Quality Control Guidelines for Production of Broiler Bedding from Urban Wood Residue
These guidelines have by the Timber Development Association (NSW) Ltd (TDA) in partnership with the NSW Environment Protection Authority (EPA).

**Disclaimers**

The EPA and TDA have made all reasonable efforts to ensure that the contents of this document are factual and free of error, omission or inaccurate information. Neither the EPA nor TDA shall be liable for any damage or loss that may occur in relation to any person taking or not taking action on the basis of this document.

**Acknowledgements**

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Introduction

A large quantity of timber and wood products is disposed to landfill in New South Wales (NSW) annually. In Sydney alone, it is estimated that nearly 300,000 tonnes\(^1\) of wood and timber is disposed by businesses annually. Further, pallets and packaging contributed to nearly 50 per cent of the timber sent to landfill. The breakdown of wood in landfill contributes to the release of greenhouse gases in the atmosphere and is a permanent loss of a potentially useful resource.

To increase the amount of end-of-life wood derived from urban sources that is recycled additional markets are required. To inform the development of markets for urban wood waste, the Department of Environment, Climate Change and Water (now NSW Environment Protection Authority (EPA)) commissioned the Timber Development Association (TDA) to undertake a literature review and report on opportunities to expand the end-of-life urban wood market in NSW.

Results from the literature review led to the EPA commissioning TDA to undertake a market study on the potential of using end-of-life wood pallets and packaging as broiler bedding. This study showed that as the poultry industry’s demand for bedding is growing at four per cent annually, current supplies of bedding are unable to keep up with demand. An opportunity therefore exists to expand the market made from end-of-life wood.

To gain further support from the timber recycling and poultry industry, a series of trials were conducted. The trials showed that shredded end-of-life wood is a suitable poultry bedding material. Production of this material will benefit the timber recycling industry (as a new market for recycled timber is likely to be developed) and the poultry industry (as concerns about the lack of bedding material will be reduced).

To ensure that the bedding produced is of high and consistent quality, a draft specification has been developed (Appendix 1). This specification has been based on practical bedding trials at three poultry farms in NSW, industry experience in Western Australia and the United Kingdom, and advice provided by the NSW Farmers’ Federation, timber recyclers and with support from the EPA.

This guideline covers the NSW legal requirements for the receipt, storage and land application of bedding from end-of-life urban wood and the needs of the poultry industry.

NSW EPA have commissioned the TDA to prepare guidelines to assist timber recyclers with producing poultry bedding from end of life wood and with meeting the Specifications.

Scope

This guideline has been prepared for timber recyclers aiming to manufacture quality bedding for the poultry industry in NSW from clean end-of-life timber.

\(^1\) Department of Environment, Climate Change and Water (2010), Disposal based survey of the commercial and industrial waste stream in Sydney
Quality control guidelines – summary

These guidelines are recommendations to assist end-of-life timber recyclers wanting to produce poultry bedding with meeting the needs of broiler growers, to protect animal and worker health and the environment. They should help timber recyclers and buyers of broiler bedding achieve a better understanding and relationship.

The guidelines apply to all grades of recovered wood products and are subject to continuous improvement. Information is provided on acceptable and unacceptable inputs, quality control, sampling and analysis methods, record keeping and work health and safety.

The basic quality control process is outlined in the flow chart diagram on the following page (Figure 1).

Reference is made to the Specification for the Supply of Recycled Urban Wood for Broiler Chicken Bedding. Refer to these specifications during the manufacturing of bedding (Appendix 1).

Information is general in nature and needs to be tailored to meet sellers and buyers specific requirements. Regional, jurisdictional and individual site arrangements are not included in this document.

All parties must be in compliance with the health, safety and environmental requirements in place in their area. Health and safety will take precedence over all other issues.
Figure 1: Flowchart summary of quality control steps for urban wood poultry bedding
Environmental regulatory requirements

Land application

Under environment protection legislation, if bedding material is intended to be land applied as a fertiliser or soil amendment, it must comply with the conditions of the Raw Mulch Exemption 2008. Preservative treated or coated wood residues or engineered wood products are not covered by this exemption. End-of-life wood recyclers must ensure the bedding material they produce is free of all foreign materials, preservative treated and painted wood and engineered wood products. A copy of this exemption is available at www.environment.nsw.gov.au/resources/waste/generalRRE.

