

Facilitator and Learner Resource

FPICOT6202A

Develop and manage a Forestry Chain of Custody certification process for the workplace

This Facilitator and Learner Resource has been developed to support FPI60111 Advanced Diploma of Forest Industry Sustainability

Unit Descriptor:

This unit describes the outcomes required to develop and manage an appropriate system for chain of custody certification which will enable the organisation to fulfil its obligations and responsibilities under applicable certification requirements

General workplace legislative and regulatory requirements apply to this unit. Specific requirements apply to OHS and environmental requirements and are referred to in Australian Standard (AS) 47072006 Chain of custody for certified wood and forest products.

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Getting started

Welcome to the facilitator and learner's guide for FPICOT6202A: Develop and manage a Forestry Chain of Custody certification process for the workplace. This is a unit of FPI60111 Advanced Diploma of Forest Industry Sustainability.

This unit involves acquiring the skill and knowledge required to develop and manage a forestry chain-of-custody certification system in an enterprise. Chain-of-custody systems provide timber users with an assurance that the timber in delivered products complies with the claims made about their source. With chain-of-custody in place, the consumer can trace the chain-of-custody of the material from a forest managed under a certified forest management system through the production chain to the timber delivered on the project.

This guide is one component of the training resources provided in the package for this unit. The others are described below. The information and activities in the package will help learners prepare for the formal assessment tasks that the workplace trainer will give once training is finished.

This facilitator and learner's guide:

- Describes the structure of the package's components, their sequence and delivery method.
- Provides additional discussion of the topics covered in the flexible delivery components.

Package structure and components

The resource package has five components:

- 1. This guide
- 2. Flexible delivery components
- 3. Resource interviews
- 4. Reference documents
- 5. Workplace assessments.

The relationship of components in the package is shown in Figure 1.

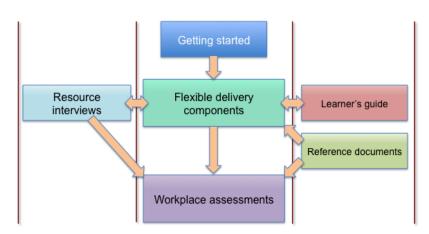


Figure 1: Relationship of resource package components

1. Flexible delivery components

Flexible delivery components are video-rich recorded presentations that focus on particular topics of the unit. There are eight flexible delivery components in this package. Each is aligned to a key topic. The components are:

1. Introduction to the unit - Develop and manage chain-of-custody.

This component deals with introductory concepts about forest and chain-of-custody certification and describes the structure of the various flexible delivery components.

Topic 1: Introductory concepts

- Forest and Chain of Custody certification and sustainability
- Forestry and Chain of Custody basics
- Chain of Custody certification as a procedurally-based activity.

Topic 2: Training Limitations

- Wood products industry
- Adapting guidelines
- Competencies and skills.

Topic 3: Unit Component Overview

- Flexible delivery components
- Resource interview collections
- Learner's Guide
- Resource and reference documents
- Assessment tasks.

2. Planning the task - chain-of-custody management plan.

This component covers the development of a Chain-of-custody management plan, the major internal and external aspects that affect the plan, and plan approval and implementation.

Topic 1: Planning the task

- Chain of Custody management plan
- Operational implementation plan.

Topic 2: Internal aspects affecting the plan

- Company structure
- Internal divisions
- Existing QA and management procedures
- Staff capability and availability
- Budgetary constraints.

Topic 3: External aspects affecting the plan

- Scheme and audit requirements
- External relationships
- Environmental protection requirements
- Customer market demands and constraints.

Topic 4: Plan approval and implementation

- Commitment to Chain of Custody
- Management approval.

3. Forest and chain-of-custody certification - key concepts.

This component describes the key concepts associated with forest and chain-of-custody certification:

Topic 1: Sustainability and drivers for verification of forestry sustainability

- The need for renewable products
- Illegal logging
- Sustainable wood supply
- Good forestry practice.

Topic 2: Forest and Chain of Custody certification systems: an overview

- Accreditation process
- Certification schemes.

Topic 3: Forest and Chain of Custody certification systems in Australia and internationally

- International schemes
- Australian schemes.

4. Forest and chain-of-custody certification processes in Australia.

This component looks at certification processes applicable in Australia.

Topic 1: International schemes

• Program for the Endorsement of Forest Certification (PEFC).

Topic 2: Australian Forest Certification Scheme (AFCS)

- Australian Standards
- Criteria and requirements
- Claims and logos.

Topic 3: Forest Stewardship Council

- Principles and requirements
- Claims and logos.

Topic 4: Certification bodies and auditors

- Independent certification bodies
- Auditors.

5. Business strategies for chain-of-custody certification.

This component discusses the ethical and commercial basis of a company having chain-of-custody certification in their business.

Topic 1: Ethical basis for adopting Chain of Custody

- Sustainable business practices
- Company commitment
- Policy.

Topic 2: Custody and other demand for Chain of Custody

- Voluntary certification
- Product demand
- Export markets.

Topic 3: Marketing Chain of Custody

- Claims and logos
- Benefits and market expectations.

Topic 4: Commercial impacts of adopting Chain of Custody

- Costs of establishment
- Costs of maintenance.

6. Structuring chain-of-custody certification in business

This component sets out the structure of chain-of-custody certification used in practice and the ways that these can be adapted to the structure of the business.

Topic 1: Models for structuring Chain of Custody in the company and supply chain

Supply chain

- Relationships
- Mapping of product flows.

Topic 2: Assessing and coordinating company policy and site procedures

- Policy approaches and procedures
- Quality assurance.

Topic 3: Approaches to efficient procedure development

- Procedure development
- Different approaches.

7. Chain-of-custody procedures 1

This component introduces the required structures of procedures in a chain-of-custody certification management system and outlines the first of these procedures.

Topic 1: Chain of Custody policy

- Chain of Custody system
- Audit
- Company commitment.

Topic 2: Procedure structure

- Structure
- Control of documents
- Organisation of staff
- Operational requirements.

Topic 3: Procedures for control of documents

- Register of documents
- Records
- Internal audit
- Continuous improvement
- Register of legislative compliance.

Topic 4: Procedures for the organisation of staff

- Responsibilities
- Staff competencies and recruitment
- Training
- Occupational health and safety
- Enterprise bargaining.

8. Chain-of-custody procedures 2

This component presents the remaining procedures required in a chain-of-custody certification management system on a production site.

Topic 1: Procedures for operational requirements

- Verification of origin
- Goods receival
- Storage of goods received
- Processing
- Material flow accounting
- Storage of final products
- Final inspection
- Labelling
- Invoicing and delivery documentation
- Chain of Custody certificate use.

2. Resource interviews

Resource interviews are recorded video interviews of industry members discussing topics relevant to the unit. They provide additional sector-specific detail about topics covered in the flexible delivery components.

The resource interviews available include:



David Gover

Heyfield Hardwood Mill

Topics discussed:

- chain-of-custody as a product attribute
- certified material supply profiles
- chain-of-custody customer profiles
- chain-of-custody market overview in Australia and overseas
- chain-of-custody marketing, branding and use of official logos



Trevor Innes

Gunns Timber Products, Bell Bay Softwood Mill.

Topics discussed:

- wood sourcing & Material flow
- chain-of-custody operations and systems management
- chain-of-custody non-compliances
- chain-of-custody procedure structuring and continuous improvement

Greg Nolan

Director, Centre for Sustainable Architecture with Wood, University of Tasmania

Topics discussed:

• The importance of sustainable forestry practice.

Topics discussed:

Wood as a natural, renewable & carbon friendly material. It is natural, renewable and carbon friendly.



Roland Freyer

Assistant manager: Huon district, Forestry Tasmania.

Topics discussed:

- Key principles in implementing chain-of-custody and Forest certification
- Quality assurance and other existing systems in relation to chain-of-custody implementation
- Managing and supporting the implementation of chain-of-custody procedures across a company.



Katy Edwards

Forest Resources Team Leader

Alex Bradley

Forest Certification Co-ordinator Norske Skog, Tasmania

Topics discussed:

- Developing & implementing chain-of-custody system
- Demand for chain-of-custody in paper industry
- Importance of commitment from highest company level
- Cultural change within workplace
- Chain-of-custody to improve business, not just meet audit needs
- Incorporating existing systems & procedures

Comparing FSC and AFS:

- Key differences, e.g. FSC controlled wood
- Coverage of schemes
- Different standards required by schemes
- Common procedures between schemes
- Paper trail of two schemes
- Audit requirements of schemes

Wood sourcing - Timber input/output:

- Existing wood tracking system, new documentation
- Tracking/recording wood input/output
- Paperwork trail for each system
- Percentage system
- Wood certified under one or both schemes
- Market versatility

External & internal auditing:

- Finding an auditor/pre-certification audit
- Auditors role
- Auditing process
- Description of what is an 'internal audit'

Key differences between external/internal audits

Non-compliance & compliance reporting:

- What is non-compliance?
- Gauging levels of non-compliance
- Examples of major & minor non-compliance
- Discovering & reporting non-conformances
- Keeping records & reports of non-conformances

Corrective actions register

3. Reference documents

Reference documents are selected publically available standards, technical and research reports, best practice manuals, and industry guides and brochures collected together into an electronic resource available at www.forestworks.com.au/learningresources. They provide additional detail to the topics covered in the *Flexible delivery components* and the *Resource interviews*.

Additional resources are also available by searching the Internet. Particularly, look for standards, report and guides at:

- Forest and Wood Products Australia at www.fwpa.com.au.
- The Australian Forestry Standard at www.forestrystandard.org.au.
- Forest Stewardship Council at www.fscaustralia.org.
- Programme for Endorsement of Forest Certification at www.pefc.org.

4. Workplace assessment

The assessments included in this resource package include:

- Quizzes. These include tasks and ask questions that can be answered directly from the content of the
 Flexible delivery components, the Resource interviews and the text in this guide. They usually require a
 short written answer.
- Intermediate tasks. These set a problem based on operations in the workplace. Learners will need to discuss the problems in this guide with the trainer and adjust them to be relevant for the workplace.
- Advanced tasks. These set a more complex problem based on the organisation and operations in the
 workplace. Learners will need to discuss the assignments in this guide with the trainer and adjust them
 to the requirements of the workplace.

Using this guide

This guide expands on the content covered in the Flexibility Delivery Components and Resources interviews. It is divided into nine chapters; generally align with the Flexible Delivery Components and a section of Workplace-based assessments. The chapters are:

Getting started.

This chapter provides an overview of the training resource package and this guide.

1. Introduction to the unit – Develop and manage chain-of-custody.

This chapter deals with introductory concepts about forest and chain-of-custody certification.

2. Planning the task - chain-of-custody management plan.

This chapter covers the development of a Chain-of-custody management plan, the major internal and external aspects that affect the plan, and plan approval and implementation.

3. Forest and chain-of-custody certification - key concepts.

This chapter describes the key concepts associated with forest and chain-of-custody certification.

4. Forest and chain-of-custody certification processes in Australia.

This chapter looks at certification processes applicable in Australia.

5. Business strategies for chain-of-custody certification.

This chapter discusses the ethical and commercial basis of a company having chain-of-custody certification in their business.

