk". In this context, exposure standards create a false sense of security – from both a health and safety perspective and a legislative compliance perspective.

In some situations air monitoring has been done for one chemical, for a particular reason, and the employer believes that this has addressed all of the airborne contaminant considerations.

When giving advice to employers in relation to chemical exposures the following process would be recommended:

- Refer to the Safety Data Sheet (SDS) to identify all possible exposures, recommended controls, and exposure standards
- Introduce risk controls in line with the hierarchy of controls, utilising elimination, substitution and engineering controls so far as is reasonably practicable
- Introduce administrative controls, such as maintenance schedules, to support engineering controls
- Adopt PPE controls as an additional control measure if necessary
- If necessary, undertake air monitoring to ensure exposure standards are not being exceeded; we would also provide advice about what information to expect from the hygienist, if that service is not being provided by one of our consultants.
- Identify if there is a need for action levels to be introduced, e.g. review of control measures if levels exceed 50% of the exposure standard (a common approach in relation to lead)
- If necessary, introduce regular air monitoring to ensure controls continue to be effective
- Review the need for ongoing air monitoring if consecutive results indicate that all control measures are effective

In providing advice to members we would emphasise that the requirement to not exceed the exposure standard is a minimum requirement and that there is also an obligation to eliminate or minimise risk so far as is reasonably practicable.

**2. How much does ensuring compliance with exposure standards cost your business (including air monitoring costs)? Please provide examples if possible.**

**(Maximum 1000 words)**

This question seeks to obtain information from individual workplaces about the costs associated with ensuring compliance with exposure standards in those workplaces. Given the timeframes available for public comment it has not been possible for Ai Group to obtain this level of detail from our members; and our consultants who provide advice to members are unable to quantify this on their behalf.

Ai Group would be willing to assist the Agency to seek detailed information from our members, if insufficient information is received from individual submissions during the consultation process.

**3. Are you aware of other exposure or advisory standards in Australia or overseas (e.g. developed by international bodies or companies)? Do you use them? If so, please explain how.**

**(Maximum 1000 words)**

As this question is directed at individual workplaces, it is not appropriate for Ai Group to respond directly to this question.

However, when advising employers in relation to chemical exposures we would make them aware of other exposure standards if relevant to their circumstances, and incorporate them into our advice if appropriate.

#### 4. Should Australia's exposure standards be health-based or pragmatic? Why?

(Maximum 1000 words)

Health based exposure standards are established purely on current knowledge of health effects.

Pragmatic exposure standards are set where:

- The level of exposure where adverse health effects are unlikely to occur cannot be determined and a health based standard cannot be set; or
- Measurement is difficult; or
- Where factors such as cost and technical feasibility have been taken into account.

It is not possible to consider whether exposure standards should be health-based or pragmatic unless there has first been a determination as to how exposure standards are to be used.

Exposure standards can be used as:

- Mandatory minimum requirements, set by regulations; or
- Advisory standards that are used as part of the overall risk management approach.

If exposure standards are mandatory in nature, the only option is to apply pragmatic exposure standards. In these circumstances consideration must be given to cost and practical feasibility; otherwise the legislation may create mandatory standards that cannot be met, leading to non-compliance. In addition, governments are required to undertake regulatory impact assessments which weigh up the cost/benefit of regulation, and would need to ensure a pragmatic assessment has been made.

If exposure standards are advisory, health based exposure standards could be adopted. However, there would still need to be clear guidance on how advisory standards are to be utilised; without this, health based exposure standards could become pseudo regulation through incorrect interpretation and application – in workplaces and by inspectors.



5. **Should exposure standards be mandatory (e.g. prescribed by law) or advisory? Please provide reasons.**

(Maximum 1000 words)

**Mandatory exposure standards** carry with them some significant difficulties.

The current WHS and OHS laws in Australia require employers to “eliminate risk, or minimise risk so far as is reasonably practicable”. At the same time there are mandated exposure standards that cannot be exceeded. It is easy for an employer to misinterpret these two obligations and decide they are meeting their legislative obligations as long as the exposure standard is not exceeded. If this interpretation is applied employers may not be minimising the risks so far as is reasonably practicable.

Mandatory exposure standards create a range of regulatory issues. In particular, the adjustment of a mandatory exposure standard would be subject to the application of a regulatory impact assessment, and the presentation of a Regulatory Impact Statement (RIS) for consultation. It has been our recent experience that the process of developing a RIS at the national level is a lengthy process with significant oversight by the Office of Best Practice Regulation (OBPR). In addition, some states/territories are required to apply their own RIS systems, and cannot just rely on the national RIS; hence significantly increase the time and cost associated with the RIS process.

In addition, the current review of exposure standards and biological standards for lead, illustrates the lengthy process required to amend standards associated with chemicals (more detail is provided in our response to question 9). Notably, this has involved considering a relatively small number of users and uses; many other chemicals would have a much greater reach and variety of uses.

**Advisory exposure standards** allow much more flexibility in the adoption of standards, but also have some difficulties.

Utilisation of exposure standards in an advisory manner would allow for overseas exposure standards to be adopted more readily without the need for a RIS.

This would have the benefit of overcoming the current issues associated with maintaining Australian exposure standards. It would also allow exposure standards to be utilised as part of the complete risk management process, rather than as a baseline which is often seen as all that needs to be done.

However, this approach creates a risk that all overseas exposure standards would be automatically adopted without consideration of the Australian context. If this resulted in a significant lowering of exposure standards, without consideration of the practical implications, various workplace parties may utilise them in a manner that is not intended. This could especially be the case when mandated exposure standards have been part of the Australian landscape for an extended period of time.

