Options to limit hazardous aromatic amines in clothing, textiles and leather articles

Call for industry cost information

Released - 29 May 2014
Final deadline - COB 12 June 2014
Early submissions preferred

ProductSafetyChemicals@accc.gov.au
1. Introduction

This initial call for information has been prepared by the Standards and Compliance (Chemical Based Products Section) of the Product Safety Branch of the Australian Competition and Consumer Commission (ACCC).

This paper supports engagement with business and industry in relation to managing the potential hazards associated with consumer exposure to chemicals in clothing, textiles and leather goods that are in direct contact with the skin for prolonged periods (hereafter referred to as clothing, textiles and leather articles). The ACCC wishes to obtain specific information from affected business and industry as to the likely increase in costs if regulation or quasi regulation were to proceed. The cost information sought relates to three options to address the problem of human exposure to hazardous dyes in clothing, textiles and leather goods. The same approach may also be used to control similar chemical hazards in consumer goods in the future.

This paper seeks costing information that will be used to inform a Regulation Impact Statement (RIS) that the ACCC will develop, publish and consult on. All interested parties will have an opportunity to comment on the RIS. The preparation of a RIS is a Government requirement. Every policy proposal designed to introduce or abolish regulation must now be accompanied by an Australian Government RIS. The Australian Government Guide to Regulation1 sets out the process for developing a RIS.

The ACCC’s recent work on hazardous dyes in consumer goods was prompted by a recommendation from the National Industrial Chemical Notification and Assessment Scheme (NICNAS). Following publication of the NICNAS human health assessment on benzidine-based dyes, the ACCC conducted a survey and commissioned testing of articles that are typically in direct and prolonged contact with the skin. While the majority of articles tested did not raise safety concerns, a number of articles were found to have unacceptably high concentrations of carcinogenic chemicals derived from hazardous azo dyes. The NICNAS recommendation and ACCC testing are discussed in more detail below.

This paper explains the problem to be addressed, why government intervention may be required, broad options available to solve the problem and how they might operate.

To assess the total burden of government intervention, the ACCC needs a good understanding of the costs business face if regulation (option 2) or quasi regulation (option 3) is developed.

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Affected businesses are being asked to provide general and specific information on possible regulation and costs associated with regulation. This information will be used in the RIS to shape the government’s response to the problem.

2. The problem

Australian consumers are being unnecessarily exposed to carcinogenic chemicals from certain dyed clothing, textiles and leather articles. The risk of exposure increases with body heat, sweat or saliva. In all cases identified by the ACCC the articles were imported from other countries.

Many consumer goods are dyed with highly effective azo dyes. A small proportion of azo dyes contain, or can break down to form, a class of chemical substances referred to as aromatic amines (including benzidine) which are hazardous to human health.

Studies have shown that aromatic amines, including benzidine can migrate from clothing, textiles and leather articles and may be absorbed through the skin exposing consumers to carcinogens.

Expert authorities such as the World Health Organisation (WHO) International Agency for Research on Cancer (IARC) have classified some of these aromatic amines as known, or suspected human carcinogens.2 A carcinogen is a substance that is capable of causing cancer. Exposure to a carcinogen does not mean cancer will result.

In the case of benzidine, the primary human health risk associated with exposure is cancer. The IARC classifies benzidine as a Group 1 - known human carcinogen.3

The IARC classifies other aromatic amines like 3,3’-dimethoxybenzidine and p-aminoazobenzene as Group 2B carcinogens.4 Classification in Group 2B is the highest available to the IARC when the carcinogenic effect is evident in animal studies but there is insufficient human data to assess the carcinogenicity to humans. It should not be taken to mean that the chemical is a less potent carcinogen than those classified in Group 2A or Group 1.

The European Scientific Committee on Toxicity, Ecotoxicity, and Environment (CSTEE) has affirmed the conclusion of a multinational assessment of the risk of cancer caused by clothing, textiles and leather articles coloured with certain azo dyes (including benzidine-based dyes), that while consumer exposure is likely to be very low, the associated cancer risks give cause for concern. As a result, exposure

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2 These aromatic amines are either known human carcinogens or suspected to be human carcinogens because they are known to be carcinogenic to animals.