6. Structuring chain-of-custody certification in business

This chapter sets out the structure of chain-of-custody certification used in practice and the ways that these can be adapted to the structure of the business.

7. Chain-of-custody procedures 1

This chapter introduces the required structures of procedures in a chain-of-custody certification management system and outlines the first of these procedures.

8. Chain-of-custody procedures 2

This chapter presents the remaining procedures required in a chain-of-custody certification management system on a production site.

Workplace assessments.

Each chapter has three sections

Topic Summary

This section includes the summary points for the topic and lists of resources: the Flexible delivery component, Resource interviews, and Resource documents relevant to the topic.

• Topic discussion

This section expands on the key points in the Flexible delivery components

Quiz

This section includes a quiz on aspects of chain-of-custody, based around workplace practices. Learners should answer the questions having gone through the videos and other learning material. Trainers can then assess whether or not learners are competent in the unit elements.

Formal assessment

An assessor from a Registered Training Organisation (RTO) must conduct assessment for this unit. To find out the RTOs currently delivering this qualification go to www.ntis.gov.au

Limitations

The timber and wood products industry includes enterprises of different sizes operating in activities from forest planning to sawmilling and building supply. They handle dozens of different timber species at harvest, processing and production site of varying scale across all parts of Australia.

Given this diversity, the resources provided for this training can only give guidelines to action and there will always be exceptions to them.

Topics covered in this training also draw on competencies and skills developed in other units. Generally, this training will not cover skills in budgeting or work programming that may be discussed in some components.



Figure 2: Hardwood cladding



Figure 3: Softwood cladding

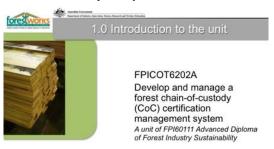
1. Introductory concepts

Topic summary

- A forestry certification system provides assurance that a company's forest products are legally sourced and that forest management is structured, encompasses economic, environmental and social values and outcomes, and is based on the standards of a forest certification scheme.
- If a consumer wants to be certain that the products they use come from a certified forest then chainof-custody certification is needed.

- Forest and chain-of custody certification is voluntary for the forest grower, timber producer, the building designer, developer or owner.
- Chain-of-custody certification is a procedurally based activity.

Flexible delivery component



Length: 19.09 mins

Topic discussion

This topic introduces introductory concepts about forest certification and chain-of-custody. These are covered again further in Part 3 of this guide. An understanding of these concepts is necessary to develop and manage effective and efficient chain-of-custody certification systems for an enterprise. The concepts include:

- 1. Forest and chain-of-custody certification and sustainability.
- 2. Forestry and chain-of-custody certification basics.
- 3. Chain-of-custody certification as a procedurally based activity.

Certification and Sustainability

Wood is a natural, renewable, and carbon-friendly material and most environmental concerns about wood products focus on aspects of forestry, particularly the legality and sustainability of forest management systems and harvesting practice.

Forests provide the raw material for timber and wood products. To acquire this raw material, trees have to be grown and then harvested. The quality of forest management then affects the sustainability of these processes. One of the major considerations is biodiversity and eco-system maintenance during harvesting and forest reestablishment. Best-practice forest management can minimise local environmental impacts while maximising other benefits. Poor forest management and harvesting can irresponsibly damage local biodiversity, ecosystems and communities.



Figure 4: Harvested logs in southern Australia.

A key question for timber users is 'how can they determine that their wood products come from well-managed forests, not illegally harvested ones, especially if the selected species is from another region or country?'

One answer to this is external, third-party certification of the forest management used to supply the timber. If it is based on accepted quality assurance processes, this can provide the link between sustainable forest management and responsible consumer decisions. Certification can provide consumers of timber and wood products with an assurance that the material they buy has originated in forests managed to a suitable and recognised standard.

Confident consumer decisions

Accredited sustainable forest management processes



Figure 5: Certification can provide the link between forest management and confident consumer decisions

Forest and chain-of-custody basics

Forest certification is a forest management process that provides customers of wood products with the assurance that

• Logs are harvested through a legally compliant forestry operation.

- Forest management is structured and complies with the values and outcomes incorporated in an internationally recognised standard.
- Compliance with that standard is subject to third party assessment.

The relationship between the external standard, the third party accreditation and the forest manager in a forest certification scheme is shown in Figure 6.

Forest certification only deals with the forest management process. If a consumer wants to be certain that the products they use come from a certified forest, and not timber from a poorly or illegally harvested site, chain-of-custody certification is needed.

As shown in Figure 7, chain-of-custody *certification* is a production and materials management process that provides an assurance that the timber in delivered products complies with the claims made about their source. With chain-of-custody in place, the consumer can trace the chain-of-custody of the material from a forest managed under a certified forest management system through the production chain to the timber delivered on the project.



Figure 6: The relationship of the external standard, the 3rd party accreditation and the forest manager in a forest certification scheme.



Figure 7: chain-of-custody certification allows material to be tacked from the forest through the production chain to the project.

There are limitations to forest and chain-of-custody certification. Certification can assure us that:

- Forest products are *legally sourced* from forests.
- Forest management is structured and encompasses *economic, environmental and social* values and outcomes, and satisfies the requirement of publicly available standards.
- Products can be traced back to certified forests.

Certification can't assure us about the quality of the wood from the forests, its characteristics and or its fitness for any particular purpose. Also, certification can't assure us about the many of the ESD values of the supply chain after the forest.

Certification does not replace the normal legal obligations that exist on forest management in Australia. However, compliance with legal obligations is a critical part of forest certification.

Certification and the market for wood products

Forest certification and subsequent chain-of-custody certification are market-based performance requirements. They are not regulated performance requirements.

Companies must want to provide this certification to their customers. It may be provided even if the customer:

- Doesn't specifically ask for it, or
- Is unwilling to pay the premium required to provide it.

A chain-of-custody certification system may not be required in enterprises that handle the timber but do not break up the unit with chain-of-custody certification. For example, a stockist who only buys in full packs of certified timber and sell them out again as full packs may not need chain-of-custody certification if the supplier's chain-of-custody and pack number are preserved.

However, if the stockist breaks open the pack and mixes packs in a delivery, chain-of-custody from the supplier is lost, and the stockist will need a chain-of-custody certification system.

Chain-of-custody certification procedures

As forest certification and subsequent chain-of-custody certification system provide a customer with assurance of a particular *attribute* of the timber, they are similar to the quality assurance (QA) systems in place in an enterprise and they should form part of these systems.

Chain-of-custody is a procedurally-based activity. Chain-of-custody certification assures the existence and operation of procedures in an organisational and operational structure that complies with the relevant chain-of-custody standards. The procedures specifically cover:

- The source of wood in an enterprise and how that wood is handled.
- Recognition of and compliance with the company's legal requirements.

The procedures are discussed further in Part 7 and 8.

Topic summary

- Enterprises committed to sustainable operations need a chain-of-custody management plan.
- The structure of the chain-of-custody management plan has to be adapted for the enterprise's scale, complexity and industry sector.

Length: 31.13 minutes

- Internal and external factors will influence the plan.
- The plan, budget and implementation program will need management discussion and approval.

Flexible delivery component



Relevant resource interviews



David Gover Heyfield Hardwood Mill



Trevor InnesGunns Timber Products, Bell Bay Softwood Mill.

2. Developing a chain-of-custody management plan

Topic discussion

This topic describes aspects that have to be considered in developing and managing an enterprise's forestry chain-of-custody certification system. These include:

- 1. Planning the task the need for a chain-of-custody management plan.
- 2. Internal aspects affecting the plan.
- 3. External aspects affecting the plan.
- 4. Plan approval and implementation.

Planning the task

The basis of chain-of-custody in an enterprise producing timber and wood products is a *chain-of-custody* management plan.

A chain-of-custody *management plan* is a structured series of documents and procedures in a manual that details the enterprise's policy framework for chain-of-custody and the structure and operation of its chain-of-custody systems.

A chain-of-custody management plan allows an enterprise to:

- · State its commitment to supplying timber from legally harvested and sustainably managed forests.
- Develop and implement an effective transition to chain-of-custody operation.
- Economically maintain efficient chain-of-custody processes.

In an enterprise that wishes to establish chain-of-custody in its operations, a chain-of-custody *management* plan will have to be developed. In an enterprise with chain-of-custody in place, the chain-of-custody *management* plan has to be kept relevant through regular review, assessment and upgrade.

The structure of the chain-of-custody management plan will vary for enterprises:

- With different scales and complexity of operation, such as large and small companies working on single or multiple sites, with single or varied wood supply arrangements.
- Working in or across different industry sectors, such as primary producers, secondary processors, fabricators, merchant, and builders.

Chain-of-custody management plan

As shown in Figure 8, a chain-of-custody management plan often has two sections or parts:

- A chain-of-custody management plan that covers enterprise-wide issues; and
- An operational implementation plan for each major site or group of sites in enterprise.

A small enterprise may combine both parts into a single plan. A large enterprise may have one enterprise level plan and several operational implementation plans.



Figure 8: The components of a chain-of-custody management plan.

Major aspects that need to be considered in preparing or reviewing the chain-of-custody management plan include action to:

- Establish a commitment to set up chain-of-custody to a selected scheme.
 - Board and senior management support is critical to effectively establishing chain-of-custody. This is covered further in part 5.
- Engage staff and auditors for development and implementation.
 - Developing and managing chain-of-custody is a responsibility that needs to be allocated to competent members of staff. Auditors are also needed. This is covered further in parts 5 and 6.
- Organise internal and external chain-of-custody relationships.
 - Chain-of-custody can affect wood flow into and out of the enterprise and between its various sites. This is covered further in part 6.
- Prepare a marketing plan for certified product.
 - Chain-of-custody may open access to particular markets and preserve access to others. This needs to be communicated to customers. This is covered further in part 5.
- Develop a chain-of-custody system of structured series of procedures.
 - Like similar QA systems, chain-of-custody is a procedurally based activity and external chain-of-custody standards require an enterprise to establish a compliant system of procedures. This is covered further in part 7 and 8.
- Establish operational implementation plans.
 - Chain-of-custody requires change to operational practice and staff responsibilities. These have to be planned for each site. This is covered further in part 6.

Operational implementation plan

Major aspects that need to be considered in preparing or reviewing the operational implementation plan include:

- The relationship of enterprise-level and site-level requirements.
 - Chain-of-custody affects practice on individual sites and site-based practice needs to be coordinated with requirements in the enterprise.
- Chain-of-custody implementation policy and procedures for the site.
 - This includes structuring the changes to site policy and procedures required by adopting chain-of-custody.
- Planned changes to staff roles and responsibilities.
 - Changes in site policy and procedures mean changes in the roles and responsibilities of individual staff members.

- Modification of information and stock management systems Component 5
- Transition to a chain-of-custody operation.

This include staff induction to changes in management practices; handling material in stock; and managing supply chain relationships

• Operating as a chain-of-custody operation.

This includes the operational aspects of procedures and non-compliance reporting and continuous improvement in action.

