



**NEW ZEALAND
FOREST OWNERS ASSOCIATION**

A National Standard

November 2005

**A National Industry Standard for
Sustainable Plantation Forest Management**

A National Standard

A National Industry Standard for Sustainable Plantation Forest Management

© 2005 New Zealand Forest Owners Association Inc.

NZ Forest Owners Association Inc.
PO Box 1208, Wellington, New Zealand
Tel +64 4 473 4769 Fax +64 4 499 8893
nzfoa@nzfoa.org.nz www.nzfoa.org.nz

First published 11 August 2005
Revised edition published 24 November 2005

ISBN 0-473-10704-X

Acknowledgements

Thanks are due to the NZ Forest Industries Council and the members of the economic, social, cultural and environmental chambers of the National Initiative Working Group. Without their assistance the development of this standard would not have been possible.

Contents

Interpretation	3
Preface	4
Background	6
<u>Standard 1: Compliance with the Law</u>	7
<u>Standard 2: Tenure</u>	9
<u>Standard 3: Tāngata Whenua (Indigenous People)</u>	10
<u>Standard 4: Employees, Contractors and Community Relations</u>	12
<u>Standard 5: Biodiversity</u>	14
<u>Standard 6: Water, Soil and Carbon</u>	15
<u>Standard 7: Chemical Use and Forest Protection</u>	17
<u>Standard 8: Operations</u>	21
<u>Standard 9: Dispute Resolution</u>	23
<u>Glossary</u>	24
<u>Appendix 1: Controlled Agrichemicals</u>	30

Interpretation

1. **“S”** : The Standard which shall be achieved.
2. **“V”** : The means of verifying that the related standard has been achieved.

Preface

New Zealand's plantation forestry is among the most environmentally friendly industries in the world.

Our forests are naturally renewable, sequester carbon, recyclable and ultimately biodegradable. Frequently they have been planted on former farmland in order to control water, soil and wind erosion. And, as anyone who works in forestry knows, they are rich with wildlife, providing a favourable habitat for many indigenous species.

In recent years, forestry has also been recognised for its ability to redress some of the negative environmental impacts of our energy-intensive society, as well as the emissions from intensive agriculture. Half the weight of timber is carbon, derived from carbon dioxide in the atmosphere, one of the main gases associated with global warming. Catchments planted in trees also have very low nitrogen discharges to ground and surface water, thereby helping to maintain the quality of our streams, rivers and lakes.

These natural advantages of forestry have been enhanced by management systems voluntarily adopted by NZ forest owners.

The 1991 NZ Forest Accord, which was signed by the NZ Forest Owners Association and the main conservation lobby groups, commits members of the Association to meeting standards of environmental practice and social behaviour in excess of those required by law or international treaties. These include a commitment to avoid the destruction of natural forests during the establishment and management of plantations, as well as a commitment to protect valued indigenous species within their estates.

Publication of this Standard corrects a fundamental deficiency in the Accord, in that it is inclusive for Maori, recognising their right to economic self-determination by developing plantation forests.

The voluntary commitment of forest owners to good environmental and social practice is almost unparalleled internationally. It also comes on top of New Zealand's laws covering resource management, conservation, agrichemical use, employment, and occupational health and safety which are among the most stringent in the world.

The NZFOA encourages members to use the National Standard as the basis for sustainable forest management. It provides forest managers with a formal framework for gaining community and market recognition of the fact that their management practices exceed legal requirements. It may also form the basis for an independently audited assurance to customers that wood products from a designated area of forest are well managed.

On the other hand, it must be emphasised that compliance with this Standard is voluntary. It is not intended to imply that the NZFOA has an expectation that forests should be managed in excess of legal requirements. Nor would the Association support the Standard being used as a justification for strengthening the regulatory or legal standards expected of forest owners.

This Standard has been developed in consultation with other stakeholders including Maori, social and environmental interests. Every effort has been made to find an acceptable compromise between conflicting perspectives. The finalised Standard is the work and responsibility of the forest owners and industry bodies that have developed it and does not necessarily represent the views of any other party.

This Standard is subject to periodic review and amendment. A copy of the most current version of the Standard is available on the NZFOA website: www.nzfoa.org.nz.

Background

1. The purpose of this National Standard is to:
 - Ensure New Zealand plantation forest management practices meet society's expectations of an environmentally and socially responsible industry
 - Maintain the New Zealand forest industry's reputation as an international leader in sustainable plantation forest management
 - Assist the promotion of New Zealand forest products by providing a credible framework which demonstrates to international regulators and consumers that the high quality standards claimed for New Zealand forest products can be fully substantiated

2. Those aspects of this Standard subject to regular review and/or requiring a high level of technical input will be managed by the use of standing committees.