4 Ibid.
to certain azo dyes, including benzidine-based dyes, should be minimised or eliminated.\textsuperscript{5}

In June 2013 NICNAS published its human health assessment for 11 benzidine-based dyes. The critical health effects include systemic long term effects including carcinogenicity, reproductive toxicity and developmental toxicity.\textsuperscript{6}

NICNAS recommended that the ACCC “consider mechanisms to restrict the supply of textiles and leather articles which may come into direct and prolonged contact with the human skin, that may plausibly result in human exposure to these chemicals at unacceptable levels.”\textsuperscript{7}

Testing to gauge the extent of the problem

Following the NICNAS recommendation, the ACCC commissioned the testing of 199 clothing, textiles and leather articles randomly selected from mainstream suppliers in Australia\textsuperscript{8}. Later, the ACCC conducted a further focussed survey of an additional 28 articles. Selection of these 28 articles was based on test results of the initial 199 articles. The final tranche of testing involved 79 samples of jeans and bedding (mainly pillow slips).

The purpose of testing was to determine whether hazardous azo dyes were still being used in these articles and to measure the concentrations of benzidine and 21 other hazardous aromatic amines. Samples were sent to an accredited test lab and tested via the following methods:

- EN 14362-1:2012 for textile material
- EN ISO 17234.1: 2010 for leather material.

The majority of this first tranche of randomly selected products (approximately 97 per cent) passed testing with either no detection or low detection of aromatic amines. However, a number of samples recorded high levels of aromatic amines above the acceptable limit of 30 mg/kg (30 parts per million). A number of these samples were washed and retested. Comparison of pre and post wash test results did not indicate a consistent decrease in the concentrations of hazardous aromatic amines after a single wash. In some cases the results after a single wash were slightly higher than the pre-wash test results.

\textsuperscript{5} National Industrial Chemical Notification and Assessment Scheme, 6 June 2013, Inventory Multi-Tiered Assessment and Prioritisation Human Health Tier II Assessment for Benzidine-Based Dyes, available: \url{http://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment_id=513}

\textsuperscript{6} ibid.

\textsuperscript{7} ibid.

\textsuperscript{8} This first tranche of randomly selected goods had a construction or use pattern that could lead to migration.
As a result of ACCC testing, and testing conducted by suppliers subsequent to ACCC testing, 35 product lines of clothing and textiles from eight suppliers were voluntarily recalled.

3. Is government intervention needed?

There was significant media interest following the recalls of unsafe clothing and textile goods with calls for the ACCC to regulate the supply of dyed products.

Safe and effective alternative dyes are available and they are being used in the majority of cases. It appears that many Australian retailers of clothing/textiles already specify in their contracts that hazardous azo dyes must not be used. However the recent ACCC survey detected hazardous aromatic amines derived from certain azo dyes. It appears that there was substitution at some point during the manufacturing process overseas.

Given that consumers are effectively unable to detect the presence of carcinogenic aromatic amines and suppliers can use alternative dyes, it seems reasonable that Australian suppliers should take steps to ensure clothing, textiles and leather articles supplied in Australia do not contain hazardous azo dyes.

Australian retailers could increase compliance activities and end product testing to verify that their specifications are being met. A number of major retailers have stated that they have recently refocused their resources to minimise the likelihood that hazardous azo dyes are present in the articles they supply. More active end product testing of articles prior to accepting them for sale in Australia is one strategy for achieving this. However, it could be costly and/or inefficient to test large numbers of finished goods upon fulfilment of orders.

In the event that Australian suppliers, for whatever reason, are unable to achieve this via self-regulation, other measures may be necessary to protect consumers.

On 24 April 2014, the Minister responsible for consumer protection (The Hon Bruce Billson MP) agreed that the ACCC should commence the process to develop options to address the potential hazards with these hazardous dyes in clothing, textiles and leather goods.

Current regulation of aromatic amines

Beyond the broader defective goods regime in the Australian Consumer Law (ACL), there is currently no regulation in Australia to restrict the supply of clothing, textiles and leather articles dyed with hazardous azo dyes which can expose consumers to aromatic amines. Other controls have been put in place to control azo dye use in other types of goods.