All these aspects are all covered in more detail in FPICOT5206A



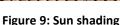




Figure 10: Structural timber frame

Internal aspects influencing the plan

Major internal aspects that need to be considered in preparing or reviewing the chain-of-custody management and operational implementation plans include:

- The structure of the company and its various divisions.
 - Product manufactured at one location may be supplied with or without chain-of-custody to other parts of the enterprise. This is covered further in part 6.
- The context of internal relationships between divisions and sites.
 - While part of the same enterprise, divisions or sites may operate as completely separate entities or as simple organisational extensions to a central site. This is covered further in part 6.
- Existing QA and management systems.
 - Chain-of-custody processes must be an integrated part of an enterprise's operations. This is covered further in part 6.
- Staff capability and availability.
 - Developing chain-of-custody processes and managing their introduction is a time-consuming and demanding exercise. This is covered further in parts 5 and 6.
- Budgetary constraints.
 - The allocation of staff time to develop and manage chain-of-custody processes has definite costs. This is covered further in part 5.

External aspects influencing the plan

Major external aspects that need to be considered in preparing or reviewing the chain-of-custody management and operational implementation plans include:

• The requirements of the selected scheme and auditors.

Each scheme has its own standard and compliance requirements may differ significantly. This is covered further in part 6.

External relationships with suppliers and contractors.

Chain-of-custody requires controlled wood flow and this will impact on current supplier and the ways contractors may handle the wood. This is covered further in part 6.

Environmental protection requirement for each site.

Chain-of-custody requires compliance with all environmental laws and regulations. This is covered further in part 6.

• Customer & market demand and constraints.

Specific customer and market demand exists for chain-of-custody. This is covered further in part 6.

Approval and implementation

Management approval and implementation aspects that need to be considered in preparing or reviewing in the chain-of-custody management and operational implementation plans include

• Board and senior management commitment to chain-of-custody.

This support is critical to effectively establishing chain-of-custody in an enterprise. This is covered further in part 6

Budgetary commitments.

Budgetary aspects will influence both the extent and timing of changes included in the plan. This is covered further in part 6.

Staff assignment.

Implementing change requires adequate numbers of staff with the correct skill set. This is covered further in part 6.

Market supply arrangements.

Implementation may be staged due to demand in the market and capacity to affect change on processing site. This is covered further in part 6.

• Supplier and contractor adjustments.

Some suppliers or contractors may not be able to comply with chain-of-custody requirement and interaction with these enterprises will need to change. This is covered further in part 6.

Implementation timetable, milestone and reports.

Management needs to consider and approve the timetable, stages and reporting processes in the plan. This is covered further in part 6.



Figure 11: Native forest



Figure 12: Hardwood logs

Quiz

Answers should be clear, concise, and generally no longer than 150 words.

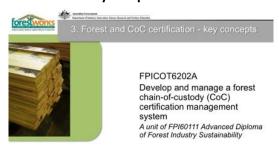
Q.1.	What is a chain-of-custody management plan?
Q.2.	Why is a chain-of-custody management plan important to the development and management of chain-of-custody certification in a business?
Q.3.	List at least four major aspects that should be included in the chain-of-custody management plan.
Q.4.	List at least four changes that are likely to occur to the enterprise's internal and external operations due to setting up chain-of-custody.
Q.5.	The chain-of-custody management plan often includes an operational implementation plan. How do these differ?
Q.6.	List at least four aspects likely to influence the chain-of-custody plan.
Q.7.	Why is senior management commitment to developing and managing chain-of-custody essential?
Q.8.	Briefly describe two areas of changed site operation that may require managerial review?

3. Forest and chain-of-custody certification – key concepts

Topic summary

- Sustainable development demands that society use more renewable materials and less nonrenewable materials.
- A forestry certification system provides assurance that a company's forest products are legally sourced
 and that forest management is structured, encompasses economic, environmental and social values
 and outcomes, and is based on the standards of a forest certification scheme.
- If a consumer wants to be certain that the products they use come from a certified forest then chainof-custody certification is needed.
- Forest and chain-of custody certification is voluntary for the forest grower, timber producer, the building designer, developer or owner.
- There is a range of international schemes, operating in different ways. In Australia, two schemes operate.
- Imported material may be certified under other schemes.

Flexible delivery component



Length: 27.09 minutes

Relevant resource interviews

Greg Nolan

Director, Centre for Sustainable Architecture with Wood, University of Tasmania

Resource documents

Crawford H. 2006, A review of forest certification in Australia, Forest and Wood Products Research and Development Corporation.

Crawford H. 2007, Chain of custody in the forest products industry: A practical guide, Forest and Wood Products Australia Limited.

EWPAA 2012 Guide to AFS/PEFC Chain of Custody.

Forest and Wood Products Australia 2007, Timber Chain of Custody Certification – Product tracking from the forest to the consumer (Forest Manager), FWPA.

Forest and Wood Products Australia 2007, Timber Chain of Custody Certification - Product tracking from the forest to the consumer (Primary Processor), FWPA

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PEFC 2011, PEFC project chain of custody certification – one project, one message, PEFC Council

PEFC 2011, Sustainable timber – a guide to procurement for the public sector, PEFC Council

PEFC, PEFC certified paper for the print, packaging and publishing industries, PEFC Council

PEFC, What makes PEFC unique and the system of choice, PEFC Council

Topic discussion

This topic expands on the introductory concepts about forest certification and chain-of-custody discussed in Part 1 of this guide. An understanding of these concepts is necessary to develop and manage effective and efficient chain-of-custody certification systems for an enterprise. The concepts include:

- 1. Sustainability and drivers for verification of forestry management
- 2. Forest & chain-of-custody certification systems: an overview
- 3. Forest & chain-of-custody certification systems internationally and in Australia

Forest and sustainability

Sustainable development demands that society use more renewable materials and less non-renewable materials. This supports the greater use of timber and wood products to meet society's needs.

Timber is a renewable, carbon-friendly material ...





Milled from logs recovered from trees...





Harvested under controlled management regimes ...





From a native forest resource...





Or a plantation resource ...





And used in buildings and other items...





An alternative to energy-intensive, non-renewable materials.





Timber as a building material has been recognised for its desirable environmental qualities such as low embodied energy and storage of atmospheric carbon. As timber is sourced from forests that provide other benefits to society, forest management and timber harvesting have become key considerations in the determination of the environmental credentials of timber.

A key question for timber users is 'how can they determine that their wood products come from well-managed forests, not illegally harvested ones, especially if the selected species is from another region or country?

Internationally, there is concern about the quality of forest management used in the supply of timber available in the marketplace. These concerns include:

- Global decline in forest areas and loss of forest values due to illegal logging and deforestation.
- Impacts of unsustainable practices such as illegal logging on the viability of forest biodiversity, soil
 quality, and clean water supplies. These practices impact communities and workers and can lead to
 social conflict.
- Significant trade in products of illegal harvesting.
- Poor recognition for good forestry practice. Illegal and unsustainable harvesting undermines the trade in timber from legal and well-managed operations managed by responsible companies.

Actions are being taken around the world to curb these impacts.

One solution to these concerns is external, third-party certification of the forest management used in the supply of the timber. Based on accepted QA processes, this certification provides consumers of timber and wood products with an assurance that the material they buy has originated in forests managed of a suitable standard

Certification of forests and forest products grew out of the desire to reduce the uncontrolled cutting of the world's tropical hardwood forests by making it possible for customers to identify timber sourced from sustainably managed forests. Over time, this objective has been expanded into an overall goal to ensure forests throughout the world are sustainably managed.

As shown in Figure 13, forest certification schemes generally have three key components:

- Performance-based standards for forest management.
- Standards for the wood's chain-of-custody from the forest through the production and supply chain to the customer.
- An external (3rd party) accreditation process that determines compliance with these standards.

The forest management and chain-of-custody standards may each be a single document or a combination of several documents.



Figure 13: The key components of a forest certification scheme

Forest certification schemes now exist in most major wood-producing countries. As they have developed, several concerns arose. These included:

- Ways that customers could determine whether one certification scheme was better than or equivalent to another.
- Avoid differences between schemes being used to create non-tariff barriers between countries, restricting trade.
- Unfairly disadvantaging developing countries. Forest certification schemes can be organisationally
 complex and very difficult to establish in a developing country. Some saw requirements for forest
 certification from customers in wealthy countries as another form of discrimination.
- Reduced competitiveness as participation in forest certification adds costs. This can disadvantage timber demand, as comparable programs are not required for alternative building materials.

As shown in Figure 14, international participation in national schemes has helped overcome some of these concerns. This works in two basic ways. These are:

National schemes endorsed internationally.

National schemes are developed in line with local laws and conditions and then assessed against the principles and standards of an international endorsement organisation. If the national scheme meets the required principles and standards, it is endorsed by the international endorsement organisation and awarded the right to use their logo. For example, the Australian Forest Certification Scheme (AFS) has been endorsed by the Programme for the Endorsement of Forest Certification (PEFC). Companies with AFS certification can use both logos on their products. The PEFC logo is widely recognised internationally.

• International schemes sponsoring a national scheme.

National initiatives are established and adapt internationally established principles and standards to accommodate local laws and conditions. The national scheme then uses the internationally recognised logo of the parent group. For example, the Forest Stewardship Council International (FSC) has sponsored a national initiative to establish FSC Australia. Companies with FSC certification use the internationally recognised FSC logo.



Figure 14: Relationship of national schemes to each other and international endorsement schemes

Forest certification

Forest certification is a forest management process structured in a system that provides assurance that a company's forest products are *legally sourced* and that forest management is:

- structured.
- encompasses economic, environmental and social values and outcomes.
- based on the standards of a forest certification scheme.

Compliance with the standard of the forest certification scheme is subject to third party assessment. This requires:

- Auditing to compare management practices against the requirements of the standard.
- Collection and analysis of objective evidence. This includes the examination of documents, observations of practice and conditions, and interviews with staff, contractors, and stakeholders.

The relationship between the external standard, the third party accreditation and the forest manager in a forest certification scheme is shown in Figure 6. The third party auditors then report their finding to the forest certification body.

Chain-of-custody

Forest certification only deals with the forest management process. If a consumer wants to be certain that the products they use come from a certified forest, and not timber from potentially a poorly or illegally harvested site, chain-of-custody certification is needed.

Chain-of-custody *certification* is a production and materials management process that provides an assurance that the timber in delivered products complies with the claims made about their source. With chain-of-custody in place, the consumer can trace the chain-of-custody of the material from a forest managed under a certified forest management system through the production chain to the timber delivered on the project. This can be from logs fully from certified forests; or from a mix of certified and uncertified sources.

Forest and chain-of custody certification is a market-driven process. It is voluntary for the forest grower and timber producer, and the building designer, developer or owner. Guidelines or building accreditation schemes may recommend or require certification to gain points under these schemes. For example, Table 1 shows the Green Building Council of Australia's (GBCA) requirements to receive points under their Green Star rating scheme.

Table 1: The Green Building Council Office rating for timber in projects

Points	Aim	Descriptions
Timber (1 point) To recognise the use of reused timber, legally sourced timber, and timber sourced from forests whose conservation values are not degraded.	_	
	conservation values are not	 is certified by a forest certification scheme that meets the GBCA's 'Essential' criteria for forest certification (e.g. all schemes accredited by FSC International or PEFC); or
		is from a reused source; or

• a combination of both.

(MTCC)

numbers. Used with permission of AFS Ltd.

These are *not legislative requirements* but they can be a requirement of a contract or a building specification. If certification is required in a contract, it can be legally enforceable. This is the same as any other timber attribute, such as its structural or appearance grade.

