



Te Uru Rākau
Forestry New Zealand

Climate Change Forestry Sector Regulations 2008

Proposed amendments

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1 Have your say

This publication is available on the Ministry for Primary Industries website at <https://www.mpi.govt.nz/news-and-resources/consultations>

Its purpose is to seek your feedback on proposed changes to the Climate Change (Forestry Sector) Regulations 2008, which would enable the New Zealand Emissions Trading Scheme to operate more effectively for forestry.

For the changes to take effect, the Regulations would need to be amended.

This consultation has been approved by the Minister for Climate Change Issues. Consultation runs from 31 May to 3 July 2018.

2 Making your submission

Email your feedback on the consultation document by 5 pm on 3 July 2018 to climatechange@mpi.govt.nz

Make sure you include in your submission:

- the title of the consultation document in the subject line of your email
- your name and title (if applicable)
- your organisation's name (if applicable)
- your address.

While we prefer email, you can send your submission by post to:

Submission on Forestry Regulations
Spatial, Forestry & Land Management
Ministry for Primary Industries
PO Box 2526
Wellington 6140
New Zealand

3 Submissions are public information

Any submission you make becomes public information. Anyone can ask for copies of all submissions under the Official Information Act 1982 (OIA). The OIA says we must make the information available unless we have a good reason for withholding it. You can find those grounds in sections 6 and 9 of the OIA. Tell us if you think there are grounds to withhold specific information in your submission. Reasons might include, it's commercially sensitive or it's personal information. However, any decision MPI makes to withhold information can be reviewed by the Ombudsman, who may require the information to be released.

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4 Background

The Climate Change Response Act 2002 (the Act) was amended in 2008 to introduce the New Zealand Emissions Trading Scheme (ETS) as the country's primary policy to address climate change.

The Climate Change (Forestry Sector) Regulations 2008 (the Regulations) contain most of the forest-related regulations that support the Act. They have been updated six times since their introduction, and were last amended in September 2016.

Forestry was the first sector included in the ETS, with the definition of two 'categories' of forest land:

- (i) Pre-1990: forest land that was first established before 1 January 1990 and which was predominantly exotic species on 31 December 2007¹.
- (ii) Post-1989: forest land established after 31 December 1989 on previously non-forest land, or pre-1990 forest land that was subsequently deforested and met any ETS obligations.

The owners of pre-1990 forest land are liable to surrender eligible units² if that land is deforested.

Owners of post-1989 forest land may elect to join the ETS and earn NZUs for the carbon stored as their forests grow, but once registered must also in most cases surrender units if the carbon stock decreases³.

Post-1989 forestry participants work out their entitlement to receive units, or obligation to surrender units, using methodology specified in the Regulations, and either carbon look-up tables contained in the Regulations or participant-specific carbon look-up tables. The latter are derived from data collected from a participant's forest under the Field Measurement Approach (FMA) which is also specified in the Regulations.

The FMA applies to all post-1989 forest participants with an area of 100 hectares or more registered in the ETS. It was designed to reflect what is happening in a specific participant's forest, and contains rules about how and when carbon stock is measured. Although it estimates carbon stock more accurately, and may substantially benefit participants with forests that have above-average carbon stock, it also creates additional complexity and cost for participants.

Under the Act, all post-1989 participants are obliged to submit a Mandatory Emissions Return at the beginning of the five-yearly emissions return period. The current period began 1 January 2018 with emissions returns due between 1 January and 30 June 2018. These emission returns detail the carbon stock change on their forest land for that period, and the number of units that a participant is entitled to or must surrender. Large areas of forest were harvested in this emissions return period, so many new provisions in the Act and the Regulations that apply at the time of harvesting and replanting are being used and tested for the first time.

Since the Regulations were last amended, 12 proposed changes have been identified which will:

¹ These descriptions are not the full definitions. The Act contains more detail, and should be used for any interpretation.

² The currency of the ETS. Either New Zealand Units (NZUs) or NZ-originated Assigned Amount Units (AAUs), each unit is equivalent to one tonne of carbon dioxide for surrender purposes.