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Goods with unacceptable levels of aromatic amines are unsafe and therefore defective, and are subject to recall under the ACL
In addition to its recommendation for the ACCC, NICNAS also recommended that the risk to public health and safety from the potential use of hazardous benzidine-based dyes in consumer products be managed through changes to poisons scheduling. 10

The Advisory Committee on Chemicals Scheduling (ACCS) recommended that, based on their carcinogenic potential, the benzidine-based dyes assessed by NICNAS should be listed in Schedule 7 of the Standard for the Uniform Scheduling of Medicines and Poisons (referred to as the ‘Poisons Standard’). Schedule 7 covers substances with a high potential for causing harm at low exposure and which require special precautions during manufacture, handling or use.

Inclusion in Schedule 7 of the Poisons Standard will assist in the control of supply, manufacture and use of specific hazardous dyes in consumer goods (including cosmetics) in Australia. It will affect suppliers, manufacturers and users of hazardous dyes, but it will not prevent the supply of finished clothing, textiles and leather articles in Australia which are already dyed.

This is because the Poisons Standard does not have the reach to control the full range of consumer goods that may contain hazardous chemical contaminants. The ACL remains the most appropriate legislative framework for controlling hazardous chemicals in finished consumer goods, as it specifically provides a range of options to control the supply of consumer goods.

This is why NICNAS made a separate additional recommendation that the ACCC “consider mechanisms to restrict the supply of textiles and leather articles which may come into direct and prolonged contact with the human skin, that may plausibly result in human exposure to these chemicals at unacceptable levels”.

The amendments to the Poisons Standard commence on 1 June 2014.11

International controls

A number of countries have specific regulations relating to certain azo dyes and hazardous aromatic amines.

In the European Union (EU), 22 aromatic amines derived from certain azo dyes are restricted in articles which may come into direct and prolonged contact with the human skin or oral cavity. The maximum total concentration for all of the aromatic amines is 30 mg/kg.12

In China, the limit for aromatic amines in leather and fur products is 30mg/kg (the Chinese standard is GB 20400-2006, Leather and Fur - Limit of Harmful Matter).13


13 https://www.iaagaservices.bureauveritas.com/reach-ccr/regulation_updates/59737.html
Decomposable carcinogenic aromatic amines are banned in any apparel, decoration textiles and household textiles placed on the market of China. The Chinese standard for textiles is GB 18401-2010 National General Safety Technical Code for Textile Products.\(^{14}\)

In Japan, the 22 aromatic amines restricted in Europe are listed in a voluntary standard. The voluntary standard was developed by the Japan Textile Federation (JTF) and the Japan Leather Industry Association (JLIA). Compliance with the standard may be demonstrated by providing a certificate of analysis or self-declaration.\(^{15}\) Importation of textiles into Japan must be accompanied by test reports, certification documentation (that certain azo dyes have not been used) and information on the manufacturing facility.\(^{16}\)

The introduction of textiles or leather articles containing benzidine-based dyes is proposed to be restricted in the United States. Access to these dyes for home use is not permitted.\(^{17}\)

There are no regulations restricting supply of textiles dyed with benzidine-based dyes in Canada, however the use of such dyes has not been detected.

In a number of international jurisdictions benzidine-based dyes are banned for use in cosmetics.

4. Policy options under consideration

4.1 Status quo – Industry self-regulation

The dangers associated with hazardous azo dyes have been known for some time and use of these dyes has been phased out in many countries. The ACCC survey found that the majority (~97 per cent) of randomly selected articles did not contain hazardous azo dyes, and the articles that did contain the problem dyes were efficiently recalled with the full cooperation of the suppliers involved.

However, while the current state of the market does not indicate a widespread problem, recent media coverage has generated significant consumer interest and concern.

A number of Australian suppliers reported they already specify to sourcing agents that dyed articles must meet the EU requirements. The extent that end product testing is undertaken to verify that specifications are being met would vary but it is not understood to be routine for all businesses.

\(^{14}\) http://www.intertek.com/textiles/gb-18401/
\(^{15}\) http://www.gmn.hkpc.org/en_newsletter_details.asp?id=62
The results from the recent ACCC survey indicate that this approach does not prevent consumer exposure to articles dyed with unsafe aromatic amines. The failure rate for randomly selected articles was approximately 3 per cent. Since the recent ACCC survey, more businesses have commenced routine end product testing.18

The ACL includes a number of general provisions which work together to support the supply of safe consumer goods. These include the provisions relating to strict liability for injury or loss from defective goods, statutory consumer guarantees that goods should be safe and fit for purpose and misleading and deceptive conduct. The recall provisions, including the Minister’s power to order a recall may also be invoked where goods may cause injury.