Forestry and chain-of-custody certification in action

There is a range of internationally recognised forest certification schemes and they operate in different ways. All embrace sustainable forest management but there are differences between them that range from the definition of key terms to the approach that underpins the certification process.

As shown in Figure 15, the two dominant international certification schemes are the Programme for the Endorsement of Forest Certification (PEFC) and the Forest Stewardship Council International (FSC).

International endorsement schemes Programme for the Endorsement of Forest Certification (PEFC) International endorsement scheme and sponsor of national schemes Forest Stewardship Council (FSC) National schemes Sustainable Forestry Initiative (SFI) Canadian Standards Association (CSA) Malaysian Timber Certification Council

Figure 15: International forest certification schemes.

As shown in Figure 16, two schemes operate in Australia: Australian Forestry Standard Certification (AFS) and the Forest Stewardship Council (FSC). PEFC has endorsed AFC while FSC international sponsored establishment of FSC Australia.



Figure 16: Relationship of resource package components

Timber imported into Australian may be certified to PEFC, FSC or some other schemes.

Quiz

Answers should be clear, concise, and generally no longer than 150 words.

	, , , ,
Q.1.	What does sustainable development demand of different types of materials used, and why?
Q.2.	Why would a customer prefer chain-of-custody certified product?
Q.3.	Briefly describe how forest certification relates to normal forest management processes.
Q.4.	List two forestry certification schemes that operate in Australia and note the international forestry certification endorsement schemes with which they are aligned?
Q.5.	Briefly discuss how certification endorsement schemes can work.

4. Forest and chain-of-custody certification processes in Australia

Topic summary

- Forest certification schemes exist in most major wood producing countries.
- The two major internationally recognised schemes are PEFC & FSC.
- The UK's *Central point of expertise for timber procurement* lists both schemes as complying with that government's requirement for legal and sustainable timber supply.
- Australian Forest Certification Scheme operates through AS4708-2007 The Australian Forestry Standard and AS4707-2006 Chain-of-custody for certified wood and forest products.
- FSC operates in Australia through interim Woodmark and SmartWood standards.
- Accredited independent certification bodies and auditors act between industry and the standardssetting body in both schemes.
- To ensure processes comply with the standards, companies wishing to establish or maintain chain-of-custody need to work closely with an accredited auditor.
- There is currently no mutual recognition between the schemes.

Flexible delivery component



Length: 22.48 minutes

Relevant resource interviews



Katie Edwards
Forest Resources Team Leader &
Alex Bradley
Forest Certification Co-ordinator,
Norske Skog, Tasmania



Resource documents

Central Point of Expertise on Timber Procurement (CPET) 2010, Do you comply with the UK Government's Timber Procurement Policy, Department for Environment Food and Rural Affairs.

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Topic discussion

This topic expands on key concepts discussed in part 3 and expands on the schemes operating in Australia. It includes:

- 1. International and national schemes in Australia
- 2. Australian Forest Certification Scheme
- 3. Forest Stewardship Council
- 4. Certification bodies and auditors
- 5. Selecting a scheme.

International and national schemes in Australia

Forest certification schemes exist in most major wood producing countries. However, in 2012, only about 9% of the world's forests were certified, producing about 26% of the world's round wood. Most were in developed countries, with 82% of the world's certified forest in North America (56%) and Europe (26%).

The two dominant international certification schemes are the Programme for the Endorsement of Forest Certification (PEFC) and the Forest Stewardship Council International (FSC).

PEFC operates mainly by endorsing schemes developed nationally. FSC operates mainly by sponsoring initiatives in particular countries or regions.

Membership of PEFC changes regularly as national schemes develop and apply for endorsement. In 2012, PEFC was the world's largest certification scheme, with 66% of certified forest, or about 245 million hectares, certified to PEFC and its member national schemes.

International endorsement scheme



Programme for the Endorsement of Forest Certification (PEFC) www.pefc.org

National schemes



Figure 17: PEFC and endorsed schemes in 2012

Like PEFC, the list of FSC national initiatives changes regularly as initiatives develop in countries around the world.

International umbrella scheme



Forest Stewardship Council (FSC) www.fsc.org

National initiatives

National initiatives in Africa, Asia Pacific, Europe & Russia, Latin America & North America.

Figure 18: FSC and areas of national initiatives.

Some make attempts to compare forest certification schemes and determine which is 'better' or 'preferable'. This is a complicated and ultimately misguided activity:

- It is complicated as the factors considered in any national forest certification scheme can be as complex as forest themselves. What might be regarded as good practice in one country may be very poor practice in another country due to changes in forest types, climate or other factors.
- It is misguided as international experience shows that certified forest management produces much better outcomes than uncertified forest management. With only 9% of the world's forest certified, the correct question is if the management of forests is certified or uncertified.

The United Kingdom (UK) government requires that timber supplied to its projects is certified as legal and sustainable. To provide suppliers with the information necessary to meet these requirements, they established a *Central point of expertise for timber procurement (CPET)*.

After a complex assessment of national and international certification schemes, CPET reported that both PEFC endorsed and FSC schemes complied with that government's requirement for legal and sustainable timber supply. These results are shown in Table 2 and available at www.cpet.org.uk.

Table 2: CPET rating of FSC and PEFC

Logo	Certification Scheme	Legal	Sustainable
FSC	Forest Stewardship Council (FSC)	Yes	Only products or product lines containing >70% certified or recycled raw material.
PEFC" PEFC/16-44-847	Programme for the Endorsement of Forest Certification (PEFC)	Yes	Only products or product lines containing >70% certified or recycled raw material.

As shown in Figure 16, two schemes operate in Australia: Australian Forestry Standard Certification (AFS) and the Forest Stewardship Council (FSC). PEFC has endorsed AFC while FSC international sponsored establishment of FSC Australia.

Australia has an advanced regime of forest management and broader environmental regulation and both the AFS and FSC incorporate broader regulatory compliance as requirements in their certification schemes.

Australian Forest Certification Scheme

The development of AFS recognised unique aspects of the Australian environment and key international certification criteria. Established in 2003, the AFS operates under two standards:

- AS4708-2007 The Australian Forestry Standard
- AS4707-2006 Chain-of-custody for certified wood and forest products

Both standards were set up through full Standards Australia development processes, and are subject to five-yearly review. Reviewed once, another review is due in 2013. The operational structure of the AFS is shown in Figure 19.

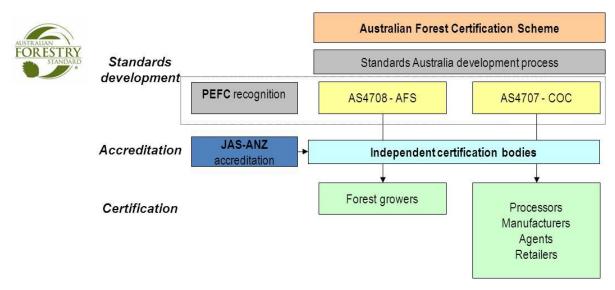


Figure 19: AFS operational structure

The nine criteria for AFS forest management are included in

Table 3. The eight criteria for AFS chain-of-custody are included in Table 4.

Controlled wood standards

Unlike the FSC's standard for controlled wood, the AFS's chain-of-custody Criteria 4 requires that organisations ensure that no wood or forest products from illegal operations or sources enter any stages within their link along the certification chain.

Claims and logos

Organisations certified under the requirements of AS4707-2006 gain the right to use the AFS and PEFC logos and make the following claims with them:

For 100% certified wood content,

From sustainably managed forests

For less than 100% certified wood content

Promoting sustainable forest management

Table 3: AFS criteria for sustainable management

No.	Criteria
1	Management system: That it be undertaken in a systematic manner that addresses the range of forest values.
2	Public participation: That it provides for public participation and fosters on-going relationships to be a good neighbour.
3	Protect and maintain biological diversity: That it protects and maintains the biological diversity of

	forests, including their successional stages, across the regional landscape
4	Forest productive capacity: That it maintains the productive capacity of forests.
5	Forest ecosystem health and vitality: That it maintains forest ecosystem health and vitality.
6	Protect soil and water resources: That it protects soil and water resources.
7	Contribution to carbon cycles: That it maintains forests' contribution to carbon cycles.
8	Natural, cultural, social, religious & spiritual values: That it protect and maintain, for Indigenous and non-Indigenous people, their natural, cultural, social, religious and spiritual heritage values.
9	Social and economic benefits: That it maintains and enhances long-term social and economic benefits.

Table 4: AFS criteria for chain-of-custody

No.	Criteria
1	Management commitment to chain-of-custody: That management commit to the principles of sustainable forest management, legal compliance, the rights of staff to collectively bargain and of continuous improvement.
2	Documented control system: That it establish, document and update a control system that addresses the chain-of-custody system for certified wood or forest products
3	Personnel training and development: That it provides a suitable training and development system for personnel.
4	Verification of origin: That it establishes a suitable process to establish the origin of wood and to address illegal operations or sources
5	Final inspection: That it carries out a final inspection of certified wood or forest products at the end of their link in the certification chain.
6	Record keeping: That it maintains appropriate records of all wood or forest products procured, processed or sold.
7	Use of certificates: That it have controls to ensure that its chain-of-custody certificate is not misused.
8	Continuous improvement: That it has relevant and appropriate mechanisms to facilitate the continuous improvement of its chain-of-custody system.





Figure 20: PEFC and AFS logos.
Labels shown are those of Australian Forestry Standard Ltd.

Forest Stewardship Council

FSC International operates in Australia through a national initiative, FSC Australia that uses international forest management principles and criteria, and chain-of-custody process to establish national assessment process.

FSC has three-levels of decision-making structure of:

- A general assembly of members,
- Chambers for Social, Environmental and Economic members, and

• A Board of directors.

While work on an Australian FSC standard has begun, in 2012, the standard has yet to be finalised. Due to this, FSC operates with interim standards from international FSC accreditation groups, Woodmark and SmartWood. The operational structure of FSC Australian is shown in Figure 21

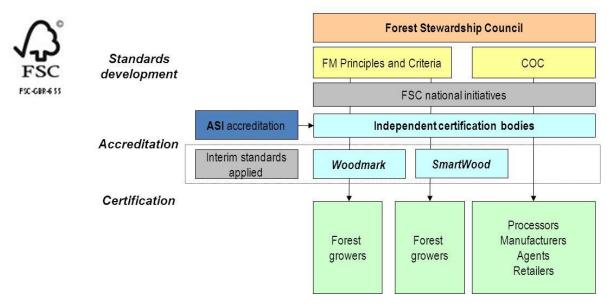


Figure 21: FSC Australia operational structure in 2012

The ten principles of FSC forest stewardship are included in Table 5.

Table 5: FSC principles of forest stewardship

No.	Criteria
1	Compliance with laws and FSC principles: Forest management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria.
2	Tenure and use rights and responsibilities: Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established.
3	Indigenous peoples' rights: The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.
4	Community relations and worker's rights: Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities.
5	Benefits from the forest: Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits.
6	Environmental impact: Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest.
7	Management plan: A management plan shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.
8	Monitoring and assessment: Monitoring shall be conducted — appropriate to the scale and intensity of forest management — to assess the condition of the forest, yields of forest products, chain of custody, management activities and their social and environmental impacts.
9	Maintenance of high conservation value forests: Management activities in high conservation value forests shall maintain or enhance the attributes that define such forests.
10	Plantations: While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests.