³ The surrender is capped at the amount of units received.

- (i) address gaps and weaknesses in the current carbon accounting methodology, and correct other technical issues that have become apparent to MPI and participants since the regulations were last amended;
- (ii) simplify the operation of the forestry components of the ETS, without running counter to longer term solutions (that require legislative change); and
- (iii) reduce fiscal and reputational risk to the Crown.

Fiscal risk arises from the potential incorrect reporting of carbon stock change due to gaps in the current Regulations, and consequent assessment of units to be issued, or required to be surrendered, not matching the change in carbon stock on those lands.

The integrity of the ETS is linked to the ability of participants to correctly undertake their emissions returns and transfer, repay or surrender the correct number of units. There is a reputational risk to the Crown if there is undue complexity in the ETS for forestry that increases the likelihood of participant error or non-compliance, or the Crown inaccurately transferring or requiring the surrender of units. It is important that the Crown allocates units that represent real carbon storage in the forests.

These amendments, covered in more depth in the next section, relate to:

#	Issue
Significant proposals	
1	Deforestation of post-1989 forest land between rotations
2	Reduce the need to update participant-specific carbon look-up tables
3	Allow extensions of time to collect and use FMA information
Minor & Technical proposals	
4	Simplify carbon accounting
5	Areas less than one hectare
6	More detailed notices on land titles for post-1989 forest land
7	Improve the rounding rules for emissions and removals
8	Simpler rules for mixed species and/or mixed ages
9	Calculating emissions after clearing of post-1989 forest land
10	Field Measurement Approach plot re-allocation after clearing
11	Notification of status of pre-1990 offsetting forest land
12	Pre-1990 offsetting forest carbon stock calculation

Interaction between these proposals and the outcomes of the 2015/16 review of the New Zealand Emissions Trading Scheme

The changes outlined in this document relate only to the forestry sector regulations. As outlined above, they will address deficiencies with the current regulations, simplify processes and reduce risk. These changes are independent of other policy changes that may occur following the NZ ETS review, which we expect will be consulted on later in 2018.

Officials from MPI and the Ministry for the Environment (MfE) are developing advice to Ministers on other potential improvements to the NZ ETS concurrently and these consist of:

- Possible changes to the NZ ETS that will be consulted on later in 2018. These changes include a “forestry package”, which is being developed separately to the annual update of the forestry sector regulations considered here. This package of advice includes developing options to reduce the complexity of current operational ETS settings, and to look at potentially introducing a new ‘averaging’ accounting approach for post-1989 forests. It also includes advice on aligning the administration of the Permanent Forest Sink Initiative with the Act.

The decision to provide advice on these matters emerged from the conclusion of Stage Two of the ETS review in July 2017. At that time, Cabinet noted that officials would report back in mid-2018 with, among other things, advice on this package of forestry accounting and operational improvements.

- The MfE are also updating other sets of climate change regulations that relate to other sectors.

5 Overview of Proposed Changes

5.1 SIGNIFICANT PROPOSALS

5.1.1 Deforestation of post-1989 forest land between rotations

When calculating opening and closing carbon stock in an emissions return period for registered post-1989 forest land that is harvested and replanted, participants must include the carbon stock in the post-harvest residual wood in their calculations. The residual wood (e.g. stumps and branches) is assumed to decay, linearly, in the 10-year period following harvesting. The carbon stock per hectare is the sum of these residuals and the growth of newly replanted forest.

However participants may deforest the forest land after harvest by, for example, declaring an intent to deforest and carrying out minimal conversion operations, or leaving the land unstocked for over four years. In these cases, they must remove the land from the ETS and surrender the units that have been issued to the affected land. This surrender obligation is in most cases the same number of units they would have had to surrender if the land remained registered, as the surrender obligation is capped by the net units issued to that area.