An independent Chemical Moderation Committee (CMC) will be appointed from time to time to review Appendix 1 "Agrichemicals" to determine the appropriateness or otherwise, of formulations for inclusion, taking into account:

 - The purpose and economics of use
 - The results of research and investigation into the effects of use and misuse
 - The availability, efficacy and environmental consequences of alternative means of achieving the purpose for which the formulation is used

3. This Standard is intended to build upon, and in some aspects exceed, relevant regulatory requirements as a means of distinguishing and promoting forest products managed in accordance with it. It is not intended that it form the basis of, or justification for, regulatory changes.

Standard 1.0

Compliance with the Law

S1.1 The forest owner shall comply with all national and local statutes, regulations, and legally binding standards and codes of practice.

V1.1.1 There is an up-to-date register of all relevant national and local statutes and regulations.

Relevant pieces of legislation are as follows (www.legislation.govt.nz):

- Biosecurity Act 1993
- Conservation Act 1987
- Crown Forests Asset Act 1989
- Electricity Act 1992 and relevant regulations
- Employment Relations Act 2000
- Historic Places Act 1993
- Fencing Act 1978
- Forest and Rural Fires Act 1977
- Hazardous Substances and New Organisms Act 1996
- Health & Safety in Employment Act 1992
- Holidays Act 1991
- Minimum Wages Act 1985
- Resource Management Act 1991
- Rural Fire District Regulations 1980
- Soil Conservation and Rivers Control Act 1941
- Te Ture Whenua Maori Act 1993
- The Forests Act 1949
- Treaty of Waitangi Act 1975
- Trespass Act 1980
- Wages Protection Act 1983
- Wild Animal Control Act 1977
- Wildlife Act 1953
- Workplace Relations Act 2000

V1.1.2 Compliance with this standard can be achieved by maintaining the capacity to view relevant legislation and a capacity to ensure that the forest owner is aware of changes to legislation.

S1.2 All applicable statutes and regulations shall be implemented through operational guidelines and procedures.

V1.2.1 There is a system for checking if a permit or consent is required, obtaining permits or consents, and communicating local authority rules and consents conditions to an operational level.

V1.2.2 There is a system for checking if historic sites are present and applying for the appropriate authority if necessary.

V1.2.3 There is a system for monitoring compliance with performance standards in local authority consents and rules.

V1.2.4 There is a system for recording correspondence from local authority officials and responding to issues raised.

V1.2.5 There are documented systems for remedial action in the event of non-compliance.

V1.2.6 There is documentation that provides evidence that the above systems are being implemented.

S1.3 All applicable and legally prescribed fees, royalties, taxes and other charges shall be paid.

V1.3.1 There is evidence that required payments have been made.

Standard 2.0

Tenure

S2.1 Long-term tenure and use rights to the land and forest resources shall be clearly defined; documented and legally established.

V2.1.1 Documents are available on request showing the legal status of the land and plantation forest. These may include:

- Crown Forest Licences
- Crown Leases
- Forestry Rights
- Give and take boundary agreements
- Land certificates & titles
- Registered rights such as leases or rights of way
- Unregistered leases or licenses to occupy

S2.2 Legal tenure, access or use rights shall be identified and provided for in operational planning.

V2.2.1 There is a process for consulting with all affected parties with legal rights e.g. easement rights holders about planned forest operations that might affect their activities.

V2.2.2 There is evidence that affected parties have given their free and informed consent to forest operations which affect their use rights, provided that any withholding of consent is neither vexatious nor frivolous.

V2.2.3 There is a written record of previous and on-going disputes over tenure, access (where controlled by forest owner) and use rights.

Standard 3.0

Tāngata Whenua

S3.1 The customary and traditional rights of tāngata whenua to use forest resources (timber and non-timber) shall be identified and provided for.

V3.1.1 There is an understanding and recognition of the principles of the Treaty of Waitangi, particularly regarding rights of tāngata whenua to land, water and traditional resources. Agreed use rights are documented in writing, or defined by clear (on both sides) verbal understandings (minuted as to date and parties to the verbal agreement, and signed by those parties), and are honoured.

V3.1.2 There is a system in place that recognises customary and traditional rights in operational plans.

V3.1.3 There is documentation that the above system is being implemented.

V3.1.4 There are records of all previous and on-going disputes over customary/traditional rights.

S3.2 Tāngata whenua and their representative bodies are identified.

V3.2.1 An up-to-date list of tāngata whenua, and their representative bodies, including contact persons and their contact details is available.

S3.3 Sites of special historic or religious significance requiring protection or specific management shall be provided for in operational plans.