The recent ACCC survey has triggered suppliers to enhance their testing for compliance with their specifications. While this may be the case for many suppliers, the ACCC is yet to establish if this is likely to become industry-wide or enduring.

An option for consideration is to allow this industry self-regulation to continue.

4.2 Regulation via a mandatory safety standard or permanent ban

The ACL (Schedule 2 to the Competition and Consumer Act 2010), provides for the Commonwealth Minister to make a mandatory safety standard, or impose a permanent ban, on certain consumer goods. Safety standards and permanent bans are legislative instruments and enforceable under provisions of the ACL.

A safety standard or permanent ban could specify the limit for certain aromatic amines in clothing, textiles and leather articles. These limits would be based on the best available scientific evidence cited by relevant authorities. As any regulation is likely to permit supply if goods are within an acceptable level, a safety standard may be more appropriate than a permanent ban. The choice between the two instruments will be considered more fully during this project.

While many Australian suppliers appear to have purchasing specifications that state unsafe azo dyes are not to be used, it appears, based on recent ACCC testing, some Australian suppliers have not been testing their products or their testing has been inadequate. Regulation would mean suppliers would need to be more active in ensuring compliance or they may face penalties for breach of a safety standard or permanent ban. Australian suppliers may need to improve their compliance processes and ensure more product testing is conducted prior to offering products for sale to satisfy themselves that they comply with the regulation. This testing may be conducted or commissioned by manufacturers who then provide test certificates to Australian suppliers and/or Australian suppliers commissioning their own testing of product once manufacturing is completed. The integrity of testing conducted overseas during manufacturing may be difficult to independently verify.

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18 Based on ACCC discussions with clothing and textiles suppliers.
Any regulation would likely be structured so as to effectively require adherence to the key elements of the EU standard and testing methodology. This element of overseas equivalence should both provide additional consumer protection and enhance supply options as it does not impose unique Australian requirements.

Currently there is an absence of test houses in Australia accredited to test to the EU requirements. However there is suitable availability overseas and there is no barrier to Australian based test houses becoming accredited if a market for those services develops.

Any regulation could be enforced by the ACCC and state and territory fair trading agencies. There are already a number of mandatory standards and bans in place that the ACCC and other regulators actively enforce by surveying retail outlets and websites, by responding to complaints and by acting promptly against offending suppliers.

The ACL provides for significant penalties for a breach of a safety standard or permanent ban. The maximum penalty for breach of a safety standard or permanent ban is $1.1 million for a corporation and $220 000 for an individual. This would be in addition to the general and recall provisions.

The view of the ACCC is that all businesses supplying products to Australian consumers must comply with the ACL. This includes domestic companies, online suppliers and businesses outside Australia that supply products to Australian retailers for resupply.

Whilst the ACCC is committed to enforcing the ACL and mandatory products safety regulations for products supplied in Australia, the ACCC exercises its discretion to direct resources to the investigation and resolution of matters that provide the greatest overall benefit for competition and consumers. The ACCC is unlikely to pursue matters that are one-off, isolated events, especially where companies have strong compliance cultures and supporting systems in place.

During the ACCC survey a number of Australian suppliers reported they had been unknowing recipients of goods where there has been substitution of dyes at some point in the production process. The application of penalties beyond Australia may have additional deterrence of conduct occurring overseas.

This fully integrated suite of controls under the ACL should maximise the incentive to source fully compliant goods.

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19 The general provisions include the provisions relating to strict liability for injury or loss from defective goods, statutory consumer guarantees that goods should be safe and fit for purpose and misleading and deceptive conduct.

20 The recall provisions, including the Minister’s power to order a recall may be invoked where goods may cause injury. Although recalls are applied as a protective function of regulation, suppliers are likely to incur significant costs and brand damage when recalling non-compliant unsafe goods.
4.3 Quasi - regulation via Referenced Safety Limits (RSL)

An alternative approach is for the ACCC to publish and promulgate recognised Referenced Safety Limits (RSL) for the chemicals of concern. It is likely the RSL would reflect the key elements of the EU standard and testing methodology.

The ACCC would publish and promote the RSL stating that it regarded these as clear thresholds for determining whether consumer goods are unsafe. The expectation would be that suppliers would comply with them.