Under the status-quo, if an area of harvested post-1989 forest land is considered deforested under the present definitions in the Act and is subsequently put back into forest, the new forest land can re-join the ETS without consideration of the emissions from decay of harvest residues that remain (i.e. they will re-enter and earn units as their new forest sequesters carbon, but the decay of harvest residues from the earlier rotation will not be considered). In contrast, if a participant had harvested and replanted, then emissions from the decay of residues would have been netted off through a lower carbon stock change in the second rotation.

Avoiding accounting of emissions from continued decay of harvest residues in an area of re-registered forest land is counter to the intent of the policy, and inconsistent with the treatment of participants who harvest and then replant while remaining in the ETS. There is an associated fiscal risk to the Crown from allocating units to participants that do not accurately reflect changes in the carbon stock on that land.

Furthermore, New Zealand would be required to report this deforestation in its reporting against our Nationally Determined Contribution (2030 emissions reduction target) under the Paris Agreement. This would increase net emissions and make it more expensive to meet the target.

Two alternatives to this regulation change were identified, both requiring legislative change:

- i. Amend the definition of post-1989 forest in the Act to ensure that areas which have been previously deforested must surrender units for the full carbon stock change in the previous forest cover before they can again be registered in the NZ ETS. This option would impose a significant administrative burden on the owners of land in perpetuity, and would reduce land use flexibility. It would also have retrospective implications as

over 100,000ha of forest land has been registered as post-1989 forest land and subsequently deregistered.

- ii. Alter sections 190 and 191 of the Act to limit its application in this deforestation situation. This is not the preferred approach as it would be challenging to only address inter-rotational deforestation, while preserving the use, and value, of these sections for other post-1989 ETS participants in other situations, e.g. deregistration of post-1989 forest land prior to sale.

Proposed change: It is proposed to remedy this situation by amending the Regulations so that post-harvest residual biomass from a prior rotation is always recognised when post-1989 forest land is registered, and the carbon stock change reported takes this into account.

Reason for change: to remove the opportunity for post-1989 forestry participants to avoid reporting emissions, and ensure to eliminate the associated fiscal risk to the Crown.

5.1.2 Reduce the need to update participant-specific carbon look-up tables

Post-1989 forestry participants may voluntarily submit emission returns at intervals of one or more years, but must submit a mandatory return under certain circumstances (e.g. transmission of interest).

All post-1989 forestry participants must submit a return once every five years for the preceding 5-year period (at the end of the Mandatory Emissions Return Period⁴). The mandatory 5-year return uses the carbon look-up tables that are current at the end of the period – these may be different to those used for voluntary returns during the period⁵. The carbon stock change from the mandatory return is reconciled against the net units (if any) issued during the period, and further units are issued or surrendered as applicable.

The present Regulations are aligned with the principle in the legislation that mandatory emissions returns, due to their reconciliatory nature, should be the most accurate. As such, for FMA participants⁶, the Regulations require that an up-to-date set of participant-specific carbon tables be used when making any type of mandatory emissions return.

This includes not only the mandatory return for the 5-yearly mandatory emissions return period, but also other returns requiring a mandatory emissions return. These include:

- when removing land from the ETS (when this involves part of a Carbon Accounting Area), or
- when a transmission of interest occurs (such as the sale of land to another ETS participant, significantly changing trustees, or granting of a forestry right or lease over forest land registered in the ETS⁷).

The purpose of the 5-yearly mandatory emissions return is to align with the Crown's accounting and reporting obligations under international commitments to mitigate climate change. Strictly up-to-date tables are not as necessary when submitting mandatory emissions in response to transferring an interest in post-1989 forestry land or removing it from the ETS.

⁴ Refer section 189(9)

⁵ For example if land has been added to or removed from the registered area.

⁶ Field Measurement Approach (FMA) participants are those who have registered 100 hectares or more of post-1989 forest. They must establish sample plots in their forest, collect and supply the data to MPI who uses it to construct participant-specific carbon look-up tables which they must use for their emission returns.

⁷ Refer section 192 of the Act for the definitions.

We propose that the latest set of participant-specific carbon tables, which will be based on the most recent data, should suffice.