V3.3.1 There is a process for identifying and registering archaeological or wāhi tapu sites. This process should involve the appropriately mandated indigenous representatives and have appropriate security, including silent files for information concerning those sites, which are confidential to the tāngata whenua concerned.

V3.3.2 There is a system for protecting or appropriately managing sites.

V3.3.3 There is documentation that the above system is being implemented.

S3.4 Accidental discovery protocols shall be in place.

V3.4.1 If discovery of a new site occurs during forest operations, the site shall be protected (work stopped, manager notified, and assessment arranged)

and undertaken with appropriately mandated representatives of the tāngata whenua involved).

- V3.4.2 There is documentation of the protocols being implemented.
- V3.4.3 There is a process for training operators and contractors to identify such sites in the field.
- V3.4.4 There is a process in place to allow tāngata whenua access to wāhi tapu.

Standard 4.0

Employees, Contractors and Community Relations

S4.1 The forest owner shall promote local employment and training opportunities.

V4.1.1 A commitment is demonstrated to hiring and contracting locally to the extent feasible in light of local capacity and required workplace skills, cost considerations and any legal obligations.

V4.1.2 There are documents confirming contributions to training programmes (e.g. Forest Industry Training via membership of NZFOA or NZFFA); or financial contributions toward the training programme; or the provision of in-kind support by using staff to provide the training; or the provision of in-kind support by providing the training venue, food etc; or paying contractors while they are being trained; or including a training component in the contractors' hourly rate.

S.4.2 The forest owner shall comply with the Health & Safety in Employment Act 1992 and its associated regulations, and the relevant codes of practice, standards and best practice guidelines.

V4.2.1 A Health and Safety and Management System is in place, which systematically identifies and documents hazards, conducts risk assessments and job safety analyses, outlines preventative measures, emergency procedures and key responsibilities, supported by documentation that the system is being implemented. This is to ensure health and safety requirements are taken into account in the planning, organisation, implementation and supervision of all operations.

V4.2.2 All employees and contractors have access to adequate on-site first aid.

V4.2.3 All employees and contractors have had relevant training in safe working practice, and at least two of every crew hold a current first aid certificate. There are up-to-date records of training, or other documented skills, for employees and contractors.

V4.2.4 All necessary tools, machines, substances and equipment, including appropriate personal protective equipment, are available at the work site and kept in a safe and serviceable condition.

V4.2.5 The contracts for service contractors include a provision to comply with health and safety requirements.

S4.3 The forest owner shall demonstrate intent to accommodate appropriate recreation and other uses of the forest within the constraints of safety, environmental protection and good forest management practice.

V4.3.1 There is a process in place that provides a permit system or other access management method for recreation or other access.

S4.4 The effect on the local community of significant changes in forest operations shall be considered.

V4.4.1 It is demonstrated that significant changes to established practices are managed in a timely and open manner.

V4.4.2 There is a database or other record of stakeholders.

V4.4.3 There is a system for the forest owner to record and respond constructively to community or other stakeholder complaints or requests, provided the complaint is neither vexatious nor frivolous.

Standard 5.0

Biodiversity

S5.1 Conversion of natural forest¹ to plantations or non-forest land uses shall not occur, except in circumstances where conversion entails a very limited portion of the forest management unit.

V5.1.1 The plantation does not occupy land converted after 14 August 1991 from naturally occurring vegetation unless there is evidence that the current manager/owner was not directly or indirectly responsible.

Land can be exempt from compliance with S5.1 where required:

- For compliance with the principles of the Treaty of Waitangi; and;
- To support the economic development of tāngata whenua.

S5.2 Areas of known High Conservation Value (HCV) within the FMU shall be identified in forest management documentation and where possible, legally protected.

V5.2.1 HCV areas within the FMU are identified in forest management documentation.

V5.2.2 Where possible, HCV areas of the FMU are legally protected by the most appropriate means including covenant, subdivision, transfer of ownership or other legally binding instrument.

S5.3 Significant habitats of known populations of threatened and endangered species shall be protected and conserved.

V5.3.1 There is a system in place for determining of the location in/or adjoining the forest of known populations of rare, threatened or endangered species.

V5.3.2 Areas of significant habitat of known populations of rare, threatened or endangered species are documented.

V5.3.3 Training is provided for employees and/or contractors to assist them in recognising and protecting populations of threatened and endangered species known to exist in the forest.

V5.3.4 Known populations of threatened and endangered species within the FMU are managed consistent with the recommendations of NZFOA's Rare and Threatened Species online management guide (see www.nzfoa.org.nz).