The seven requirements for FSC chain-of-custody are included in Table 6.

Controlled wood standards

FSC also has a standard for controlled wood. Controlled wood is virgin wood or wood fibre that has been verified as having a low probability of including wood from any of the following categories:

- Illegally harvested wood;
- Wood harvested in violation of traditional and civil rights;
- Wood harvested in forests in which high conservation values are threatened by management activities;
- Wood harvested in forests being converted from natural and semi natural forest to plantations or nonforest use;
- Wood from forests in which genetically modified tress are planted.

FSC has particular requirements for direct verification of these requirements.

Table 6: FSC requirements for chain-of-custody

No.	Criteria
1	Quality management: This deals with responsibilities, procedures and records.
2	Product scope: This deals with definition of product groups and outsourcing arrangements

Material sourcing: This deals with material specifications
 Material receipt and storage: This deals with identification and segregation
 Production control: This deals with control of quantities and determination of FSC claims
 Sales & delivery: This deals with invoicing and transport documentation
 Labeling: This deals with application of FSC labels on-product and labeling thresholds

Claims and logos

Organisations certified under FSC requirements gain the right to use the FSC and logos and make the following claims for 100% certified FSC wood, wood from mixed sources, and from recycled sources. There are shown in Figure 22.

Claims and logos FSC-Pure FSC-Mixed FSC-Mixed FSC-Mixed Sources Mixed Source

Figure 22: FSC logos

requirements

Certification bodies and auditors

Accredited *independent certification bodies* and *auditors* act between industry and the standards-setting body in both schemes. In a system very similar to international quality control schemes, external assessment bodies, such as JAS-ANZ, accredit each of these.

Auditors can take different views on their relationship to organisations subject to audit. They can:

- Stand removed from the process and simply assesses an organisation's compliance or non-compliance.
- Recognize some participation in the process and potentially offer some guidance on means to assure compliance. They still have to assess an organisation's compliance or non-compliance.

To ensure processes comply with the standards, organisations wishing to establish or maintain chain-of-custody need to select and work closely with an accredited auditor.

Selecting a scheme

While there are considerable similarities between forest certification and chain-of-custody schemes, they exist as separate entities without mutual recognition. Therefore, wood origin constrains the chain-of-custody certification options in a company.

AFS / PEFC certified wood entering a business needs AFS / PEFC chain-of-custody certification through the business while FSC certified wood needs FSC chain-of-custody certification. Chain-of-custody certification is not transferable.

A company wishing to handle material certified under either scheme needs to maintain certification for both.







Figure 24: LVL

Quiz

Answers should be clear, concise, and generally no longer than 150 words.

Q.1. What do international umbrella and endorsement schemes do?
Q.2. What Australian Standards (AS standards) govern the Australian Forest Certification Scheme?
Q.3. What considerations influence the certification scheme that an enterprise can adopt?
Q.4. What is controlled wood under FSC Forest and chain-of-custody certification?
Q.5. Why are accredited certification bodies and auditors required when establishing and maintaining chain-of-custody certification?

5. Business strategies for chain-of-custody certification

Topic summary

- Chain-of-custody certification is often part of a company's commitment to ethical and sustainable business practices.
- Companies need a Chain-of-custody policy, a written and public commitment to the principles of chain-of-custody from the company's board and senior management team.
- Chain-of-custody certification gives companies the right to use particular claims and logos on their products.
 - The company must decide the extent that it wishes to use these claims and logos
- Costs of establishing chain-of-custody include staff costs, assessment and auditing expenses, lost productivity, and potential loss in value of current stock.
- Costs of maintaining chain-of-custody include staff costs, assessment and auditing expenses and potential loss in productivity.
- The costs of establishing and maintaining a chain-of-custody system have to be measured against the returns it may generate

Flexible delivery component



Length: 21.49 minutes



FPICOT6202A

Develop and manage a forest chain-of-custody (CoC) certification management system

A unit of FPI60111 Advanced Diploma of Forest Industry Sustainability

Katie Edwards

Relevant resource interviews



Forest Resources Team Leader & **Alex Bradley**Forest Certification Co-ordinator,

Norske Skog, Tasmania



David Gover Heyfield Hardwood Mill

Resource documents

Crawford H. 2006, A review of forest certification in Australia, Forest and Wood Products Research and Development Corporation.

Crawford H. 2007, Chain of custody in the forest products industry: A practical guide, Forest and Wood Products Australia Limited.

EWPAA 2012 Guide to AFS/PEFC Chain of Custody.

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Forest and Wood Products Australia 2007, Timber Chain of Custody Certification - Product tracking from the forest to the consumer (Secondary Processor), FWPA.

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PEFC 2011, Passing it along Communicating Chain of Custody to suppliers and customers, PEFC Council

PEFC 2011, PEFC Chain of Custody certification - the key to selling certified products, PEFC Council

PEFC 2011, PEFC project chain of custody certification – an introduction, PEFC Council

PEFC 2011, PEFC project chain of custody certification – one project, one message, PEFC Council

PEFC 2011, Sustainable timber – a guide to procurement for the public sector, PEFC Council

PEFC, PEFC certified paper for the print, packaging and publishing industries, PEFC Council

PEFC, What makes PEFC unique and the system of choice, PEFC Council

Topic discussion

This topic covers aspects important to determining business strategies related to chain-of-custody. It includes:

- 1. Ethical basis for adopting chain-of-custody.
- 2. Customer and other demand for chain-of-custody.
- 3. Marketing chain-of-custody.
- Commercial impacts of adopting chain-of-custody

Ethical basis for adopting chain-of-custody

Chain-of-custody certification is often part of an enterprise's commitment to pursue ethical and sustainable business practices. Sustainable business practices include:

- Legal and ethical business dealings.
- Reduction in environmental impacts.
- Fair and equitable work and employment practices.
- Respect for the local and national community.
- Fair and economic operation.
- Continuous improvement.

An enterprise that wishes to establish chain-of-custody needs a Chain-of-custody policy. This is a written and public commitment to the principles of chain-of-custody from the company's board and senior management team. It includes clear targets and statements of intended action.



Figure 25: Natural round columns



Figure 26: Timber cladding

Development of the chain-of-custody policy requires

- Explicit commitment to a particular certification scheme.
- An understanding of that scheme's requirements and their impacts on the business's current operations.
- A relationship with accredited auditors for that scheme.

To comply with AS 4707—2006, the policy needs to includes commitments to

- Supporting any claims related to the source of wood and forest products with chain-of-custody certification;
- Providing assurance of the continuity, integrity and validity of the chain-of-custody system and the wood and forest products certified by it;
- Ensuring compliance with applicable laws and/or regulations covering environmental impacts of the manufacturing facility;

- Recognising the right for personnel to collectively bargain consistent with the International Labour Organisation conventions; and
- Continuous improvement of the chain-of-custody system.

The FSC has similar requirements, particularly a demonstration of the enterprise to comply with the Values of FSC as defined in the "Policy for the Association of Organizations with FSC". The FSC for chain-of-custody also requires that the enterprise declare that they are not involved in:

- Illegal logging or the trade in illegal wood or forest products;
- Violation of traditional and human rights in forestry operations;
- Destruction of high conservation values in forestry operations;
- Significant conversion of forests to plantations or non-forest use;
- Introduction of genetically modified organisms in forestry operations;
- Violation of any of the ILO Core Conventions, as defined in the ILO Declaration on Fundamental Principles and Rights at Work, 1998.

In fact, the pursuit of chain-of-custody certification in an enterprise without a clear company policy and commitments at each major operational level is pointless. Without it, the operational changes necessary to implement chain-of-custody certification do not happen.



Figure 27: Forest reserve



Figure 28: Hardwood plantation

Customer and other demand for chain-of-custody

Enterprises pursue chain-of-custody because it is in their interests to do so. However, forest and chain-of custody certification is voluntary for:

- The forest grower and timber producer.
- The building designer, developer, or owner.

chain-of-custody is not currently required by building or other regulations. However, it can be driven by market demand. Currently, major demand for product with chain-of-custody in Australia is driven by:

- Government and major corporate requirements for GreenStar building accreditation. This complicates sales and supply to a minor but important market.
 - GreenStar is the Green Building Council of Australia's rating scheme for environmentally preferred building. 1 point is available for using certified or recycled timber.
- Export markets.

Market demand for chain-of-custody is:

• Common in export markets. This is especially the case with exports of:

- Solid wood products to countries with Government chain-of-custody procurement requirements, such as the UK.
- Wood fibre to pulp and paper mills that supply products to governments and major corporate customers.
- Limited in the Australian solid timber and fibreboard market, outside of the commercial building sector. This is currently little interest for chain-of-custody in the supply chain for general housing, from house builders, general building owners, and materials distributors.





Figure 29: Roof trusses

Figure 30: Boards in rack

Marketing chain-of-custody

Chain-of-custody certification gives companies the right to use particular claims and logos on their products.

The company must decide the extent that it wishes to use these claims and logos in marketing to:

- Ensure access of their products to key markets, such as government and corporate project.
- Build company profile with their existing or an extended customer base.
- Foster broader support for chain-of-custody in the marketplace.

The enterprise must also decide when it wishes to use the claims.

Marketing chain-of-custody needs to be positive, framed to support the benefits that chain-of-custody can provide including:

- Building confidence in forestry for wood products in their target market and in the broader community.
- Highlighting the company's recognition of responsible action.

Marketing must avoid putting forward negative chain-of-custody positions. These can encourage unreasonable market expectation of certified products or promote constraints on wood products that are uncertified or certified by other schemes. Negative chain-of-custody positions generally undermine timber as a valid material selection. Few (if any) other material supply chains offer environmental chain-of-custody on their products. Inappropriate chain-of-custody marketing can allow suppliers of competitor materials to exploit apparent dissent between wood suppliers to their own benefit.

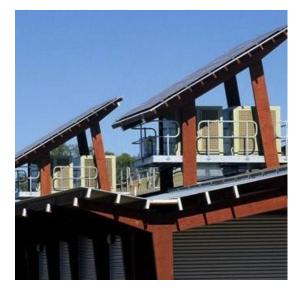






Figure 32: Glulam beams and joists

Commercial impacts of adopting chain-of-custody

Establishing chain-of-custody in an enterprise has commercial and financial impacts. Forest certification and subsequent chain-of-custody certification are market-based performance requirements. They inevitably add cost to a company's operations while establishing and maintaining chain-of-custody. These costs have to be offset against direct or indirect returns.

The costs to an enterprise of establishing chain-of-custody include:

- Staff costs, such as time for management, procedure development, and adjustment to new operational processes.
- Assessment and auditing expenses. This includes the cost of providing guidance during the process and for audits.
- Lost productivity in adjustment to new operational processes.
- Potential loss in value of current stock. Uncertified material may be sidelined or undervalued in the transition.

The costs to an enterprise of maintaining chain-of-custody include:

- Staff costs in management, procedure refinement, and continuous improvement.
- · Ongoing assessment and auditing expenses.
- Potential loss in productivity as additional procedures can limit production versatility.