Some FMA participants may wish to obtain a set of up-to-date tables before completing mandatory emissions returns associated with removing forest land. This is in order to more exactly specify their obligations or entitlements just prior to the date their land holding changes – for reasons of certainty, or as an input to conditions set in sale and purchase agreements. The Regulations currently allow FMA participants to update their carbon tables at any time. The proposed changes would not remove this right. The proposed changes would, however, significantly reduce FMA participants' compliance costs and MPI's administration costs, in those instances where the participant decides an updated set of participant-specific carbon tables is not warranted.

From the Crown's perspective, it will mean that a mandatory emissions return made within a mandatory emissions return period may not be as accurate as at present.

Proposed change: Amend the Regulations so that for FMA participants their participant-specific carbon tables must be updated only for the 5-yearly mandatory emissions return.

For any other mandatory emissions return (as with voluntary returns currently), it is proposed that it be voluntary for FMA participants to update their tables before making the return – including for the returns associated with removal of part of a Carbon Accounting Area, or with a transmitted interest.

Reason: to simplify compliance with the Regulations for participants wishing to remove part of, or transmit an interest in, their registered post-1989 forest land.

5.1.3 Allow extensions of time to collect and use FMA information

FMA participants must collect data from sample plots in their forest at least once in each 5-year mandatory emissions return period. The data is submitted to MPI for use in constructing updated participant-specific carbon look-up tables, which must be used to complete the 5-yearly mandatory emissions return.

The Regulations currently allow participants to obtain a waiver from using participant-specific tables for a mandatory emissions return, in a narrow range of circumstances. The waiver allows either the use of a participant-specific table from a prior mandatory emissions return period if an applicable table exists, or otherwise the relevant default look-up table from the Regulations, to complete their mandatory emissions return.

However, rather than seeking this sort of waiver, circumstances can arise in which an FMA participant wishes to take advantage of the FMA with up-to-date FMA information, but are unable to do so because there is insufficient time to complete FMA requirements or because there are simply no inventory providers that have capacity to do the work. The present Regulations, however, do not provide for a waiver to allow FMA participants to complete collection of FMA information after the end of a mandatory emissions return period.

Proposed change: Amend the Regulations to allow a waiver of the deadline for collecting some or all of a participant's FMA data. Other obligations, e.g. submitting a mandatory emissions return within six months of the end of the period, would remain.

Reason: This explicit provision would allow the waiver provisions to better recognise the circumstances beyond a participant's control that may prevent them from completing FMA requirements. If a waiver under this proposal is granted, it will provide an approach that is more equitable (by ensuring FMA requirements are completed) and provides for more

accurate allocation of units. Only in very exceptional, and unanticipated, circumstances would use of the default carbon tables by FMA participants then be required, as a last resort.

5.2 MINOR AND TECHNICAL PROPOSALS

5.2.1 Simplify carbon accounting

The definition of a sub-area in the Regulations in relation to post-1989 forest land currently combines criteria relating both to the growing trees, and to the presence of residual stumps/roots from a previously harvested forest on the same area. This results in overly large and complicated sets of sub-areas – given calculation of carbon stocks is required to be completed quite separately for growing trees and harvest residues.

Proposed change: Amend the Regulations to clarify that sub-areas are determined separately for the area with growing trees and those with residual stumps/roots from a previously harvested forest, for the purpose of carbon stock calculation.

Reason: The oldest areas of post-1989 forest land are beginning to be harvested and if no action is taken, the current complicated calculations of carbon stock after harvesting are highly likely to result in participants making inadvertent errors and facing penalties. The proposed change will simplify these calculations, and reduce the risk of participant non-compliance and/or inaccurate returns being filed.

5.2.2 Areas less than one hectare

The calculation of carbon stocks for areas of pre-1990 or post-1989 forest land that are less than one hectare was not anticipated for all circumstances when the Regulations were developed, and is therefore not well defined in the Regulations in some unusual cases. However, circumstances such as the need to calculate deforestation liabilities for small sub-hectare areas have frequently arisen in the case of pre-1990 forest land. Simplification of rules for calculating carbon stocks in post-1989 forests will also be possible if treatment of sub-hectare areas is formalised.