¹ See the definition of natural forests in the Appendix

Genetically Modified Organisms

S5.4 **The forest owner shall not establish plantations using any genetically modified vegetative or seed material.**

V5.4.1 There is a system in place to ensure that no GMO material is planted into the natural environment. All genetic material used in plantation establishment will be recorded and available for confidential verification by third party auditors.

Standard 6.0

Water, Soil & Carbon

- S6.1 The forest owner shall comply with all regulatory requirements and forestry industry codes of practice relevant to minimising the adverse effects of forestry operations on water quality.**
- V6.1.1 There is a system for monitoring compliance with regulatory requirements.
- V6.1.2 There is a system for monitoring compliance with Appendix 6.2 'prohibited agrichemicals'.
- V6.1.3 There is documentation that the above systems are being implemented.
- S6.2 In the absence of any obligation under S6.1, the forest owner shall prepare written operational management plans for each work area before work commences; and keep the plans up-to-date. The plans shall be appropriate to the scale and intensity of the operations. The long-term objectives of management, and the means of achieving them, shall be clearly stated.**
- V6.2.1 No commercial planting is undertaken within 5 metres of water bodies, or as stipulated in the relevant forestry industry code of practice, that have permanent water when forested, except where management practices are adopted which ensure the aquatic habitat – including temperature, sediment and nutrient conditions – is maintained. The decision support system for this is documented in the management plan.
- Nothing in S6.2 precludes the harvesting of plantation trees in the riparian zone that were planted prior to the adoption of these standards, except where stipulated by regulation.
- V6.2.2 There is a system in place to document planting boundaries and evidence that the system is being implemented.
- S6.4 No earthworks shall be undertaken within riparian zones except in association with designated stream crossings or for the purpose of maintaining existing roads.**
- V6.4.1 There is a system in place to document the location of earthworks and documentation that the system is being implemented.
- S6.5 Forests shall be managed to maintain or improve overall soil quality.**

V6.5.1 Plantations are routinely monitored for reductions in productivity by monitoring the growth of the crop trees, and any reductions investigated to determine if they relate to changes in soil quality. Monitoring shall be appropriate to the nature and scale of the plantation.

Note: This standard is met if the forest owner is taking part in a research programme that examines long-term site productivity of plantations.

S6.6 Forest owners shall identify water catchment areas and fisheries that may be compromised by management operations.

V6.6.1 Operational procedures include provisions relating to maintenance or enhancement of water catchment areas and fisheries.

Carbon Sequestration

S6.7 The forest owner shall manage the forest to ensure that the biomass representing the net volume of carbon storage contractually committed to by the forest owner is maintained or exceeded.

V6.7.1 Contractual obligations to maintain forest biomass on behalf of a third party as a permanent store of carbon and in offset for an emission of greenhouse gas by that third party are documented.

V6.7.2 There is documentation to demonstrate that the biomass of the FMU or separately designated part of the FMU equals or exceeds the biomass contractually committed to be maintained by the method or methods prescribed by the contract/s.

Standard 7.0

Chemical Use and Forest Protection

S7.1 The forest owner shall show a commitment to the goal of minimisation of agrichemical² use and the promotion of environmentally optimal methods of pest management.

V7.1.1 Documentation to demonstrate commitment and/or participating in research to investigate means to avoid and reduce the volume and/or adverse effect of agrichemical usage is evidence of compliance with S7.1.

S7.2 The forest owner shall not use agrichemicals that are banned by law and when using agrichemicals listed in Appendix 1 'Controlled Agrichemicals' should do so only under the conditions stipulated in that Appendix.

Note 1: The agrichemicals listed in Appendix 1 are monitored and reviewed by an independent Chemical Moderation Committee which sets the conditions for their use.

Note 2: The conditions under which an agrichemical listed in Appendix 1 may be used will not apply in an environmental and/or national emergency such as infestations of insects, weeds, pests and plant diseases, which cannot feasibly be controlled by conventional means. In these cases, the use of agrichemicals may be required by, and must comply with, the law.

V7.2.1 Records of agrichemical use and/or contractual arrangements with spraying contractors are maintained.

V7.2.2 Relevant contracts (e.g. agrichemical application) contain provisions covering the use of agrichemicals, in accordance with NZS8409:2004 *Code of Practice for the Management of Agrichemicals*.

V7.2.3 There are emergency procedures for clean up following agrichemical spillages.

V7.2.4 Documentary evidence of contractual obligations and/or procedures for the training of staff in agrichemical spill response is available. The contractual obligation or procedure will detail:

- Agrichemical storage, sited so that recovery is facilitated in the event of a spill
- The materials and equipment required on-site in the event of a spill

² The term 'agrichemical' means 'agricultural compound' as defined in NZ legislation. Refer to Glossary.

