Australian Industry Group

Consultation Regulation Impact Statement Managing risks associated with lead in the workplace: blood lead levels and exposure standards

Submission to
Safe Work Australia

FEBRUARY 2016

CONSULTATION REGULATION IMPACT STATEMENT MANAGING RISKS ASSOCIATED WITH LEAD IN THE WORKPLACE: BLOOD LEAD LEVELS AND WORKPLACE EXPOSURE STANDARDS

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 *Consultation Regulation Impact Statement: Managing risks associated with lead in the workplace: blood lead levels and exposure standards (CRIS).*

Ai Group is a member of Safe Work Australia (SWA) and the related Strategic Issues Group – Work Health and Safety (SIG-WHS), which have been considering the issues addressed in this paper over recent years.

Since early 2013 Ai Group has been liaising with impacted member companies that have responded to our advice that the issue was being addressed by Safe Work Australia, seeking their input and encouraging their direct involvement in the consultation processes. It is our understanding that many of these organisations will make their own submissions and provide the necessary information relating to technical and practical issues associated with the proposals, and the relevant costing information being sought as part of this process.

With this in mind, Ai Group will not be making specific comments on the technical aspects of the paper, nor attempting to quantify the cost to individual businesses of the options being considered in this CRIS.

Ai Group's submission will focus on the overarching policy issues and considerations associated with the options being considered.

BLOOD LEAD LEVELS

International benchmarks

Figure 1 in the CRIS illustrates international benchmarks for recommended blood lead removal levels for females not of reproductive capacity and males. At first glance, this indicates that there is a range from 20 µg/dL to 70 µg/dL, with many set at 30 µg/dL. However, a closer analysis of this data highlights that most of the references to 30 µg/dL, and one of the references to 20 µg/dL relate to scientific and research organisations, rather than regulatory levels. It is noted that the World Health Organisation recommends a removal level of 40 µg/dL.

The majority of regulated blood lead removal levels are in the range of 40 µg/dL to 70 µg/dL. It is important that consideration of potentially regulated removal levels takes into account the global economic environment and a recognition that many of our trading partners and competitors are operating in environments where regulated blood lead removal levels are higher than Australia's currently regulated levels, and much higher than proposed levels outlined in Option 2 and Option 3.

Considering the Options

Table 1 in this submission illustrates the various options that are being addressed in the CRIS in relation to blood lead levels: triggers for monitoring (i.e. the classification of lead risk work); triggers for removal; and levels at which a person would be allowed to return to work after removal.

It is noted that the recommendations for blood lead removal levels (BLRL) of the ToxConsult Report (cited in the CRIS, page 21) were outlined as:

- For females of non-reproductive capacity and men two options were suggested:
  - A blood lead removal level of 20 µg/dL, or
  - A target blood lead level of 20 µg/dL and mandated blood lead removal level of 30 µg/dL
- For women of reproductive capacity a BLRL of 10 µg/dL is recommended.

The recommendations of the ToxConsult report generally translate into Option 2.

Option 3 is a gender-neutral approach which adopts the levels recommended by ToxConsult for women of reproductive capacity, and applies them to all categories of workers.

Another significant change proposed, which would apply to both Option 2 and Option 3 is the increased frequency of testing of blood lead levels.

If adopted as currently proposed, the minimum time between blood lead level testing will be 3 months; this level currently only applies to females of reproductive capacity, with males and females of non-reproductive capacity having testing at a minimum of 6 monthly intervals.

<table>
<tr><th>Detail</th><th>Risk Group</th><th>Current Level and Option 1 Status Quo</th><th>Option 2</th><th>Option 3
Gender neutral</th></tr>
<tr><td rowspan="3">Triggers health monitoring (likely to exceed)</td><td>M/FNRC</td><td>30 µg/dL</td><td>20 µg/dL</td><td rowspan="3">5 µg/dL</td></tr>
<tr><td>FRC</td><td rowspan="2"></td><td rowspan="2">5 µg/dL</td></tr>
<tr><td>P / BF</td></tr>
<tr><td rowspan="3">Triggers removal from lead risk work</td><td>M/FNRC</td><td>50 µg/dL</td><td>30 µg/dL</td><td rowspan="3">10 µg/dL</td></tr>
<tr><td>FRC</td><td>20 µg/dL</td><td rowspan="2">10 µg/dL</td></tr>
<tr><td>P / BF</td><td>15 µg/dL</td></tr>
<tr><td rowspan="3">Allows return to lead risk work</td><td>M/FNRC</td><td>40 µg/dL</td><td>20 µg/dL</td><td rowspan="3">5 µg/dL</td></tr>
<tr><td>FRC</td><td rowspan="2">10 µg/dL</td><td rowspan="2">5 µg/dL</td></tr>
<tr><td>P / BF</td></tr>
</table>

Detail	Risk Group	Current Level and Option 1 Status Quo	Option 2	Option 3 Gender neutral
Frequency of testing	M/FNRC	Every 6 months < 30µg/dL Every 3 months =>30 µg/dL but <40 µg/dL Every 6 weeks =>40 µg/dL	Every 3 months <20 µg/dL Every 6 weeks =>20 µg/dL	Every 3 months <5 µg/dL Every 6 weeks =>5 µg/dL
	FRC	Every 3 months < 10µg/dL Every 6 weeks =>10 µg/dL	Every 3 months <5 µg/dL Every 6 weeks =>5 µg/dL	

M = Males; FNRC = Females not of reproductive capacity; FRC = Females of reproductive capacity; P/BF = Pregnant or breast feeding

Table 1: Blood lead levels: Options being considered

Ai Group consultation with industry has identified that Option 3 (the gender neutral option) is unlikely to be achievable. We also note that the CRIS states (page 37) that "this option may be difficult to implement due to the close relationship between return to work blood lead levels and removal levels."