Currently the approach MPI applies is to first separate out all areas which may be calculated on the basis of being one hectare or more. Any remaining sub-hectare fragments are then treated as if they were areas of one hectare or more. This is consistent with the policy objective that carbon stock change is assessed on all of a participant's registered area.

Proposed change: to amend the Regulations so it is clear that remnant sub-hectare fragments should be treated as if they were areas of one hectare or more for the purposes of calculating carbon stock changes. A lower limit for consideration of 0.1 ha will be specified to avoid overly complex calculations with little impact.

Reason: If there is no change, the lack of clarity and consistency in the Regulations would remain. Not changing this makes it difficult for post-1989 forest owners to calculate their entitlements or obligations precisely. For pre-1990 forest, there would be a cost to the Crown if deforested sub-hectare areas are ignored, as participant surrender obligations would not match the actual area deforested and which the Crown reports internationally. The proposed change will also simplify cases in which there are multiple sub-hectare areas comprising

different forest species or ages to be accounted. At present these are subject to relatively complicated accounting rules, which require the predominant species and age to be determined on a basal-area⁸ basis, sometimes hectare-by-hectare.

5.2.3 More detailed notices on land titles for post-1989 forest land

Under the Act, ETS participation transfers automatically when a transfer or transmission of land (collectively a transmission of interest) occurs in respect of an area of registered post-1989 forest land. This commonly occurs as the result of a change in land ownership, a transfer of a forestry right or lease, or a change in the composition of the trustees of a trust in which the land is vested. The existing participant is the transferor and the new participant is the transferee.

A transmission of interest triggers obligations under the Act. Both the transferor and transferee are required to notify MPI of the transmission, and the transferor must submit an associated emissions return within 20 working days. This enables MPI to determine the transferor's NZU obligations or entitlements up to the date of transfer and update the register of participants.

The problem is that the rate of compliance with the obligation to notify MPI of transmissions and submit the associated emissions return within 20 working days is very low. Although a land status notice is registered on the land titles of all land containing registered post-1989 forest land, its wording does not specifically draw attention to these notification obligations.

In April 2017 MPI investigated the transmissions which MPI had been notified of (247 in total⁹), and only 3 had notified MPI within 20 working days. At that date MPI had 88 outstanding cases where either a transmission was known to have occurred but hadn't been notified, or where MPI was still resolving the ETS implications of the transmission of interest. In some cases multiple non-notified transmissions have occurred for the same registered area. Other transmissions have probably occurred that have yet to be identified.

Proposed change: Amend the Regulations to require all notifications of status of forest land made after the Regulations to more explicitly record obligations when post-1989 forest land is transferred, and in particular to include a statement that the participant must comply with s192 of the Act.

Reason: to improve the rate of compliance with the transmission of interest obligations under the Act and enable forest land owners to better understand their ETS obligations.

5.2.4 Improve the rounding rules for emissions and removals

Regulation 5(1) sets out rules for rounding areas in hectares where area data is collected for calculating emissions or removals. Regulations 5(2) and (3) set out rules for rounding tonnes of emissions or removals. However, this regulation is often misunderstood leading to incorrect returns. A more specific rounding process, i.e. more like regulation 5(1), will improve compliance.

Proposed change: It is proposed to amend regulations 5(2) and (3) to make them clearer.

Reason: To provide more specific rules for rounding tonnes of emissions or removals.

⁸ From regulation 4: basal area means the cross-sectional area of the stem of a tree measured over bark at a point that is 1.4 metres from ground level on the uphill side of the tree and expressed in square metres

⁹ There were 2043 post-1989 forestry participants at this date.

5.2.5 Simpler rules for forests with mixed forest species and/or mixed ages

Background

Areas of forest with trees from different forest types¹⁰ and/or ages occur relatively infrequently, but when present the complexity of the present rules makes practical carbon assessment very costly. Changes to simplify the present definitions of forest type and the methodology for determining tree age are therefore proposed.