The general\textsuperscript{21} and recall\textsuperscript{22} provisions of the ACL would still apply, however unlike the regulatory option, it would not be an offence to exceed the RSL, and specific financial penalties would not be able to be pursued for non-compliance. There would be no prospect of pursuing overseas suppliers for breaches of Australia’s product safety laws. Consequently, the quasi regulation option does not carry with it the full force that the fully integrated suite of controls in the regulatory option would provide.

During the ACCC survey a number of Australian suppliers reported they already specify to sourcing agents that dyed articles must meet the EU requirements and had been unknowing recipients of goods where there had been substitution of dyes at some point in the production process. This suggests that some suppliers have not been sufficiently diligent in verifying supply chain compliance despite the obligations from the general and recall provisions of the ACL.

The ACCC uses the SRL approach with formaldehyde in textile goods. The ACCC publishes non-regulatory safety limits for formaldehyde on its Product Safety Australia website (\url{http://www.productsafety.gov.au/content/index.phtml/itemId/973697}).

Whilst there is anecdotal reporting from a number of major retailers that these limits are adopted and they commission product testing to ensure they meet them\textsuperscript{23}, the exact efficacy of RSL has not been accurately measured.

5. Net benefit

New regulation must offer a net benefit to be viable. In seeking this costing information the ACCC will subsequently prepare a RIS which examines the costs and attempts to determine which option provides the greatest net benefit.

\textsuperscript{21} The general provisions include the provisions relating to strict liability for injury or loss from defective goods, statutory consumer guarantees that goods should be safe and fit for purpose and misleading and deceptive conduct
\textsuperscript{22} The recall provisions, including the Minister’s power to order a recall may be invoked where goods may cause injury. Although recalls are applied as a protective function of regulation, suppliers are likely to incur significant costs and brand damage when recalling non-compliant unsafe goods.
\textsuperscript{23} Based on ACCC discussions with clothing and textiles suppliers.
6. Consultation

Through the RIS process the ACCC will consult with a wide range of stakeholders including:

- major, medium and small retailers;
- importers of finished clothing, textile and leather goods;
- importers of raw materials for local manufacturing and ‘finishing’;
- Australian manufacturers of clothing/textiles and leather goods;
- industry associations;
- consumers;
- federal and state/territory government agencies such as fair trading agencies, the Federal Department of Industry, NICNAS etc;
- World Trade Organisation (WTO);
- dyeing and colouring industry;
- health professionals; and
- academics.

The ACCC is targeting this initial discussion with clothing suppliers via this paper to determine the likely costs associated with each option.

Once the ACCC has considered industry responses to this paper, a draft RIS will be developed and sent to stakeholders. It will be published on the Product Safety Australia website (www.productsafty.gov.au) as well as the ‘business.gov.au’ website. The ACCC has a dedicated consultation hub where it publicises consultation; both industry and consumers have access to the hub. This second phase of consultation will provide stakeholders with more time to consider and comment on the specific options.

All stakeholders will be invited to make submissions on the consultation RIS.

7. The preferred option

There is no preferred option at this time. The ACCC needs to gather cost information in order to prepare and consult broadly on a RIS. The RIS consultation will further inform cost and benefit considerations. In accordance with Government policy, the preferred option will have the highest net benefit.

8. Implementation and evaluation

If either regulation or quasi regulation is ultimately implemented, suppliers may want time to ensure compliant stock is available for supply. Suppliers are invited to comment on a suitable time frame for implementation of any regulatory or quasi non-regulatory option.

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The ACCC actively engages with suppliers of consumer goods and will continue to speak with suppliers about aromatic amines in certain clothing, textiles and leather articles once the regulatory issues are determined.

The ACCC will also monitor the market for compliance with either regulation or quasi regulation. If the quasi regulatory option were adopted and later found not to adequately protect consumers, a regulatory option could be reconsidered.

9. Form of proposed regulation

The wording for any possible future regulation has not yet been finalised, however it is likely to be similar to the key elements of the EU requirements set out in Regulation (EC) No 1907/2006 25.

Under the EU Regulation, azo dyes which, by reductive cleavage of one or more azo groups, may release one or more of 22 aromatic amines in detectable concentrations, i.e. above 30 mg/kg, in the finished articles or in the dyed parts thereof, must not be used in textile and leather articles which may come into direct and prolonged contact with the human skin or oral cavity.