The use of an exempted waste remains subject to all other relevant environmental regulations (such as planning, air and water), including pollution offences under the Protection of the Environment Operations Act 1997 (“POEO Act”).

Adhering to the conditions of an exemption does not provide a defence against offences such as the pollution of land (section 142A) or water (section 120) or the special requirements relating to asbestos waste (clause 42).

All planning consents or approvals from the appropriate regulatory authority are still required

Receipt and storage

Poultry farms using urban wood poultry bedding may require an Environmental Protection Licence. When providing bedding produced from urban wood sources, please make poultry growers aware that:

- growers who intend to have onsite more than 2,500 tonnes or 2,500m³, whichever is the lesser, of bedding from urban wood sources at any time
  
  or

- growers who intend to receive more than 30,000 tonnes of bedding from urban wood sources per year,

require an Environment Protection Licence under Schedule 1 of the POEO Act.

Poultry growers who already hold an Environment Protection Licence because they accommodate more than 250,000 birds at any time may need to modify their planning consent and the conditions on their Environment Protection Licence before they can lawfully receive bedding from urban wood sources.

Further information and support on regulatory requirements is available from the NSW EPA’s Waste Reform Unit by calling 131 555 or email info@environment.nsw.gov.au

Environmental performance

The Waste Contractors and Recyclers Association of NSW provides suitable training for end-of-life wood recyclers on best practice management of Waste and Resource Recovery Facilities. Training is also available for environmental practices, work health and safety and resource recovery operations.
Please visit [www.wcra.com.au/Training.html](http://www.wcra.com.au/Training.html) for more information should this training be relevant to your needs.
Importance of using clean inputs

The importance of using clean timber cannot be overemphasised. Only untreated and uncontaminated urban derived timber and wood material that is collected as a separate material stream for processing should be used.

Urban wood includes materials such as sawn timber off-cuts, sawdust, wood shavings, packaging crates and pallets. It does not include preservative treated or coated wood residues or engineered wood products.

It is important to prevent contamination for a number of reasons. These include:

- to prevent any chance of contaminating poultry meat
- to avoid any detrimental effects on the health of poultry
- to avoid any detrimental effects on the health of poultry growers
- to ensure that recyclers and growers meet environmental regulations
- to prevent damage to expensive processing and shredding machinery
- to maximise the quality and value of the finished products for sale as chicken bedding
- to ensure that the used poultry bedding can be sold as organic fertiliser for lawful application to land.

Unacceptable inputs and contaminants consist of any foreign matter or unacceptable wood products, which during processing may cause damage to machines and/or may reduce the value of the finished products for sale as bedding. They are:

- wood preserved with copper chromium arsenate (CCA)
- other chemically preserved wood
- medium density fibreboard (MDF)
- particleboard
- kitchen veneer laminate
- laminated veneer lumber and plywood
- poles or posts
- heavily coated and painted wood
- diesel oil and petrol
- rotten or mouldy wood
- heavy metal bolts and connections
- metal strapping
- plastic wrap and strapping
- glass
- sand and stones
- chemical residue
- metal processing residue.

Examples of acceptable and unacceptable inputs are shown in Figures 2 and 3.
**Acceptable inputs**

<table>
<thead>
<tr>
<th>Clean softwood pallets</th>
<th>Clean softwood crate components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean fumigated wood packaging marked MB and IPPC logo</td>
<td>Clean heat sterilised wood packaging marked HT and IPPC logo</td>
</tr>
<tr>
<td>Clean softwood packaging</td>
<td>Clean timber offcuts</td>
</tr>
</tbody>
</table>
### Acceptable inputs

- Clean dunnage

### Unacceptable inputs

- Dark pallets with a strong smell or looking like diesel, petrol or chemicals have spilled on them
- Pallets coloured and dyed may indicate preservative treatment for European House Borer
- Packaging, lattice or poles with a light green colour (CCA treated timber)
- Pallets used to import goods from New Zealand (e.g. DB Breweries – CCA treated)