**On balance** it is Ai Group’s view that advisory standards, supported by good guidance material, is the best approach. Whilst a RIS would not be required for this approach, some form of public consultation would still be appropriate, to ensure that the Australian context is being considered.

**6. If exposure standards became advisory, would this change the way you approach the management of risks? Please provide reasons.**

**(Maximum 1000 words)**

Advisory standards, or abandoning Australian exposures standards altogether, would not change the manner in which Ai Group advised members in relation to managing chemical risks.

It would be important to provide clear advice to employers about what the change from mandatory to advisory standards meant for them in the context of managing chemical risks.

**7. Do you support mandating a smaller number of exposure standards and keeping them up to date? Please provide reasons.**

**(Maximum 1000 words)**

It is Ai Group's view that requiring employers to refer to an external source to identify a combination of Advisory and Mandatory exposure standards would create confusion for employers.

If there is a need to specify mandatory levels of exposure, this could be done through specific reference within regulations. This is currently done for airborne levels of asbestos fibres during removal work and biological levels of lead. It could be argued that inclusion in regulations makes it difficult to implement changes; however, the requirements associated with changing mandatory exposure standards already leads to slow change.

If a decision is made to adopt mandatory exposure standards, in any form, it will be essential to ensure that the necessary resources and expertise are allocated to this task.

**8. Do you have any views on how to prioritise which chemicals should have a mandatory exposure standard?**

**(Maximum 1000 words)**

Ai Group does not support maintaining a list of mandated exposure standards. For the reasons outlined earlier in our submission, it is our view that adoption of advisory exposure standards would be more appropriate.

However, if this option was adopted, prioritisation should take into account:

- The level of risk associated with the chemical: it would only be relevant to put extensive work into developing a RIS for high risk chemicals.
- The breadth of use: it would not be appropriate to undertake extensive work if the chemical is only used in a small number of workplaces; other regulatory enforcement tools could be utilised to address exposure.
- Known uses of the chemical: it would not be appropriate to introduce mandatory exposure standards if a chemical is generally used under closely controlled conditions, such as within enclosed plant, that mean that exposure standards are unlikely to be exceeded.

**9. What process should be used to review and keep exposure standards up to date?**

**(Maximum 1000 words)**

The current review of the exposure standards and biological standards for lead would be a good model for the review of any future **mandatory** exposure standards. This has included consultation with key stakeholders through Safe Work Australia, and the opportunity for major users to provide direct input into the process (see below). The final stage of this process is about to commence with the release of a Consultation RIS for public comment.

The review of **advisory** standards would not need to be as detailed. However, it would still be important to have agreed consultation and review processes in place.

Ai Group would recommend that the Agency establish a draft protocol for reviewing and updating advisory exposure standards that includes: which sources would be referred to; how often an exposure standard could be amended; consultation processes; notification processes; and implementation guidelines.

If the agreed protocol enabled advisory exposure standards to be updated more regularly, a key part of the protocol would need to address how best to ensure users become aware of the changed exposure standards.

***Process undertaken to consider changes to the WHS Regulations and Workplace Exposure Standard for Inorganic Lead***

In 2010 it was first agreed that Safe Work Australia would undertake work to review the WES and biological monitoring standards (BES) for inorganic lead. This provided an initial indication to industry that change may occur in the future.

After significant background work by Safe Work Australia Agency staff an Issues Paper was considered at the April 2013 meeting of the Strategic Issues Group – Work Health and Safety (WIG-WHS), a sub-committee of Safe Work Australia. The Issues Paper allowed jurisdictions and union and employer representatives to provide input into the paper; in Ai Group's case this also enabled us to discuss a range of specific issues with employers who would be directly affected by this change.

Safe Work Australia engaged Toxconsult Pty Ltd to undertake work to examine the health effects of exposure to lead and based on the analysis, advise on appropriate blood lead removal levels and workplace exposure standard for lead. The Report, entitled *Review of hazards and health effects of inorganic lead – implications for WHS Regulations* was published on the Safe Work Australia website in July 2014. The report was used to further inform the development of a Consultation Regulatory Impact Statement (RIS). Prior to release the Consultation RIS must be approved by the Office of Best Practice Regulation (OBPR).

It is expected that the Consultation RIS will be released for public comment during December 2015.

At the conclusion of the public consultation process, feedback will be considered; a final RIS will be developed with recommendations for adoption.

This has been a long process, but one that ensures that all practical considerations are taken into account, prior to major changes being made to mandatory requirements in the workplace.

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Thank you for making your submission. Submissions will be accepted until **5.30 pm AEDT, Friday 18 December 2015**. You can submit this to Safe Work Australia by the following methods:

**Online submission** - To submit online, please complete the Online Cover Sheet on [our submissions website](#) and upload your saved submission when prompted.

**Submission by email** - Email to [WES@swa.gov.au](mailto:WES@swa.gov.au). Please include a completed [Cover Sheet \(DOCX 103KB\)](#) with your saved submission.

**Submission by post** - Please post your saved submission, including a completed [Cover Sheet \(DOCX 103KB\)](#) to:

Director  
Occupational  
Hygiene Section  
Safe Work Australia  
GPO Box 641  
Canberra  
ACT 2601  
Location  
Code: C2PL7

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**For further assistance with your submission, please contact Safe Work Australia:**

General enquiries phone:

1300 551 832 General

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[info@swa.gov.au](mailto:info@swa.gov.au)