These establishment and maintenance costs have to be measured against the direct or indirect returns that chain-of-custody may generate from:

- A company profile that is enhanced to its customer or investor base.
- Gaining or maintaining access to markets that may pay a product premium. It could be from avoiding loss of access to those markets.

Market experience suggests that many customers are unwilling to pay a premium simply to have the assurance that chain-of-custody provides – that the timber is from a certified forest.

Quiz

Answers should be clear, concise, and generally no longer than 150 words.

Q.1. Can chain-of-custody certification contribute to a company's commitment to sustainable business practices?

Q.2.	What is a chain-of custody policy and why is it important?
Q.3.	Is it likely that customer demand for chain-of-custody is growing? If so, why might this be the case? Base answers on the opinions of speakers featured in the recorded module.
Q.4.	Do forest and subsequent chain-of-custody certification add cost to a company's operations?
Q.5.	List at least 3 possible costs of establishing and maintaining chain-of-custody within a company.

6. Structuring chain-of-custody certification in business

Topic summary

- Chain-of-custody certification is technically required by all organisations in the supply chain. In practice, it is required by all organisations that transform the material or break or redistribute a certified unit of the material.
- To plan chain-of-custody implementation, the enterprise's wood supply arrangements have to be mapped.
- Chain-of-custody systems provide a number of material flow accounting options.
- Chain-of-custody may force changes to supplier and external production contractor relationships.
- Chain-of-custody requirement will force changes to policy approaches and procedures.
- Chain-of-custody procedures can be developed in several ways. A guided collective approach often provides the most effective approach.

Flexible delivery component



Length: 35.44 minutes

Relevant resource interviews



Trevor InnesGunns Timber Products, Bell Bay Softwood Mill.



David Gover Heyfield Hardwood Mill



Katie Edwards
Forest Resources Team Leader &
Alex Bradley
Forest Certification Co-ordinator,
Norske Skog, Tasmania



Roland FreyerAssistant manager: Huon district, Forestry Tasmania.

Resource documents

Centre for Sustainable Architecture with Wood (CSAW), School of Architecture and Design, University of Tasmania, Cailum Pty Ltd, 2008, Chain of Custody for the Timber Industry, Chain of Custody System Manual, Tasmanian Timber Promotion Board.

Crawford H. 2007, Chain of custody in the forest products industry: A practical guide, Forest and Wood Products Australia Limited.

Forest and Wood Products Australia 2007, Timber Chain of Custody Certification – Product tracking from the forest to the consumer (Forest Manager), FWPA.

Forest and Wood Products Australia 2007, Timber Chain of Custody Certification - Product tracking from the forest to the consumer (Primary Processor), FWPA

Forest and Wood Products Australia 2007, Timber Chain of Custody Certification - Product tracking from the forest to the consumer (Secondary Processor), FWPA.

Forest and Wood Products Australia 2007, Timber Chain of Custody Certification - Product tracking from the forest to the consumer (Seller), FWPA.

Forest Stewardship Council (FSC) 2006, FSC-STD-30-010 Controlled Wood Standard for forest management enterprises, FSC.

Forest Stewardship Council (FSC) 2010, FSC-STD-50-001 - Requirements for use of the FSC trademarks by certificate holders, FSC.

Forest Stewardship Council (FSC) 2011, FSC-STD-40-004 Chain of Custody Certification, FSC.

Standards Australia 2006, Chain of custody for certified wood and forest products, Australian Forestry Standard Technical Committee of Australian Forestry Standard Limited.

Topic discussion

This topic discusses aspects important to structuring chain-of-custody certification in an enterprise. It includes:

1. Models for structuring chain-of-custody in the company and supply chain.

- 2. Assessing and coordinating company policy and site procedures.
- 3. Approaches to efficient procedure development.

Models for structuring chain-of-custody

Chain-of-custody certification is technically required by all organisations in the chain that:

- Have control over wood products including their flow along the value chain.
- Can define their input and output stages of the product flow.

In practice, chain-of-custody certification is required by all organisations that:

- Transforms the material from one certified unit to another An example of this includes using boards from a certified pack to make trusses.
- Break or redistribute a certified unit of the material such as log or dry pack.
- Have FSC forest management certification and are also involved in harvesting and log transportation
 to customers. In these cases, FSC chain-of-custody certification is needed to cover log handling from
 the harvest site to the customer. This is not the case for AFS certification, which extends the cover of
 its forest management certification to include harvesting and delivery to the mill door.

A chain-of-custody certification system may not be required in enterprises that handle the timber but do not break up the unit with chain-of-custody certification. For example, a stockist who only buys and sells full packs of certified timber may not need chain-of-custody certification. In this case, the key chain-of-custody information is transferred with the pack if the supplier's chain-of-custody and pack number are preserved on the stickers or labels. However, if the stockist breaks open the pack and mixes packs in a delivery, chain-of-custody from the supplier is lost, and the stockist will need a chain-of-custody certification system.

Mapping supply and other relationships

Chain-of-custody can influence relationships within:

- The enterprise, within and between various sites and divisions.
 - For example, if one mill in an enterprise has chain-of-custody certification and another mill does not, their product can't be mixed without losing chain-of-custody. Similarly, the product from the mill without chain-of-custody can't be used as a direct substitute for material from the mill with chain-of-custody.
- The supply chain between the company, its suppliers, associate producers (contractors) and customers.
 - For example, if a log supplier cannot provide logs with forest management certification, a mill with chain-of-custody must either reject them or process them as a separately accounted batch.

To plan chain-of-custody implementation, these relationships have to be:

- Mapped at enterprise and site levels;
- Compared to acceptable chain-of-custody processes.

An example mapping diagram is shown in Figure 33. The results of this mapping are used to determine the structure chain-of-custody procedures and to plan changes in supply chain and subcontractor arrangements.

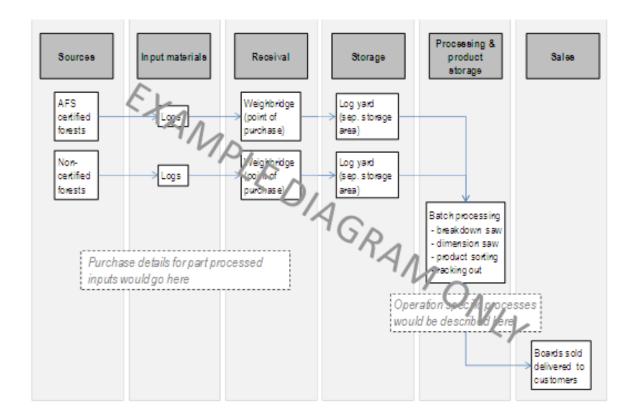


Figure 33: Sample map of material flow in an enterprise

Mapping of product flows on sites should include:

Input sources.

This is the flow of certified and non-certified into this link of the supply chain.

Points of purchase.

These are the points where ownership of the material transfers to the enterprise.

Production processes.

These are processes that transform the input resources from one form to another, such as sawing a log into boards. This includes methods of physical separation or marking of products to identify material from certified and non-certified sources.

External production contractors.

These are external contractors who may handle the material for some specialist process, such as appearance dressing, preservative treatment or application of coatings.

Product lines produced.

This includes the major product lines, such as boards or trusses, plus any by-products such as sawdust or wood chips.

Points of sale.

This is the point where ownership of the material transfers out of the enterprise.

General market type.

This is the likely markets for the product lines produced.

The material flow of certified and non-certified inputs and outputs needs to be clearly shown in the mapping.

To assist site implementation, the mapping process should ideally generate three related diagrams showing wood flow against existing and revised:

- wood supply and contractor arrangements.
- operational procedures.
- information systems.







Figure 35: Truss components

Accounting for certified and non-certified material

An enterprise cannot receive certified and non-certified inputs of wood and then claim it all has chain-of-custody certification for all the material. The certified and non-certified inputs have to be handled or accounted separately.

Chain-of-custody systems provide a number of material flow accounting options.

If certified and non-certified inputs can be readily separated or identified, AS4707 allow a *physical separation* and/or marking of raw materials chain-of-custody system. This requires certified and non-certified material to be kept either physically or organisationally separate and then processed in batches. It allows companies to market material fully from certified forests.

Non-compliant material is either fully excluded from the site; or excluded from batch processing.

If certified and non-certified inputs can't be readily separated, a company must choose an *Inventory control* and accounting of raw material flow system. These are:

- The percentage input/output system
- The rolling average percentage system.

The percentage input/output system allows an organisation with a known percentage of certified material entering the processing stream to consider as certified products the same percentage of production from that stream. For example, if 60% of the total input into a paper mill is known to be from certified sources, certification claims can be made for 60% of the output.

The *rolling average percentage system* allows an organisation to calculate the certification percentage for a specific batch using the quantity of raw material procured in the specified previous time period. This allows companies to accommodate varying supply level for certified and uncertified material. For example, if a particle board mill received chip supply from several sources and these vary through the year, they can sell certified product from the mill in line with their rolling average percentage of certified product. The maximum time for the rolling average calculation must be shorter than 12 months.







Figure 37: Timber structure

Structuring chain-of-custody in production

Chain-of-custody may force changes to the enterprise's relationships with wood supplier and external production contractor. This is particularly the case in the longer term with supplier providing non-certified wood, as it is likely to be in the enterprise's interest to simplify supply to certified wood only.

Chain-of-custody processes provide options for organising external production on several enterprise or contractor sites. These include:

- Independent chain-of-custody arrangements
- Centrally coordinated chain-of-custody procedures.

An example of independent chain-of-custody arrangements is shown in Figure 38. In this example, each site has its own wood-handling procedures and maintains its own chain-of-custody system. Material leaving Production site 1 going to Contract dry mill 1 needs to have a final inspection and be accompanied by complete paperwork. Similarly, complete paperwork needs to accompany material returning to Production site 1 from Contract dry mill 1. This can provide versatility in production but also be administratively very cumbersome.

As shown in Figure 39, centrally coordinated chain-of-custody procedures are organised around a 'central office' that coordinates and controls the movement of wood across several sites. With this model, procedures at each production site have to ensure that the integrity of wood supply into the system. If uncertified material is handled, procedures have to ensure certified timber is not mixed with it.

For example, the operators of Contract dry mill 1 have to ensure that the timber they receive from other centrally managed sites is kept separate from potential uncertified timber belonging to other customers

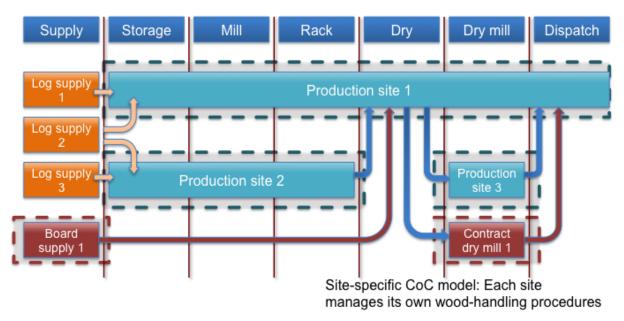


Figure 38: Independent chain-of-custody process in a production system

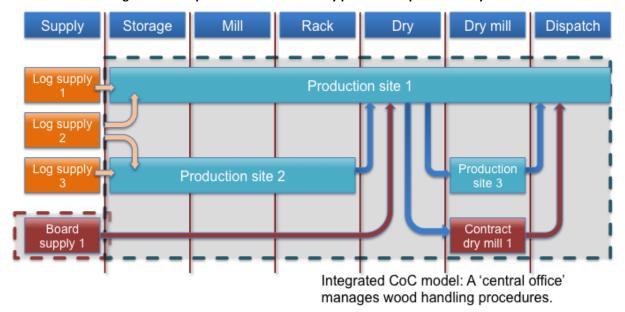


Figure 39: Central office chain-of-custody process in a production system.