**Figure 2: Acceptable inputs for urban wood poultry bedding**
<table>
<thead>
<tr>
<th>Unacceptable inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium density fibreboard (MDF)</td>
</tr>
<tr>
<td>Particleboard (e.g. whole pallets)</td>
</tr>
<tr>
<td>Laminated veneer lumber</td>
</tr>
<tr>
<td>Plywood</td>
</tr>
<tr>
<td>Kitchen laminates</td>
</tr>
<tr>
<td>Rotted or mouldy wood</td>
</tr>
<tr>
<td>Large quantities of plastic wrapping</td>
</tr>
<tr>
<td>Wood packaging with heavy bolts</td>
</tr>
</tbody>
</table>
Unacceptable inputs

<table>
<thead>
<tr>
<th>Wood mixed with rubbish</th>
<th>CCA treated poles</th>
</tr>
</thead>
</table>

Figure 3: Unacceptable inputs for urban wood poultry bedding
Quality control guidelines - detail

A quality management system for the production of broiler chicken bedding is essential to ensure the Specification is continually met. Suppliers of broiler chicken bedding derived from urban waste residues must have in place quality control processes, screen and storage facilities to remove all foreign materials, preservative treated and painted wood and engineered wood products in the final product. The following quality control steps are recommended to negate and address any contamination issues.

1. Education

Education of all people involved in the manufacturing of urban wood poultry bedding is essential. Education will reduce disputes at the weighbridge as well as expensive post-delivery contamination removal. This section outlines the types of education that should be provided. Examples of suitable education material are included in Appendix 2.

Education for suppliers of urban wood

Pro-active education of end-of-life urban wood suppliers is essential to ensure they supply suitable uncontaminated wood. Education may include the development of information sheets and signs indicating acceptable and unacceptable inputs. All educational material should be easily accessible in both hard and electronic format.

Recyclers may also provide educational material to known potential suppliers of large volumes of urban wood. Known generators of significant volumes of urban wood include:

- trucking and logistics companies
- customs brokers and forwarders
- importers of manufactured products including machinery
- frame and truss manufacturers
- wood packaging manufacturers and repairers.
- waste collection companies who separate clean wood from contaminated wood.

Education for timber recyclers

Educational materials are also required for staff manufacturing bedding. This includes providing training and information on acceptable and unacceptable inputs as well as on contaminate identification and removal techniques.

The facility manager should supply printed material to staff and provide information on their website.

2. Visual inspection of incoming loads

Inspection of incoming loads by trained staff will ensure unacceptable contamination is prevented from entering the site. A weighbridge operator or other staff member with suitable training should visually inspect each load before accepting it onsite. Loads with unacceptable levels of contamination should be rejected and directed off site to be managed by a lawful facility.
Examples of acceptable inputs are illustrated in Figure 2. Note that untreated timber includes fumigated and sterilised timbers which carry the markings HT or MB are classed as acceptable. Examples of unacceptable inputs and contaminants are illustrated in Figure 3.

3. Directing incoming loads to designated drop off area

After visual inspection loads will be classified as acceptable or unacceptable. The following steps should be taken to ensure that the incoming loads do not contaminate already shredded material.

Acceptable loads

Acceptable incoming loads will be directed to a pre-shredding area where it is safe for drivers to unload and where the unloaded timber will not cross-contaminate shredded wood.

If the inspector is unsure the load is of acceptable quality, or the load is contaminated to a minor degree, the driver should be directed to a quarantine area where the load can be deposited. The load should undergo a second visual inspection by on-ground staff. The driver will remain on site while the load is inspected.

- If the load is deemed acceptable it will progress to the pre-shredding area before loading into a shredder.
- If the load is deemed unacceptable the load will be directed off-site to a lawful facility.

Unacceptable loads

If the wood is excessively contaminated the facility manager should immediately direct the load offsite to a lawful facility that is able to process or dispose of the waste.

4. Removal of contaminants

The loader/forklift operator should inspect wood before it is placed in the shredder. All contaminates should be removed by suitably trained on-ground staff by hand and/or loader.

Major contaminants such as large metal fixings have potential to damage shredding equipment and affect the quality and saleability of the finished bedding product. Minor contamination refers to small levels of light metal fixings, engineered wood products, mouldy wood, painted wood, plastic strapping and/or paper. Presence of these contaminants may affect the quality and saleability of the finished product.

5. Feeding wood into shredder and shredding

As wood is fed into shredder by an excavator or forklift it is inspected again for contamination. This is to ensure that all large contaminants are removed prior to shredding.