Regulations 16 and 22 prescribe how the critical parameters of forest type and tree age are to be determined for use in preparing emissions returns¹¹. These regulations can become difficult and costly to apply when the age or species of exotic trees¹² varies either spatially or temporally, or when mixtures of trees with different species and/or ages are present. In these cases, the regulations may sometimes require a hectare-by-hectare assessment of forest type and age.

At present, the age of exotic trees that have been established in different years must be determined as the basal-area-weighted¹³ average – on a hectare-by-hectare basis if the proportion of trees with different ages varies spatially. When exotic trees from multiple species and with mixed ages are present, the age is taken as that of the predominant species, the single species with the largest basal area. This again must be determined on a hectare-by-hectare basis if the age of the trees that are the predominant species varies spatially. Feedback from participants suggests there is a very low degree of compliance with these rules.

MPI propose to simplify accounting for exotic forests with mixed species and/or ages, by introducing the same simplified rules that presently apply to indigenous species. Further changes are proposed to simplify dealing with any change in species composition over time, which will largely avoid the need to assess basal area – especially on a hectare-by-hectare basis. Although the proposed new rules would result in some minor loss of accuracy when assessing carbon stocks in mixed species/age forests, the originally intended accuracy is not currently being achieved as the existing methodology is too costly and complex to apply.

The changes proposed will only affect a small percentage of the forest land registered in the ETS, although the present compliance cost for participants with such areas is disproportionately high if they are following the existing regulations precisely.

Proposed changes:

Introduce the ability to calculate carbon stock changes based on the ‘Intended predominant forest species’

The present determination of forest type is based on the predominant species – the single species with the largest basal area per hectare – at the time that carbon stocks must be calculated. It is proposed to instead base determination of forest type on the predominant

¹⁰ The ETS groups species into forest types for the purposes of carbon accounting. While a forest may consist of different species, it may still only be one forest type for ETS reporting purposes.

¹¹ The same parameters are required for either the default carbon tables in the regulations, or participant-specific carbon tables issued under the Field measurement Approach (FMA).

¹² Simpler rules are used for indigenous species, which avoid these complexities.

¹³ Basal area per hectare is a commonly used parameter in forestry that is an indicator of timber volume. It is the sum of the cross-sectional areas of all the trees in a hectare. For ease of measurement, tree diameters are measured at 1.4 m above ground.

forest species expected to have the largest basal area per hectare at the time of commencement of harvest, or at maturity if a non-harvest/permanent forest.

Introduction of an intended predominant species definition shifts the focus of determining forest type from what is the present state of a forest land area, which may change over time or across the forest landscape as the forest initially develops, to the state to be achieved through intended management of the forest. In simple planted forest situations comprising a single species, which comprise the large majority of forest land in the ETS, the intended predominant species and the predominant species at the time of an emissions return will be the same. However, in the more complex forest situations that both participants and MPI find problematic, its use would offer a number of important advantages:

- (i) it would be much simpler to define the forest type of areas with mixed species, or when the initial and final species with the largest basal area change over time or spatially;
- (ii) determining forest type would rarely, if ever, require costly measurements of basal area, as the intended final state of a forest is generally sufficiently apparent for the species which will have the largest basal area to be obvious (and it would also be the same over wide areas, avoiding the need for a hectare-by-hectare assessment); and
- (iii) having been defined, the forest type information for an area of forest could be expected to remain unchanged through at least a forest rotation (c. 25 – 30 years, or longer for some species) – reducing compliance cost, and simplifying record keeping and preparation of emissions returns¹⁴.

The operational utility of basing forest type on the *intended predominant forest species* has already been proven as a simplifying approach to carbon stock assessment, in its use under the FMA.

Further, if the focus of the regulations is on the *intended predominant forest species*, it would simplify the determination of age in more complex situations as discussed in the next section.