- The procedures for containment and recovery of spilled agrichemicals
- Processes to ensure safe storage, transport and eventual recycling/disposal of recovered agrichemical
- The names of those requiring notification in the event of a spill and means by which they may be contacted

S7.3 There shall be a procedure or contractual obligation for the recovery and recycling or appropriate disposal of used machinery lubricants.

V7.3.1 There is documentation that this procedure is being implemented.

S7.4 The forest owner may use biological control agents approved for use and release under the Hazardous Substances & New Organisms Act.

V7.4.1 There is documentation of the use of biological control agents.

V7.4.2 The use of biological control agents is restricted and any use is in full compliance with the conditions placed on such use or release by the Environmental Risk Management Authority.

S7.5 Field use of genetically modified organisms by the forest owner is prohibited.

S7.6 The forest owner shall comply with any applicable regional pest management strategy.

V7.6.1 There is a procedure to ensure pest control methods comply with any applicable regional pest management strategy and/or have minimal and environmentally acceptable impacts on non-target species.

V7.6.2 There is documentation that this procedure is being implemented.

S7.7 In the absence of a species being identified in an appropriate regional pest management strategy, the forest owner shall remove wildings from adjoining properties before seed production where:

- **The adjoining property owner is agreeable to any wilding control activities required on his or her land; and**
- **Wildings are clearly identified as the progeny of species planted within the plantation area; and**
- **Wilding spread has occurred from forests planted after this Standard becomes operative.**

V7.7.1 There is documentation of any action to remove wildings.

S7.8 Forests shall be managed to protect their health and productivity, including protection against fire, pest and disease.

V7.8.1 Fire plans and/or other documentation are available which set out steps to prevent and suppress fires. This documentation will include:

- Contractors' responsibilities for action
- Contact details for personnel
- Emergency procedures
- Maps which include important information such as:
 - Clear access routes
 - Dams, ponds and other water supplies
 - Equipment and training for fire suppression
 - Firebreaks
 - Helipads
 - Important features requiring protection such as dwellings (including those on adjoining properties), ecological reserves, and infrastructure (power lines etc)
 - Stand identification

V7.8.2 There is correspondence and other evidence of involvement with the Rural Fire Authority.

V7.8.3 There is a system for documenting important records and ensuring compliance with the Forest & Rural Fires Act.

V7.8.4 A forest health surveillance programme is in place.

V7.8.5 Appropriate action is taken in relation to any issues arising from forest health surveillance.

V7.8.6 Pest control is part of an integrated pest management strategy. This strategy will identify:

- The range and number of pests
- Triggers for intervention
- Compliance with any applicable regional pest management strategy
- Methods of intervention

V7.8.7 There is documentation that the strategy is being implemented.

Standard 8.0

Operations

S8.2 A Management Plan – appropriate to the scale and intensity of the operations – shall be written, implemented, and kept up to date.

V8.2.1 There is a Management Plan or overview linking different planning activities and incorporating the following, where relevant:

- Management objectives are described
- Forest resources, environmental limitations, land use and ownership status, socio-economic conditions, and adjacent lands are described
- A rationale for the rate of harvest and species selection is provided
- Provisions for monitoring forest growth and dynamics are described
- Environmental safeguards are described
- Plans for identification and protection of rare, threatened and endangered species are described
- There are maps showing the forest resource base including reserve areas, planned management activities and land ownership
- There is a requirement for the planning of all harvest settings containing sufficient detail, related to the scale and level of operational difficulty, so that environmental and safety risks are identified and addressed
- There is documentation that the Management Plan(s) is (are) being implemented

S8.3 Staff at all levels (including contractors) shall receive training (including the health and safety issues and environmental aspects) to ensure the Management Plan is implemented.

V8.3.1 All activities are supervised and monitored sufficiently to ensure that Management Plan standards and procedures are adequately implemented.

S8.4 The Management Plan shall be reviewed within 5 years from the date of first receiving certification to this standard.

V8.4.1 Staff members with responsibility for the overall compilation and updating of the Management Plan are identified.

V8.4.2 A timetable is adhered to for the periodic revision of the Management Plan.

S8.5 The forest owner shall, while respecting the confidentiality of information, make publicly available a summary of the primary elements of the Management Plan.

V8.5.1 Summary documents are available on request.

S8.6 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.

V8.6.1 The forest owner maintains a Monitoring Plan that describes:

- a. Elements to be monitored
- b. Monitoring indicator(s) for each element
- c. Rationale for the selection of each element and monitoring indicator(s)
- d. Relevant baseline information
- e. Persons responsible for implementing and maintaining monitoring programs are identified
- f. The date of monitoring plan review
- g. The clear link between the Monitoring Plan and the Management Plan

V8.6.2 There is documentation that the Monitoring Plan is being implemented.