The shredder should be fitted with strong magnets on exit points to remove ferrous metals and stainless steel fixings from the shredded material. The shredder should be fitted with dust extraction and/or suppression equipment to minimise exposure of staff to wood dust. See the Workplace health and safety section for more information (Appendix 2).
6. **Screen for acceptable sizing**
Screening of shredded wood is needed to ensure the product meets the Specification (Appendix 1). Shredded wood should be passed through a trommel or over a vibrating screen of a suitable grid size to ensure acceptable sized material is produced. If the material is too large, it should be processed again until it reaches sizes identified in the Specification.

7. **Storage of bedding**
Correct storage of broiler bedding is needed to prevent cross-contamination with incoming material and other products that may be produced onsite. Further if bedding is exposed to excessive moisture from sprinklers, water trucks to reduce dust onsite or rain; the bedding could begin to decay causing growth of air-borne fungi and/or mould. Fungi and mould can have serious impacts on worker and poultry health.

Bedding should be stored according to the directions below:

- bedding will be stored in isolated bays made from uncontaminated wood or concrete preferably located on a hard stand area to prevent contamination with soil and to make loading for transport easier
- bedding should be protected from rain and/or sprinklers with tarps or storage in a covered area.

8. **Bedding sampling**
To ensure that the bedding produced meets the Specification, samples need to be taken frequently and appropriate tests undertaken. Information on sampling frequency is provided in Table 1.

<table>
<thead>
<tr>
<th>Constituent/Property</th>
<th>Sampling frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCA treated timber</td>
<td>1 per 2,000m³ or 1 per week if less than 2,000m³</td>
</tr>
<tr>
<td>Particle size distribution</td>
<td>As requested by purchasers</td>
</tr>
<tr>
<td>Moisture content</td>
<td>As requested by purchasers</td>
</tr>
<tr>
<td>Contamination with non-wood constituents</td>
<td>1 per 2,000m³ or 1 per week if less than 2,000m³</td>
</tr>
</tbody>
</table>

*Table 1: Minimum sampling requirements for urban wood poultry bedding*
All samples should be taken in the following manner:

- a sample should be a composite sample of five litres and composed of five discrete sub-samples of one litre each and collected at random from the stockpile of shredded wood
- all samples should be gathered by a person of suitable experience, packed securely, labelled and forwarded to a facility for homogenisation and standard sample splitting and sample reduction techniques used to obtain a representative sub-sample for analysis.

The sample label should be in a similar format as below:

<table>
<thead>
<tr>
<th>Broiler bedding sample label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product:</td>
</tr>
<tr>
<td>Supplier:</td>
</tr>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Company Name or Code:</td>
</tr>
<tr>
<td>Composite Sample no:</td>
</tr>
<tr>
<td>Taken by:</td>
</tr>
<tr>
<td>Sample for:</td>
</tr>
</tbody>
</table>

**Figure 4: Example of broiler bedding sample label**

9. **Sample analysis and testing**

The supplier should undertake at their expense, the tests specified in Table 2. When carrying out testing, the Australian Standards and test methods mentioned in Table 2 should be used unless otherwise specified.

Records for all samples and analysis should be kept for a minimum of two years from date of sampling. All reports must be supplied to bedding purchasers and/or growers as requested.
<table>
<thead>
<tr>
<th>Standard / method number/ test</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AS4454 Appendix H/ Method for Determining Moisture Content and Level of Visible Contamination</strong> or <strong>AS/NZS 1301.010s:2007/ Determination of moisture in wood chips</strong></td>
<td>The purpose of this test is to ensure that the bedding moisture content meets the requirements in the specification (see Appendix 1). Moisture content must be below 18% by mass to ensure that the bedding does not become a medium for pathogens and is able to absorb animal waste and spills from drip feeders. It is also important to improve the saleability of the product.</td>
</tr>
<tr>
<td><strong>Modified AS4454 Appendix G / Method for Determining Particle Size Grading</strong> or <strong>AS1141.11 Particle Size Distribution by Sieving</strong></td>
<td>The purpose of this test is to determine that the particle size of the bedding remains below the sizes required. It is important to ensure that the bedding produced adheres to the specification (see Appendix 1) and to ensure the consistency of bedding produced. Producing a consistent product will likely improve the saleability of the bedding.</td>
</tr>
<tr>
<td><strong>AS4454 Appendix H/ Method for Determining Moisture Content and Level of Visible Contamination</strong> or <strong>RTA test T276 or equivalent/ Physical contaminants</strong></td>
<td>This test is to detect the presence of contaminants such as glass, plastics, engineered and coated wood products. Contaminants could harm animals and cause damage to machinery. The presence of contaminants may also reduce the saleability of the bedding. No contamination is acceptable. The supplier shall have in place quality control processes, screening and storage facilities to prevent the inclusion of and facilitate the removal of contaminants.</td>
</tr>
<tr>
<td><strong>Standard Metals Screen</strong></td>
<td>In addition to visually inspecting in coming loads, a Standard Metals Screen is essential to identify any possible metal contamination from CCA wood preservatives and or other sources which may be present in the bedding. No contamination with CCA wood preservative is acceptable.</td>
</tr>
</tbody>
</table>