Attachment A of this paper includes a summary of how any regulation may look. It provides a list of the 22 aromatic amines and provides a total limit of 30 mg/kg. It is proposed that the 30 mg/kg total limit apply to the finished article or in the finished articles dyed parts.

10. Supplier information request

Accurate information about costs assists in further developing options. Responses to the questions below will assist the ACCC to understand the costs of the options identified however, stakeholders are invited to provide submissions on any aspect of this paper.

Please provide details of additional costs you are likely to incur as a result of potential regulatory or quasi regulatory approaches.

These additional costs are to any existing costs incurred as part of current day to day business activities including current activities to manage hazardous azo dyes. As a guide and prompt, additional costs may include:

- Any additional staff time and overheads to be involved in compliance work anticipated for each of the three options.

- Establishing and maintaining additional compliance practices, checking, auditing paperwork and site inspections, internal reporting, legal/scientific/technical advice etc.

Costs of additional verification and testing, including the price for testing and estimated number of SKUs and samples you would expect to test annually (bearing in mind any regulation is likely to involve clothing, textiles and leather goods likely to be in direct contact with the human skin for a prolonged period of time).

Any additional transit and storage costs arising from delays getting products to market or returns.

Specific questions for Australian suppliers

1. Can you provide a brief profile of your business such as:
   - Approximate number of staff.
   - Approximate annual turnover.
   - Type of products or services you supply.
   - Resources your business has for quality/safety assurance and compliance activities – i.e. number of staff dedicated to this function or costs to contract those services.
   - The extent that your business supplies clothing, textiles and leather articles likely to be in direct and prolonged contact with the skin.
   - Countries/regions you supply goods or services to.
   - Countries/regions you source goods from.

2. The ACCC is unlikely to receive submissions from all Australian suppliers and may therefore need to use the information it receives to estimate the total impact on all Australian suppliers. Can you estimate what proportion of the Australian market for clothing, textiles or leather articles you supply?

3. Do you source clothing, textiles and leather articles directly from manufacturers or through intermediaries such as importers or sourcing agents?

4. Is your business aware of safety concerns around certain azo dyes? Does your business currently adopt the position that you should not supply certain clothing, textiles and leather articles that contain more than 30 mg/kg total hazardous aromatic amines? If you do not use 30 mg/kg total hazardous aromatic amines do you set other limits for the use of these dyes?

5. What approach does your business currently take in relation to minimising the risk of hazardous dyes being present in articles you supply? Do you have the overseas production processes audited? Do you currently conduct product testing once they arrive in Australia? What do you estimate are the actual compliance costs that your business incurs managing potentially hazardous azo dyes? In considering compliance costs please refer to the information on types of costs above.
6. Assume the ACCC were to publish and notify your business that the safe reference limit (SRL) for total aromatic amines in certain clothing and textile articles was 30 mg/kg as described under the quasi regulatory option. Would this change your current practices? Would you put in place additional controls to comply with the SRL? If so, what additional compliance costs (in addition to your current costs) would your business incur?

7. Assume regulations were introduced under the Australian Consumer Law that set a statutory limit of 30 mg/kg for total hazardous aromatic amines in certain clothing, textiles and leather articles. Would this change your current practices? What effect would the possibility of significant penalties have on your approach? If so, what additional compliance costs (in addition to your current costs) would your business incur?

8. Are the additional costs for online business the same as those for traditional ‘bricks and mortar’ style business?

9. Assume the ACCC develops either regulation (described in section 4.2) or quasi regulation (described in section 4.3). Will your business pass any additional costs arising from these options on to consumers? Can you estimate what these additional costs might be in price per garment/product?

10. Are there any other possible chemical hazards (for example formaldehyde, dimethyl fumarate) that you would support taking the same approach with?

11. Are there any other options the ACCC should consider to reduce the exposure of Australian consumers to hazardous azo dyes in clothing, textile and leather articles (for example, international inter-governmental agreement on the use of safe dyes, industry codes or stewardship schemes)?

11. **Submissions on this paper**

Responses to questions and comments on this paper should be sent to the ACCC using the email address below.