S8.7 There shall be a documented procedure for identifying all wood products leaving the forest so the recipient can easily determine the forest of origin.

V8.7.1 There is documentation enabling monitoring and certifying organisations to trace each forest product from its origin, a process known as the 'chain of custody'.

Standard 9.0

Dispute Resolution

S9.1 The forest owner shall employ appropriate mechanisms of dispute resolution to resolve disputes, including legal requirements and internal procedures, where the dispute is not vexatious or frivolous.

V9.1.1 There is a written record of disputes.

V9.1.2 If requested by the tāngata whenua there is to be a hui between tāngata whenua and the manager (or persons with delegated responsibility) to review forest operations.

V9.1.3 The manager holds records of meetings, hui dates, discussions, any agreed actions, and responsibility for implementation of actions.

Glossary

Applicable law	Includes applicable legislation as well as common law principles (e.g. legal principles related to contracts).
Agrichemical	Means <i>agricultural compound</i> as defined in NZ legislation (below).
Agricultural compound	<p>Any substance, mixture of substances, or biological compound, used or intended for use in the direct management of plants and animals, or to be applied to the land, place, or water on or in which the plants and animals are managed, for the purposes of —</p> <ul style="list-style-type: none"> (a) Managing or eradicating pests, including vertebrate pests; or (b) Maintaining, promoting, or regulating plant or animal productivity and performance or reproduction; or (c) Fulfilling special nutritional requirements; or (d) The manipulation, capture, or immobilisation of animals; or (e) Diagnosing the condition of animals; or (f) Preventing or treating conditions of animals; or (g) Enhancing the effectiveness of an agricultural compound used for the treatment of plants and animals; or (h) Marking animals; <p>and includes any veterinary medicine, any substance, mixture of substances, or biological compound used for post-harvest pest control or disinfestation of raw primary produce, and any substance, mixture of substances, or biological compound declared to be an agricultural compound for the purposes of this Act by Order in Council.</p> <p><i>Agricultural Compounds and Veterinary Medicines Act 1997</i></p>
Available	Available means available to the public, so long as the information is not commercially sensitive and is requested during normal working hours, or is accessible on a web site where one exists.
Biodiversity (biological diversity)	The variability among living organisms from all sources including, <i>inter alia</i> , terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems (United Nations Conference on Environment and Development 1992).
Biological control agents	Living organisms used to eliminate or regulate the population of other living organisms.

Consultation	The act of asking advice or opinion from other persons or parties, and of deliberating together over that advice or opinion. When consulting, the consulting person or persons must do so with an open mind and not have carried out any actions that would prevent the opinion or advice being actioned.
Cultural heritage	Includes natural, historic and indigenous aspects and is made up of those things that people value, objects, places, artefacts and concepts such as ideas, beliefs, traditions and behaviours. A cultural heritage site can be a whole region or landscape, or a small area such as a land feature, object or building, which is valued by people for its historical significance, or social significance. A cultural heritage site is a physical link with the past and is important because of that link.
Customary rights	Rights which result from a long series of habitual or customary actions, constantly repeated, which have, by such repetition and uninterrupted acquiescence, acquired the force of a law within a geographical or sociological unit.
Ecosystem	A biological system comprising a community of living organisms and its associated non-living environment, interacting as an ecological unit (<i>Biowhat 2000</i>).
Endangered species	A plant or animal in danger of extinction whose survival is unlikely if the causal factors continue. (The relevant national <i>Red Data Books</i> of New Zealand and The EPBC Act Lists of Australia.)
Exotic	An introduced species not native or endemic to the area in question.
Forest management unit (FMU)	The geographically defined area of plantation land over which the manager has tenure and forest use rights, and includes any set aside areas required to fulfil the requirements of this Standard.
Forest owner	The people (including the owner/s where these are one and the same) responsible for the operational management of the forest resource and of the enterprise, as well as the management system and structure, and planning and field operations.
Genetically modified organism (GMO)	Any organism in which the genes have been modified by using recombinant DNA techniques. For example, GM potatoes or pine trees modified to resist disease or improve their growth rate.
Hapū	A number of whānau (families) with a common ancestor. Sub-tribe (<i>Waitangi Tribunal 1991</i>).