Option 2 has created some significant discussions. Some of our members have indicated that maintaining blood lead levels below 30 µg/dL, for males and females of non-reproductive capacity, is mostly achievable albeit at a cost implying a loss of competitveness.

However, others have indicated that they currently have difficulties achieving their internal action level of 30 µg/dL. This would make compliance with Option 3 extremely difficult, and result in an increased requirement for workers to be removed from lead risk work. One employer, with approximately 40 employees undertaking lead risk work indicated that a removal level of 30 µg/dL would result in approximately 22% of their workforce being regularly removed from lead risk work; this would be the same people every time. This organisation regularly raises hygiene issues with this cohort of workers, but has not been able to achieve significant improvements.

Concerns have also been raised by those who believe they can maintain levels below 30 µg/dL about: the impact on internal action levels; the increased frequency of blood lead level testing; and the feasibility of achieving the levels proposed for females of reproductive capacity.

Internal Action Levels

Some organisations utilise internal action levels below the legislated BLRL to ensure that the prescribed level is not exceeded, including removal from lead risk work; this action level is generally in the vicinity of 20 µg/dL to 30 µg/dL. If the prescribed BLRL is lowered to 30 µg/dL, these organisations will need to consider whether it is feasible to introduce lower internal action levels.

Organisations that currently utilise 40 µg/dL as their internal action level will experience even greater immediate issues.

Increased frequency of blood lead level testing

It is unclear why Option 2 includes a change to the frequency of testing, from every 6 months if the blood lead level is below 30 µg/dL, to every 3 months if the blood lead level is below 20 µg/dL.

Ai Group is proposing that, if the various levels outlined in Option 2 are adopted, the blood lead level testing regime should include a level at which it is appropriate to undertake testing at 6 monthly intervals.

Levels associated with females of reproductive capacity

Industry feedback has generally indicated that it is unlikely to be reasonably practicable to implement control measures that would achieve the gender-neutral outcomes considered in Option 3. It therefore extrapolates to them being unable to meet the proposed Option 2 levels for females of reproductive capacity. We have been advised that it has often been difficult to maintain the current levels required for females of reproductive capacity, e.g. below 20 µg/dL.

When considering the final decision in relation to females of reproductive capacity it will be important to recognise that the proposed blood lead removal and return to work levels may effectively result in businesses being unable to employ females of reproductive capacity in some industries.

Hence the introduction of the lower levels for females of reproductive capacity may result in this group of workers being unable to undertake lead risk work.

An alternative to Option 2

It has been proposed by some organisations, for the reasons outlined above, that an alternative to Option 2 would be to lower the BLRL to 40 µg/dL, rather than 30 µg/dL.

Transitional arrangements

If the various blood lead levels are reduced, it is Ai Group's view that a minimum four-year transitional arrangement would be required for adoption of Option 2, or the alternative Option proposed above. As part of this transition, domestic organisations should have access to arrangements that facilitate the necessary upgrades to their operations (for example through greater automation). This would assist avoiding the risks that higher costs imposed by more stringent domestic regulatory requirements would push domestic production offshore to jurisdictions that had lesser requlatory requirements. Further, organisations who are having genuine difficulties meeting any new removal requirements should be able to seek exemptions, based on having achieved the lowest level of exposure that is reasonably practicable in their circumstances.

Ai Group does not support Option 3. If Option 3 is adopted, a longer period of transition will be required. Feedback from industry indicates that Option 3 could not be achieved without significant automation of processes which would effectively remove the need for workers to be engaged in lead risk work. Where this is feasible, significant capital expenditure is likely to be required.

Interaction with definition of lead risk work

*The Model WHS Laws define lead risk work as "*work carried out in a lead process that is likely to cause the blood lead level of a worker carrying out the work to exceed:

> (a) for a female of reproductive capacity — 10µg/dL (0.48µmol/L); or
> (b) in any other case — 30µg/dL (1.45µmol/L)".

As these definitions align with the need to provide health monitoring, it can be extrapolated that the trigger for classifying work as lead risk work will also be reduced if the BLRL is lowered. Statements throughout the CRIS indicate that this will be the case, but it is not specifically stated.

If this is the case, it is possible that work that is not currently classified as lead risk work would become lead risk work, with a larger pool of workers captured in the requirements to participate in blood lead monitoring.

Commentary on the Impact Analysis

Section 8 of the CRIS investigates the cost/benefit analysis of the options being considered for blood lead levels. The majority of the analysis relates to the adoption of Option 2.