**Table 2: Required test methods for urban wood poultry bedding**
Note: The testing outlined in Table 2 is not exhaustive. If a particular contaminant is suspected additional testing is required. It is the responsibility of the bedding manufacturer to undertake testing of this contaminant as part of the characterisation.

10. Transport to growers
Clean transport is needed to ensure bedding is not cross-contaminated. The following steps should be taken to ensure bedding remains clean:

- transport to growers should be in covered trucks that have been thoroughly cleaned before pickup of bedding material
- to prevent cross-contamination trucks should not have been previously used to transport manure, putrescible wastes or any other waste or contaminated materials
- a completed Litter Vendor Declaration Form in a format that the grower requires should be completed and supplied with each delivery of bedding to a grower. A sample Litter Vendor Declaration Form is included in Appendix 3
- the purchaser reserves the right at any stage to test material to check the conformance to the requirements of the Specification. If any such tests fail it will be the responsibility of the supplier to remove the material from site and replace it with fresh bedding. The cost of removing the material and replacing it with material conforming to the specification should be at the supplier’s expense.
Glossary

Composite sample means a sample that combines discrete sub-samples into a single sample for the purpose of analysis.

Dunnage means loose timber packing material used to protect a ship's cargo from damage during transport.

Engineered wood products (EWP) means engineered or composite wood products such as particleboard, oriented strand board, plywood, laminated veneer lumber, glulam or fibreboard that are manufactured with glues, resins, water repellents, fire retardants, fungal inhibitors and/or other chemicals.

Preservative treated wood and coated wood residues means wood residues that are preservative treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP) and/or coated with substances such as varnish or paint.

Producer means the organisation, business or individual who accepts or purchases urban wood and produces a broiler bedding product.

Purchaser means the organisation, business or individual that contracts to buy broiler bedding.

Specification means Specification for the supply of recycled urban wood from broiler chicken bedding.

Supplier means the organisation, business or individual under contract to the purchaser for the supply of broiler bedding.

Untreated new wood residues means new green or kiln-dried wood in the form of offcuts, sawdust, or shavings not treated with wood preservatives and collected as a separate material stream from a primary manufacturer (i.e. sawmill) or secondary producer (e.g. cabinet maker, joinery etc).

Urban wood means untreated and uncontaminated urban derived timber and wood material that is collected as a separate material stream for processing. Urban wood includes materials such as sawn timber off-cuts, saw dust, wood shavings, packaging crates and pallets but does not include preservative treated or coated wood or engineered wood products.

Vendor means the organisation, business or individual under contract to the grower for the supply of broiler bedding/litter.

References


Safe Work Australia (2011) WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS DATE OF EFFECT: 22 DECEMBER 2011
More information

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Email: emailus@nswfarmers.org.au

Postal address:
GPO Box 1068
SYDNEY NSW 2001
Appendix 1 Final Speciation for the Supply of Recycled Urban Wood for Broiler Chicken Bedding

The Specification shows the required particle size distribution and the maximum moisture content to ensure consistent performance of the bedding product. The specifications have been based on the use of urban wood for broiler bedding in Western Australia and Victoria, a literature review, a qualitative risk assessment and the field trials. The specification requirements for a range of parameters are given in the table below.