Controlled agrichemicals	Refer to Appendix 1 'Controlled agrichemicals'.
High Conservation Value areas:	<p>Areas of the FMU classified as having critical importance due to their biodiversity, scientific, or landscape values. For the purposes of this definition; "of critical importance" shall mean:</p> <ul style="list-style-type: none"> • Unmodified areas of indigenous vegetation that are rare within the Ecological District; or • Unique nationally significant areas of scientific value not elsewhere represented; or • Refugia of critically endangered indigenous flora and/or fauna.
Hui	Meet; come together.
Indigenous people	On mainland New Zealand, Māori are the indigenous people. Refer to <i>tāngata whenua</i> .
Indigenous (animal or plant species)	A species of flora or fauna that occurs naturally in New Zealand or arrived in New Zealand without human assistance.
Indigenous tree species	Any woody plant which ultimately forms part of the canopy of a naturally occurring forest or any indigenous tree species that attains a diameter at breast height of 30 cm or greater (<i>NZ Forest Accord</i> 1991).
Integrated pest management (IPM)	An ecological method of pest control that relies on a combination of operational approaches to reduce damage to the forest rather than eliminate the pest. Techniques may include the use of natural predators and parasites, genetically resistant hosts, environmental modifications, and when necessary and appropriate, agrichemicals. An important goal of IPM is to minimise environmental impact.
Iwi	A group of hāpu which trace their genealogy (whakapapa) back to a common ancestor. Tribe, people (<i>Waitangi Tribunal</i> , 1991).
Legal or customary tenure or use rights	<p>Legal or customary tenure and use rights include, but are not limited to:</p> <ul style="list-style-type: none"> • Easements and covenants • Public and private rights of way • Statutory tenures (e.g. licences, permits etc. under relevant national or regional legislation) • Customarily or legally permitted uses of Crown land for gathering of non-timber forest products, hunting, fishing etc • Rights or obligations related to construction, rehabilitation or maintenance of roads, tracks or other recreation facilities • Rights to use public footpaths or roads (e.g. to well known landmarks, features or viewpoints) • Water use and stream stewardship rights and obligations (e.g. under the Resource Management Act).

Local	People are considered local where they reside, and organisations are considered local where they are based, within commuting distance by car from the forest management unit, or where they are tāngata whenua, whose lands contain, or are contained within, the forest management unit.
Local laws	Includes all legal norms given by organs of government whose jurisdiction is less than the national level (e.g. Regional and District Councils).
Māori	Refer to <i>Indigenous people</i> .
Native	Refer to <i>Indigenous (animal or plant species)</i> .
Natural areas	Areas of land with a predominant cover of indigenous vegetation, including natural forests as defined below, and naturally occurring water bodies.
Natural forest	<p>(a) Any area of 5 hectares or greater which has an actual or emerging predominance of naturally occurring indigenous tree species of any height. For the purposes of this clause an indigenous tree species is defined as any woody plant which ultimately forms part of the canopy of a naturally occurring forest or any indigenous tree species which attains a diameter at breast height of 30 cm or greater.</p> <p>(b) Any natural indigenous forest vegetation of between 1 and 5 hectares in area with an average canopy height of at least 6 m which is practical to protect.</p> <p>(c) Significant Natural Areas (Areas recognised as significant indigenous vegetation or significant habitats of indigenous fauna) as defined in an operative legislation or District under the Resource Management Act 1991).</p>
Pest	Organisms that damage desired species and ecosystems.
Pesticide	Refer to <i>Agrichemical</i> .
Plantation forest	Areas of land predominantly covered in trees grown for cropping and managed primarily for commercial purposes and excluding natural forests as defined here.
Protected Natural Area	A legally protected area, characterised by indigenous species or ecosystems in which the principal purpose of management is retention of the natural state. The Protected Natural Areas Programme assists the Crown to meet its requirements under section 3(1)b of the Reserves Act, 1977.

Protection	In relation to an ecosystem, plant or animal, means to maintain, as far as is practicable, in its current state.
Rare	Species with small world populations that are not at present endangered or vulnerable, but are at risk (<i>The Red Data Books of Australia and New Zealand</i> .)
Recommended area for protection	A place identified as a priority for protection because it contains the best example(s) of its type or class of natural ecosystem and/or landscape in an ecological district (<i>The New Zealand Protected Natural Areas Programme</i> , Kelly and Park, 1986).
Reserve area	A reserve is an area within a forest management unit in which extractive management is specifically excluded. This does not preclude cultural harvest or a one-off commercial harvest of exotic species as part of a restoration programme.
Resource consent	As defined in section 87 of the New Zealand Resource Management Act 1991.
Riparian	An area with a maximum width of 10 metres immediately adjacent to a perennial water body managed primarily for the maintenance of water quality.
Significant natural area	Generally, but not constrained to being subject to one or more of the following: <ul style="list-style-type: none"> • An area that supports an indigenous species that is rare within its ecological district • Area is one of the best examples of an association of species typical of its ecological district • The area supports an association of species rare in the ecological district • The area is little modified and comprises a predominantly intact indigenous system not affected in a major way by weed or pest species • An area connected to other significant natural areas in a way that makes a major contribution to the value or natural functioning of connected significant natural areas
Silent file information	A file reference that directs the searcher to the particular hapū or whānau that holds a particular piece of information, e.g. whether a proposed track or roadway would pass through a wāhi tapu.
Taonga	Treasured possessions; includes both tangible and intangible treasures.