Company policy and site procedures

As chain-of-custody requires greater control of wood flow through the operation, it also requires changes to the policy approaches and procedures in an enterprise and on a site that control this wood flow.

Like the actual flow of wood, these policies and procedures need to be:

- Mapped within and across sites.
- Assessed against the company's policy commitments and intended chain-of-custody system.
- Modified in a coordinated process.

Mapping of policies and procedures on sites should include:

- · Wood receival.
 - This is acceptance of wood and timber products into the site or enterprise.
- · Production handling.

These are the procedures covering handling and use of wood from all sources throughout the operation.

External production contractors.

This includes the processes of engaging, supplying and receiving material back from external contractors who may handle it.

Points of despatch or final inspection.

This is the point where the information needed by the next enterprise in the chain-of-custody is confirmed and included in documentation, such as pack labels and invoices.

Market support information.

This is brochures, guides and Internet information that provide users with information about the enterprise's products. Each of these will eventually need to be revised.

The material flow of certified and non-certified inputs and outputs should also be clearly shown in the map.

Chain-of-custody and internal QA systems

Like any other QA system, chain-of-custody systems provide a customer with the assurance of a particular *attribute* of the timber. In this case, chain-of-custody provides assurances about the origin of the timber.

Both QA and chain-of-custody are structured around written procedures and an operational culture that supports their use to control of production and other actions.

For companies with an established QA system, chain-of-custody adoption requires new or modified procedures that are integrated with existing QA systems and culture. While this can be complex, staff experience and skill in procedure development and implementation can help with the process.

For companies without a QA system in place, chain-of-custody adoption requires both new procedures and the development of an operational culture that supports their use. This is a significantly greater challenge, as staff may not have the experience and skill in procedure development and implementation necessary to complete the task efficiently. They will also need to develop the culture of following procedures in the enterprise.

Efficient procedure development

Whether an enterprise has existing QA or not, chain-of-custody requires it to establish a new or revised set of procedure that comply with requirements of the chain-of-custody standard. These procedures have to be developed and particular approaches have to be taken in structuring their content. While this occurs, a balance needs to be struck between standard compliance and economically efficient operation.

Chain-of-custody procedures can be developed in enterprises in several ways. Two common approaches are:

• Top-down procedure development.

In a top-down approach, a limited number of participants frame the procedure structure and the content. Other staff may comment on the procedures but they are not open to full staff comment and review until they are implemented. While this can appear to be an efficient process, it can lead to significant production inefficiency during implementation

• Guided collective procedure development.

In a guided collective approach, a chain-of-custody 'champion' organises the broad procedure structure and then encourages operational groups in the enterprise to develop the detail of procedures in their work area. While this can appear to be a more-time consuming process, experience has shown that it can significantly reduce problems during implementation and lead to more efficient operational processes.





Figure 40: Roof frame

Figure 41: preparing glulam

In addition to the process taken in developing the procedures, different approaches can be taken to the content of chain-of-custody procedures. These are:

• A proscriptive approach.

This is where the procedures specifically limit particular actions or exclude other actions. They provide a solution for doing something. For example, the procedures may state that all logs received must be stored in a particular log yard. By inference, storing logs in any other yard or site breaches this procedure.

Performance approach.

This is where the procedures define a particular quality of action or result. They say what the solution has to do rather than say what it is. For example, the procedure may state that all logs received must be stored in a log yard where they can be handled safely and kept separate from any uncertified logs. Storing logs in any yard that satisfies these requirements conforms to this procedure.

A combined approach.

While a proscriptive approach can limit alternatives, a pure performance approach may not provide enough guidance for compliance to those responsible for operating under the procedure. In these cases, the two approaches can be combined to first define the quality of action required and provide options for complying with these requirements. For example, the example, the procedure may state that all logs received must be stored in a log yard where they can be handled safely and kept separate from any uncertified logs and then state that storage in this log yard or that log yard complies with these requirements.

Quiz

Answers should be clear, concise, and generally no longer than 150 words.

- Q.1. Which organisations in a supply chain need to have chain-of-custody in place?
- Q.2. List two material flow accounting options available under AS 4707 of the Australian Forest Certification Scheme.

- Q.3. Chain-of-custody can be organised as either a site-specific or an integrated model in a particular wood supply and production process. Discuss the differences between these models.
- Q.4. Chain-of-custody procedures can be developed in several ways. Two ways are top-down and guided collective. What is the difference between these two?

7. Chain-of-custody procedures 1

Topic summary

- To achieve chain-of-custody certification, chain-of-custody standards require that the enterprise:
 - Adopt a Chain-of-custody policy
 - Establish a chain-of-custody system by preparing and maintaining a structured series of procedures and implementing those procedures in their operation.

Length: 21.30 minutes

Have the system audited successfully by an accredited external party.

Flexible delivery component



Relevant resource interviews



Katie Edwards
Forest Resources Team Leader &
Alex Bradley
Forest Certification Co-ordinator,
Norske Skog, Tasmania



Trevor InnesGunns Timber Products, Bell Bay Softwood Mill.

Resource documents

Centre for Sustainable Architecture with Wood (CSAW), School of Architecture and Design, University of Tasmania, Cailum Pty Ltd, 2008, Chain of Custody for the Timber Industry, Chain of Custody System Manual, Tasmanian Timber Promotion Board.

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Forest Stewardship Council (FSC) 2006, FSC-STD-30-010 Controlled Wood Standard for forest management enterprises, FSC.

Forest Stewardship Council (FSC) 2010, FSC-STD-50-001 - Requirements for use of the FSC trademarks by certificate holders, FSC.

Forest Stewardship Council (FSC) 2011, FSC-STD-40-004 Chain of Custody Certification, FSC.

Standards Australia 2006, Chain of custody for certified wood and forest products, Australian Forestry Standard Technical Committee of Australian Forestry Standard Limited.

Topic discussion

This topic and Topic 8 discuss an enterprise's policy and procedural requirement in detail. While the discussion focuses on the particular requirements of AS4707, it also covers the types of procedures required by other schemes. This topic includes:

- 1. Chain-of-custody policy
- 2. Procedure structure
- 3. Procedures for control of documents
- 4. Procedures for the organisation of staff.

Chain-of-custody policy

To achieve chain-of-custody certification, chain-of-custody standards require that the enterprise:

- Adopt a chain-of-custody policy
- Establish a chain-of-custody system by preparing and maintaining a structured series of procedures and implementing those procedures in their operation.
- Have the system audited successfully by an accredited external party.

In general, the chain-of-custody policy has to state the enterprise's commitment to support chain-of-custody, the aims of sustainable forest management in general and the goals of the particular certification scheme. As described in Table 4, a Chain-of-custody policy that complies with AS 4707 needs to commit the company to:

- source wood only from suitable sources.
- maintain a valid chain-of-custody System.
- comply with applicable legal environmental requirements
- recognise the right for personnel to collectively bargain
- continuous improvement of its chain-of-custody system.



Figure 42: Roofing module



Figure 43: Pine plantation

Procedure structure

chain-of-custody procedures can be structured in various ways to suit the company.

In this training, procedures are discussed in line with common business organisational structures, namely:

- Control of documents
- Organisation of staff

• Operational requirements.

While the enterprise needs to address the intent of each procedure to obtain chain-of-custody certification, they do not have to be presented as individual procedures. Also, they do not have to operate solely as part of the chain-of-custody system. For example, the requirements for the procedure on record keeping, outlined for chain-of-custody below, may already be part of the enterprise's broader management system.

It does not need to be repeated in the chain-of-custody system.

Procedures for control of documents

The control of documents for chain-of-custody requires procedures for:

- 1. Register of documents
- 2. Records
- 3. Internal audit
- 4. Continuous improvement (corrective and preventative actions)
- 5. Continuous improvement (complaints and comments)
- 6. Continuous improvement (management review)
- 7. Register of legislative compliance

Each of these procedures is covered below.

Register of documents

Objective

The objective of this procedure is to ensure that a complete and up to date set of documents that together comprise the chain-of-custody system is kept and is available for audit inspection.

Background

The chain-of-custody standards require that:

- A documented control system be established and maintained.
- The system is kept in a format that is available for audit inspection by the contracted certification body and will remain available for a suitable period of time from the date of the last sale made as a result of the chain-of-custody system.

Records

Objective

The objective of this procedure is to ensure that all necessary records for implementation, monitoring and audit of the chain-of-custody system are stored and maintained in such a manner to ensure ease of retrieval and protection against damage, deterioration, tampering or loss.

Background

The chain-of-custody standards require that:

- Companies maintain appropriate records of all wood or forest products procured, processed or sold; including records relating to purchase, delivery, shipment, receipt, forwarding and invoicing of certified wood or forest products and include information on their category status.
- That records of management reviews and audit and corrective or remedial action reports be kept.



Figure 44: Logging in SE Asia



Figure 45: Native forest

Internal audit

Objective

The objective of this procedure is to ensure that the chain-of-custody system is being effectively implemented, in accordance with procedures specified and the requirements of the standard, internal audits are required at a regular interval.

Background

The chain-of-custody standards can require:

- The organisation to conduct internal audits of the chain-of-custody system, to maintain records of
 such audits and any non-conformity that occurred and of any corrective or remedial action that has
 been taken. In the event of non-conformity, a corrective or remedial action report needs to be
 prepared that includes the changes necessary to the chain-of-custody system that could be expected
 to prevent a reoccurrence of the non-conformity.
- that internal audits be conducted at least as frequently as third-party audits and that audits take into account the outcomes of previous internal audits.

CI (corrective & preventative actions)

Objective

The objective of this procedure is to ensure that the appropriate corrective or remedial action is taken to deal with deficiencies identified in the organisation's chain-of-custody system.

Background

The chain-of-custody standards can require that in the event that a non-conformity is identified, a corrective or preventative action report is prepared, describing the changes necessary to the chain-of-custody system that could be expected to prevent a reoccurrence of the non-conformity.

CI (complaints and comments)

Objective

The objective of this procedure is to ensure that complaints and comments received on the implementation of the chain-of-custody system are acknowledged, recorded and investigated, and that if non-conformities or opportunities for improvement are identified, that appropriate corrective or preventative action is taken.

Background

The chain-of-custody standards can require that organisations maintain a record of all complaints or comments made known to the organisation relating to its chain-of-custody system.

CI (management review)

Objective

The objective of this procedure is to ensure that there is a mechanism in place for senior management to periodically review the continuing suitability, adequacy and effectiveness of the chain-of-custody system.

Background

The chain-of-custody standards can require organisations to establish and implement a program of periodic internal checking, auditing, corrective action and review of its chain-of-custody system.