We note that the impact analysis does not appear to take account of the implications, either for domestic industry or for the health of workers in other countries, of a transfer of activities to less-regulated countries that are subject to cost increases in Australia. Most of the industries that would be affected by the proposals are subject to the contraints of international trade as evidenced by competition from imports in these industries. As noted above, there is a risk that the adoption of more costly regulatory requirements will simply increase the likelihood of the displacement of Australain production with increased activity in other countries. The assessment of costs and benefits should include the costs of the additional health risks transferred to employees in less-regulated countries and the production and employment loss in Australia.

The CRIS considers some of the economic benefits associated with changes to blood lead levels, including “Staffing - a reduction in blood lead levels would see less accumulation of lead in the body and therefore a reduction in the amount of time a worker is removed from lead risk work. Consequentially, this would require a shorter period of time where the business may require the cost of additional staff member [sic] to replace them” (page 41). Whilst this may be true, it is also likely that more workers will need to be removed from lead risk work more often, which would lead to an increase in staffing requirements.

On page 41, it is stated “Safe Work Australia is seeking information on the major industries that would be affected by revising the removal levels and an estimate of the number of workers that are likely to be exposed to lead risk work in each sector”. As it has not been clearly explained that the definition of lead risk work is most likely to change, the response to this question may be an underestimate.

On page 42 it is stated that where a business is already meeting “… the proposed removal levels there will be no direct net cost with the proposed changes.” However, this does not take into account:

- the extra costs associated with increasing the minimum testing frequency from every 3 months to every 6 months, which will effectively double the costs of health monitoring and increase the amount of administrative time required and the absence of workers to participate in the testing;
- the reclassification of lead risk work, thus requiring the provision of health monitoring for a larger number of people; and
- the impact of lowering non-mandatory internal action levels which may increase removals and/or the need for testing.

On page 43, the CRIS refers to a survey undertaken by WorkCover Victoria in 2000. It is reported that “only one employee reported any costs associated with removal”. It seems that this result is being utilised to support the view that “it is assumed there will be minimal additional cost from removal of lead risk workers.”

It is Ai Group's view, supported by industry feedback, that removal of workers from lead risk work can have significant costs to the business, in particularly those related to the engagement of replacement workers whilst the impacted worker is reallocated to other duties or placed on paid leave. The CRIS should not rely on this 2000 data. Workers may also experience costs through reduction in access to overtime.

It is hoped that the public comment process will help to provide industry based data to better consider the costs associated with the implementation of Option 2, or the alternative proposed earlier in this submission.

WORKPLACE EXPOSURE STANDARDS

It is clearly appropriate to consider the workplace exposure standard (WES) for lead at the same time as proposing options to reduce allowable blood lead levels.

However, it is important to note that a separate SWA consultation process on the use of workplace exposure standards in work health and safety laws has only recently concluded; public comment closed on 18 December 2015. Decisions about the manner in which the WES will be applied for lead must be made in the light of decisions that are made for the broader range of WES utilised in managing work health and safety issues.

The CRIS (page 48) states "most occupational exposures to lead is by inhalation or ingestion of airborne particles which have landed on clothing, work surfaces, food items, smoking materials and unprotected skin… Biological monitoring is considered the most effective way of measuring the amount of lead actually absorbed by a worker because it takes into account both ingestion and inhalation."

Ai Group has received advice from a member company that is achieving blood lead levels below 30 µg/dL; they have difficulties achieving the current WES and are continually reviewing all processes and extraction equipment to manage the WES within current parameters.

It is expected to be very difficult to achieve a level of airborne contaminants below 0.15 mg/m^3 and they do not believe that a level below 0.10 mg/m^3 would be achievable.

Consistent with the views expressed in our previous submission in relation to workplace exposure standards generally, it is Ai Group's view that an advisory utilisation of WES is the most appropriate approach.

This is particularly the case with lead exposure where there is the ability to directly measure the level of lead in the blood without the need to rely on air monitoring to identify what the exposure and impact may be.

We have received feedback from member companies that, when they do experience elevated lead levels, they often identify that the most likely cause is ingestion, rather than inhalation.

One example involved a range of people working in the same area, and therefore with a similar exposure to airborne lead. The workers who were actually handling the lead product had consistently higher blood lead levels than those working in the same vicinity, but not handling the product.

Another example involved circumstances where a person with facial hair had consistently higher blood lead levels than his colleagues undertaking the same work. When the worker trimmed his moustache, the blood lead levels decreased significantly.

These examples highlight that focusing on airborne contaminants may not be a good measurement of true exposure to lead.

The ultimate measure of success in relation to the range of control measures necessary to reduce the inhalation and ingestion of lead particles is the blood lead levels being identified.

If an advisory measure is utilised, the exact WES applied becomes less crucial.

However, it is important that the advisory WES is one that can be practically achieved in workplaces. If the WES is set too low:

- businesses may decide that it is impossible to even strive to achieve it, particularly if blood lead levels are below the removal level, indicating that the airborne contaminants are not impacting blood lead levels; and
- workers may be unnecessarily concerned about air monitoring results when their blood lead levels are within the allowable range.