**Submissions should be sent to the ACCC by close of business, Thursday 12 June 2014, to:**

ProductSafetyChemicals@accc.gov.au

While the final deadline for submissions is 12 June 2014, early submissions would be greatly appreciated so collation of cost information can commence as early as possible.

Industry costs are important in considering the options to address the hazard; industry is strongly encouraged to provide costs which will be used to develop a RIS. The broader stakeholder group (including industry) will have an opportunity to comment on the draft RIS before a decision on policy is made.
If you wish to discuss this paper please contact:

Simon Bell  simon.bell@accc.gov.au or 02 6243 1232

Peter Wallner  peter.wallner@accc.gov.au or 02 6243 4972

If the information provided is of a confidential nature, you can be assured that the details provided by you will be treated confidentially. That is, the ACCC will not disclose the confidential information to third parties, other than advisors or consultants engaged directly by the ACCC, without first providing you with notice of its intention to do so. Please note that any information which you believe to be of a confidential nature should be clearly marked or identified as confidential.

The ACCC may be compelled by law to disclose submissions (for example under subpoena or following a request under the Freedom of Information Act 1982). For more information see the ACCC-AER Information Policy available via www.accc.gov.au
### Attachment A: Draft copy of aromatic amines and proposed limits

<table>
<thead>
<tr>
<th>Type of consumer good</th>
<th>Concentration of hazardous chemical</th>
<th>Chemical name and Chemicals Abstract Service (CAS) number of aromatic amines.</th>
<th>Health effects</th>
<th>Reference</th>
<th>Examples of types of consumer goods</th>
</tr>
</thead>
</table>
| Clothing, textiles and leather articles in direct and prolonged contact with the human skin or oral cavity. | Total concentrations of aromatic amines over 30 mg/kg (or 0.003 % by weight) shall not be present in the described type of consumer good | 1. 4-Aminodiphenyl (CAS 92-67-1)  
2. Benzidine (CAS 92-87-5)  
3. 4-Chloro-o-Toluidine (CAS 95-69-2)  
4. 2-Naphthylamine (CAS 91-59-8)  
5. o-Aminoazotoluene (CAS 97-56-3)  
6. 2-Amino-4-Nitrotoluene (CAS 99-55-8)  
7. p-Chloroaniline (CAS 106-47-8)  
8. 2,4-Diaminoanisole (CAS 615-05-4)  
9. 4,4’-Diaminodiphenylmethane (CAS 101-77-9)  
10. 3,3’-Dichlorobenzidine (CAS 91-94-1)  
11. 3,3’-Dimethoxybenzidine (CAS 119-90-4)  
12. 3,3’-Dimethylbenzidine (CAS 119-93-7)  
13. 3,3’-Dimethyl-4,4’-diaminodiphenylmethane (CAS 838-88-0)  
14. p-Cresidine (CAS 120-71-8)  
15. 4,4’-Methylene-Bis(2-Chloroaniline) (CAS 101-14-4)  
16. 4,4’-Oxydianiline (CAS 101-80-4)  
17. 4,4’-Thiodianiline (CAS 139-65-1)  
18. o-Toluidine (CAS 95-53-4)  
19. 2,4-Toluylenediamine (CAS 95-80-7)  
20. 2,4,5-Trimethylaniline (CAS 137-17-7)  
21. o-Anisidine (CAS 90-04-0)  
22. p-Aminoazobenzene (CAS 60-09-3) | All the aromatic amines listed are either known or suspected human carcinogens. The critical health effects for risk characterisation include systemic long-term effects including carcinogenicity, reproductive toxicity and developmental toxicity. | The NICNAS IMAP Human Health Tier II Assessment for benzidine-based dyes recommended that the supply of textiles and leather goods likely to come into direct and prolonged contact with the human skin that may plausibly result in exposure to benzidine-based dyes at unacceptable levels be restricted: [http://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment_id=513](http://www.nicnas.gov.au/chemical-information/imap-assessments/imap-group-assessment-report?assessment_id=513) Identifying benzidine-based dyes in these consumer goods means testing for certain aromatic amines. | The consumer goods captured by this regulation include but are not limited to:  
- clothing such as shirts, singlets, pants, jeans, shorts  
- underwear, socks, gloves;  
- bedding, such as sheets, pillow cases  
- doona covers  
- sleeping bags; and  
- yarn and fabrics supplied to consumers where the finished article is likely to be in direct and prolonged contact with the skin. |