<table>
<thead>
<tr>
<th>Constituent/ property</th>
<th>Test method</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Material proportions</strong></td>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Urban wood residue (max% by mass)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Particle size distribution</strong></td>
<td>Modified AS4454-Appendix G or AS1141.11</td>
<td>100</td>
</tr>
<tr>
<td>% passing 13.2mm sieve</td>
<td></td>
<td>95± 5%</td>
</tr>
<tr>
<td>% passing 4.75mm sieve</td>
<td></td>
<td>65± 5%</td>
</tr>
<tr>
<td>% passing 1.18mm sieve</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% passing 600µm sieve</td>
<td></td>
<td>25± 10%</td>
</tr>
<tr>
<td><strong>Moisture content</strong></td>
<td>AS4454-Appendix H or AS/NZS 1301.010s:2007</td>
<td>18</td>
</tr>
<tr>
<td>(max% by mass)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 2 Education material

The website of the National Timber Product Stewardship Group (www.timberstewardship.org.au) has useful resources on recycling end of life wood:

- For information on recycling wood pallets and packaging see the brochure titled “Recycling wood pallets and packaging”
- For information on detecting copper based wood treatments see “Guide for use of Chromazurol S solution to indication presence of copper-based wood preservatives in post-consumer wood products”
- For information on Workplace Health and Safety see “Working safely with wood and wood products”.

The Eastern Metropolitan Regional Council’s Hazelmere Recycling Centre website (emrc.org.au/timber-recycling.html) also has some useful educational material.
Appendix 3 Workplace health and safety

Risk can be defined as the significance of an occurrence in terms of its likelihood and the severity of possible injury or harm. From a work health and safety perspective there are a number of apparent risks that arise from the production and use of recycled wood broiler bedding. These apparent risks are predominately associated with the inhalation of wood dust from the shredding of urban wood residue and from the spreading bedding in the sheds.

The current relevant legislation is the Work Health and Safety Act 2011 No 10 and the requirements of this legislation need to be adhered to. This includes communicating safe work practices with staff/contractors, risk management and personal protection equipment.

Wood dust

All dust, regardless of whether it comes from MDF, Particleboard or any other building material, is potentially harmful.

Wood dust becomes a potential health problem when wood particles from processes such as sanding, cutting and shredding become airborne. Breathing these particles may cause allergic respiratory symptoms, mucosal and non-allergic respiratory symptoms, and cancer. The extent of these hazards and the associated wood types have not been clearly established.

The International Agency for Research on Cancer (IARC) classifies wood dust as a Group 1 Carcinogen. This means the substance is carcinogenic to humans.

In order to ensure a safe working environment, when machining timber or wood panel products, priority should always be given to limiting the volume of dust. Shredding machinery should be designed to minimise dust generation. Water sprays and/or dust extraction equipment should be fitted to machinery and conveyors in workplaces to minimise the volume of dust. People working near wood shredding operations should always wear long sleeves, gloves, and eye and face-masks if exposed to dust. Shredding operations should occur in a well-ventilated area. The same precautions should be undertaken when moving and spreading the broiler bedding.

Inhalable wood dust levels should not exceed Australian workplace exposure standard of 1mg/m³ for hardwood or 5mg/m³ for softwoods.²

Other work health and safety concerns

In addition to wood dust management the following work health and safety concerns must be addressed:

- working with and near heavy plant equipment and heavy vehicles
- protection from nails, sharps and wood splinters
- noise from operating machinery
- exposure to contaminants such as chemicals
- manual lifting of heavy and awkward loads.

² Safe Work Australia (2011) WORKPLACE EXPOSURE STANDARDS FOR AIRBORNE CONTAMINANTS DATE OF EFFECT: 22 DECEMBER 2011
Appendix 4 Litter Vendor Declaration Form

**Litter Vendor Declaration Form**

(This form may be used by suppliers of litter for broiler chicken sheds to satisfy the requirements as set out in the Pro-Forma Food Safety Management Statement for Contract Chicken Growers)

<table>
<thead>
<tr>
<th>1. Vendor Details</th>
<th>2. Buyer’s Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Address:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Tel:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Fax:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Email:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Date of Delivery:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Quantity Delivered:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>IDs of Sheds for which the litter will be used:</strong></td>
<td></td>
</tr>
</tbody>
</table>

I/We, .................................................................................. [name of litter supplier] declare that:

- this consignment of litter has been sourced from untreated timber* and litter is free of contamination including timber treated with Copper Chrome Arsenate (CCA)
- the delivery vehicle was cleaned before being used to transport material from the batch of litter that was used in this consignment

Vendors Signature: ............................................................. Date: ..................................................

* untreated timber includes fumigated and sterilised timbers which carry the markings HT or MB.