Tāngata whenua	Māori for 'people of the land'. It refers to the people who have customary authority (mana whenua) over an area of land. It may refer to a hapū (sub-tribe) or iwi (tribe). An individual may also describe himself or herself as tāngata whenua in relationship to a particular place.
Tenure	The bundle of rights and duties of ownership, holding, access and/or usage of a particular land unit (landholding) and/or the associated resources therein (such as trees, plant species, water, minerals etc), as recognised by legal statutes or customary practice.
Threatened species	A species or community that is vulnerable, endangered or presumed extinct.
Wāhi tapu	Place sacred to Maori in the traditional, spiritual, religious, ritual or mythological sense (<i>Historic Places Act 1993</i>).
Weed	Plant growing in a location where it is undesired.
Whānau	A family (nuclear or extended).
Wildings	Unwanted natural regeneration of introduced tree species outside the forest management unit.

Appendix 1

Controlled agrichemicals²

All agrichemicals banned by law in New Zealand are prohibited from use.

Agrichemical use shall be in accordance with applicable regulatory requirements. Efforts shall be made to reduce the intensity and/or frequency of agrichemical use to below that which is allowed by regulation where it is efficacious and economic to do so.

Use of controlled agrichemical formulations listed below (refer Tables 1 & 2) within forests managed to this Standard shall be limited to the specified formulation, application rate and other conditions of use. Conditions of use can include prohibition.

Modification of the list of controlled agrichemical formulations is at the discretion of the Chemical Moderation Committee (CMC).

The CMC will be appointed from time to time by the NZ Forest Owners Association. It will comprise four members representative of environmental, social, economic and Māori interests who also have expertise relevant to agrichemical use in plantation forests and/or expertise in those aspects of forest management impacted by agrichemical use.

The CMC shall meet as and when required to consider requests for inclusion or modification of either the agrichemicals listed or their conditions of use. For the avoidance of doubt the CMC:

- Will consider no more than three requests in any calendar year for changes to the agrichemicals listed in this Appendix
- Retains the discretion to prioritise the requests it receives
- Cannot list a formulation or condition of use which would breach a regulatory obligation
- Will make decisions with reference to S7.1
- Will, within 6 months of making a decision to modify the conditions of use applying to the use of an agrichemical, amend Table 1 or Table 2 as appropriate
- Will make decisions to modify the list of controlled agrichemicals by consensus. Where consensus is not achieved the list will not be modified.

Forests managed to comply with the National Standard have 12 months from the date of publication of a change to the agrichemicals listed in this Appendix to comply with that change.

² The term 'agrichemical' means 'agricultural compound' as defined in NZ legislation. Refer to Glossary.

Table 1

The following agrichemicals have been reviewed by the Chemical Moderation Committee and are prohibited for use in the FMU.

Name of agrichemical	Reason for prohibition
All agrichemicals banned by law in New Zealand.	It is illegal to use these agrichemicals.
All agrichemicals identified as Extremely Hazardous (Class 1A) or Highly Hazardous (Class 1B) under the WHO Recommended Classification of Pesticides by Hazard (ISBN 92 4 154663 8) unless provided by way of derogation in Table 2 below.	Eco-toxicity and/or persistence in the environment.

Table 2

The following agrichemicals have been reviewed by the Chemical Moderation Committee and have been designated suitable for use within the FMU subject to the conditions stipulated.

Name of agrichemical	Conditions for controlled use
Brodifacoum	Agrichemical is used in accordance with all regulatory requirements.
Sodium cyanide	Agrichemical is used in accordance with all regulatory requirements.
Sodium fluoracetate (1080)	Agrichemical is used in accordance with all regulatory requirements.
Warfarin	Agrichemical is used in accordance with all regulatory requirements.

Note:

Agrichemicals listed in Appendix 1 may be used in an environmental and/or national emergency such as infestations of insects, weeds, pests and plant diseases which cannot feasibly be controlled by conventional means. In these cases, the use of agrichemicals may be required by, and must comply with, the law.

+ + +