Register of legislative compliance

Objective

The objective of this procedure is to ensure legal and regulatory compliance by the company to the laws and/or regulations covering environmental impacts of the manufacturing facility.

Background

The chain-of-custody standards can require organisations to recognise their legal compliance responsibilities, enact any changes to legal and regulatory compliance and then incorporate them into the chain-of-custody using a system of continuous improvement.



Figure 46: Forest reserve

Figure 47: Pine plantation

Procedures for the organisation of staff

The organisation of staff for chain-of-custody requires procedures for:

- 1. Responsibilities
- 2. Staff competencies and recruitment
- 3. Training
- 4. Occupational health and safety
- 5. Enterprise bargaining

Responsibilities

Objective

The objective of this procedure is to ensure that staff responsibilities have been assigned for each component of the chain-of-custody system and that each person assigned a responsibility is also aware of the assignment of other responsibilities within the system.

Background

The chain-of-custody standards can require that procedures, controls and guidelines are in place and roles and responsibilities are defined in order to implement the chain-of-custody system.

Staff competencies and recruitment

Objective

The objective of this procedure is to ensure that staff involved in the implementation of the chain-of-custody system is competent and adequately resourced and that members of the local and regional workforce are given opportunities at the manufacturing facility.

Background

The chain-of-custody standards can require organisations to ensure that staff and contractors have appropriate skills, competencies and available resources that are essential to the implementation and control of the chain-of-custody system. The standard also expects local and regional workforce to be given opportunities at the manufacturing facility.



Figure 48: Dry eucalypt forest

Figure 49: Site assessment

Training

Objective

The objective of this procedure is to ensure that all those with roles or responsibilities in the implementation and control of the chain-of-custody system are adequately trained.

Background

The chain-of-custody standards can require organisations provide or have a system in place that provides for the:

- Training and orientation of the personnel involved in the handling and presentation of certified wood or forest products and non-certified products, and the
- Training of personnel sufficient for them to understand their specific responsibilities in the implementation and control of the chain-of-custody system.

Occupational Health and Safety

Objective

The objective of this procedure is to ensure that the facility meets or exceeds all applicable laws and/or regulations covering health and safety of personnel.

Background

The chain-of-custody standards can require each certified facility to meet or exceed all applicable laws and/or regulations covering health and safety of personnel. It is recognised that this requirement will already be incorporated into the organisation's existing management system. The objective here is not to replicate or recreate specific procedures already developed to ensure occupational health and safety is effectively managed, but to fit in with what has already been done and bring existing procedures into the continuous improvement framework of the chain-of-custody system.

Collective bargaining

Objective

The objective of this procedure is to ensure that collective bargaining is recognised in the workplace.

Background

The chain-of-custody standards can require:

• Organisations to recognise the right of the company personnel to collectively bargain and that mechanisms to achieve this are in place.



Figure 50: Timber lining



Figure 51: Recycled boards as lining

Quiz

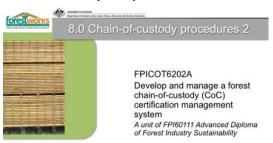
Answers should be clear, concise, and generally no longer than 150 words.

- Q.1. List four key components of a company's chain-of-custody policy.
- Q.2. What is the objective of an internal audit procedure for chain-of-custody?
- Q.3. What is a non-conformity or non-compliance in a chain-of-custody system and how should they be addressed?
- Q.4. What is the objective of a staff competencies and recruitment procedure for chain-of-custody?
- Q.5. What are internal audits of the chain-of-custody system and how do they differ from external audits?
- Q.6. Why is *continuous improvement* an important part of the chain-of-custody system and how can opportunities for continuous improvement be identified?

8. Chain-of-custody procedures 2

Topic summary

Flexible delivery component



Length: 21.57 minutes

Relevant resource interviews



Katie Edwards
Forest Resources Team Leader &
Alex Bradley
Forest Certification Co-ordinator,
Norske Skog, Tasmania



Trevor InnesGunns Timber Products, Bell Bay Softwood Mill.

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Topic discussion

With Topic 7, this topic discusses an enterprise's policy and procedural requirement in detail. While it discusses the particular requirements of AS4707, it also covers the types of procedures required by other schemes. It includes procedures for operational requirements.

Operational requirements

For chain-of-custody compliance, an enterprise's operational stage requires procedures for:

- 1. Verification of origin: (certified sources)
- 2. Verification of origin: (non-certified sources)
- 3. Goods receival
- 4. Storage of goods received
- 5. Processing
- 6. Material flow accounting
- 7. Storage of final products
- 8. Final inspection
- 9. Labeling
- 10. Invoicing and delivery documentation
- 11. chain-of-custody certificate use

Verification of origin: (certified sources)

Objective

The objective of this procedure is to ensure that material purchased from certified sources is accompanied by sufficient documentation to enable reliable and effective verification of origin.

Background

The chain-of-custody standards can require organisations:

- To develop and implement a recognition system to distinguish between certified and non-certified sources, including specification of the percentage of certified products in each delivery.
- That initially receives wood or forest products direct from the forest to implement a recognition system for verification of the origin of the wood or forest products used in subsequent processes and also for procured wood or forest products.

A verifiable recognition system must be based on valid and unambiguous documentation from the supplier to support certified source claims and must be able to distinguish between certified and non-certified sources, including specification of the percentage of certified products in each delivery.

Origin: (non-certified sources)

Objective

The objective of this procedure is to ensure that no wood or forest products known to be from illegal operations or sources, under relevant domestic and/or international law, enters any stages within the organisation's link along the certification chain.

Background

The chain-of-custody standards can require organisation to:

- Request a signed self-declaration by suppliers of non-certified raw materials that the supplied raw material does not originate from an illegal operation or source.
- Document risk assessment procedures for evaluating the potential risk of procuring raw material from illegal sources, based at the regional/country level. Where a high-risk level exists, the organisation shall establish a sampling based program of second- or third-party verification of the suppliers' selfdeclarations.

Recognised systems of sustainable forest management certification such as the Australian Forestry Standard and the Forest Stewardship Council all require compliance with applicable national law as a means to demonstrate legality of wood or forest product sources.

Goods receival

Objective

The objective of this procedure is to ensure that forest and wood products received from suppliers match the description and certified status described in the accompanying documentation.

Background

The chain-of-custody standards can require that when an organisation receives or procures wood or forest products that are claimed to be from certified sources, its recognition system shall ensure that:

- The material or products are sourced from a forest for which the forest manager or owner, or a member of a group certification scheme holds a valid forest management certificate that meets the standard's requirements; or
- The supplier of either material or products has a valid chain-of-custody certificate.

Storage of goods received

Objective

The objective of this procedure is to ensure that certified and non-certified inputs are stored appropriately until ready for processing.

Background

The chain-of-custody standards can require organisations using the physical separation and/or marking of raw materials option to store certified inputs and products in separate designated areas to augment the physical separation option.

- Separation of certified and non-certified inputs is required where the company chooses the physical separation and/or marking of raw materials chain-of-custody system.
- If the company is unable to separate certified and non-certified material, then it must choose one of the Inventory control and accounting of raw material flow systems: the percentage input/output system or the rolling average percentage system.

Processing

Objective

The objective of this procedure is to ensure that the processing of inputs is carried out in such a way that allows certified and non-certified material to be separately identified and tracked through the process.

Background

The chain-of-custody standards can require certified inputs or products to remain readily identifiable as certified throughout the certification chain. This is generally achieved by:

- Directing wood or forest products to separate mills, sites, facilities or production lines.
- Using products at different times or runs if the organisation has certified products and non-certified products at the same mill, site, and facility.
- Marking the certified products prior to, and at all stages in any process to ensure that intermediate, semi-processed and end products can be identified as certified.



Figure 52: Logs in the log yard



Figure 53: Boards in rack

Material flow accounting

Objective

The objective of this procedure is to select and implement an appropriate material flow accounting option for the company's operations.

Background

The chain-of-custody standards can provide a number of different material flow accounting options:

- If certified and non-certified inputs can be readily separated and/or identified, the physical separation and/or marking of raw materials chain-of-custody system is appropriate.
- If the company is unable to separate certified and non-certified material, then it must choose one of the Inventory control and accounting of raw material flow systems – the percentage input/output system or the rolling average percentage system.

Storage of final products

Objective

The objective of this procedure is to ensure that certified and non-certified final products are stored separately to augment the physical separation process.

Background

The chain-of-custody standards can require organisations to store certified wood or forest products in separate areas to non-certified wood or forest products to augment the physical separation option.

Final inspection

Objective

The objective of this procedure is to ensure that all material about to leave this link in the certification chain meets the requirements of the company's chain-of-custody system.

Background

The chain-of-custody standards can require organisations to carry out a final inspection of certified wood or forest products at the end of its link in the certification chain, and prior to distributing to the next link, to ensure that:

- Identification and traceability has been established and maintained throughout the certification chain;
- Necessary tracking and recording has been completed in the document system; and

 Relevant data, documentation and records are complete, duly authorised and retained for audit purposes for a period of five years.

Labeling

Objective

The objective of this procedure is to ensure that the certification status of products sold is readily identifiable.

Background

The chain-of-custody standards can require organisations to ensure that wood or forest products are clearly marked, labeled or otherwise identified in a way that the marking or labeling does not become detached, ambiguous or otherwise indistinguishable during later handling.

Invoicing & delivery documentation

Objective

The objective of this procedure is to ensure that documentation accompanying products sold contains sufficient information to maintain the chain-of-custody to the next link.

Background

The chain-of-custody standards can require that any product sold by the organisation as certified is accompanied by documentation issued by the organisation to a purchaser that includes:

- A description of the product
- The volume/quantity of the product
- Category of the input material's origin (including percentage of certified raw material if a percentagebased method was used)
- Date or period of delivery or the accounting period
- The organisation's chain-of-custody certificate registration code and expiry date.

Chain-of-custody certificate use

Objective

The objective of this procedure is to ensure that the company's chain-of-custody certificate is not misused.

Background

The chain-of-custody standards can require organisations to have controls in place to ensure that its chain-of-custody certificate is not misused.

It also requires the organisation to acknowledge that:

- The certification body is responsible for verifying the chain-of-custody system and the certification body controls and supervises the use of the chain-of-custody certificate.
- The certification body uses a two-tier system for breaches of the chain-of-custody system prior to undertaking punitive action. The breaches in order of severity are minor non-conformance and major non-conformance.
- Prior to issuing breach notices, the certification body may issue an observation to the organisation as
 an indication that corrective and remedial action may be warranted to avoid notifiable breaches of the
 chain-of-custody system.
- The certification body may cancel the chain-of-custody certificate where it has transparent and sufficient reasons to conclude that misuse has occurred.

Quiz

Answers should be clear, concise, and generally no longer than 150 words.

Q.1. What is the difference in procedures for handling material of certified and uncertified origin?

	st the key information that can be included in the delivery documentation of product with chain-of
cu	ustody in place.
Q.4. W	What is the objective of the chain-of-custody's final inspection policy?

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Authors:

Gregory Nolan and Michael Lee Centre for Sustainable Architecture with Wood School of Architecture and Design, University of Tasmania

Video editing

Stephanie Edmunds and Dmitri Troyanousky Centre for Sustainable Architecture with Wood School of Architecture and Design, University of Tasmania

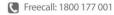
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