Average age of trees with mixed species or mixed ages

It is proposed to provide a simpler and more practical approach to determine the carbon-critical parameters of forest type and tree age for mixed species/age forests, which takes a more consistent approach across the range of forest circumstances typically encountered in the forests in the ETS.

- (i) for forest land areas with mixed forest species, the calculation of age would be based on the age of establishment of the *intended predominant forest species* – because in the large majority of cases the intended predominant forest type will be the most relevant for carbon sequestration over the longest period; and
- (ii) if the *intended predominant forest species* comprises trees of more than a single age, all trees present shall be considered to have the age of the oldest of those trees – a simple approach already available for regenerated indigenous forest under the Regulations.

¹⁴ In introducing an intended predominant forest species it should be noted that for regenerating indigenous forest, the individual species that will achieve the largest basal area at maturity may not be known with certainty. Fortunately, this is not important at present, as it is unlikely other than a single carbon stock table will be used to represent all indigenous forest species for the foreseeable future. As such, it does not actually matter if regeneration conditions for indigenous forest land are such that the species with the largest basal area does actually change over time (i.e. the same carbon table will continue to be used).

Determining the age of naturally regenerated trees

The present Regulations also use different approximations to determine the age of exotic and indigenous trees that have regenerated naturally, which causes further confusion for ETS participants. Under the rules of the ETS now in place, the registered area of regenerating exotic trees will remain very small given that trees with a significant wilding risk are not able to be registered in the ETS.

Allowing a less expensive approach to age determination for regenerated exotic trees is expected to offer overall benefits to participants. It would also provide consistency between treatment of exotic and indigenous trees, simplifying the ETS for participants.

This would be accomplished by the changes detailed under *Average age of trees with mixed species or mixed ages*.

5.2.6 Calculating emissions after clearing post-1989 forest land

The post-1989 forest land carbon stock change methodology in Regulation 21(3) does not provide for the calculation of emissions from the decay of residual wood and roots when trees are cleared in a prior emissions return period. The definition of the term T_{SC} currently does not cover both opening and closing carbon stocks, if applicable.

Without amendment, emissions cannot be calculated correctly if trees are cleared in a prior emissions return period. In time this could affect most forestry participants.

Proposed change: Amend the Regulations to calculate carbon stock change from decay of residual wood and roots regardless of when in an emissions return period the trees were cleared, or emissions are calculated.

Reason: To correct the methodology so that it provides for the correct calculation of carbon stock and is in line with the original policy intent that the decay of residuals from a previous harvest is accounted for.

5.2.7 Field Measurement Approach – allocation of sample plots

There is no provision in the Regulations for FMA participants to reallocate plots to retain a distribution of permanent sample plots that satisfies the regulatory condition that the distribution should be “as uniform as practicable”, in situations where the *intended predominant forest species* (and thus the Forest Class) may change from Exotic to Indigenous or vice versa when the land is cleared and replanted/regenerated. Regulation 22F currently deals with reallocation of sample plots, and should be amended to include reallocation when the Forest Class of an area changes.

Currently, the sampling intensity, by not being uniform, may result in biased estimates of carbon stocks. Sampling intensity may also be higher than necessary (unduly expensive for participants) or too low (statistically inadequate) in some cases. At present, however, a change in forest species after harvest sufficient to alter the Forest Class of land occurs very infrequently, so the foregoing situations have yet to occur in any number.

Proposed change: Amend the Regulations to require reassessment of the required number of permanent sample plots if the Forest Class of an area is changed.

Reason: to remedy this gap in the Regulations and ensure that plot sampling intensity is consistently applied and appropriate for the Forest Class of an area.

5.2.8 Notification of status of pre-1990 offsetting forest land

The Act requires the land status notices to be registered on land titles in certain circumstances. This includes land that has been designated 'pre-1990 offsetting forest land'. Schedule 3 of the Regulations prescribes the notification forms but does not include a land classification for 'pre-1990 offsetting forest land'.

Without the form containing the land classification of 'pre-1990 offsetting forest land', landowners may be unaware of their obligations under the Act in the absence of a registered notice clearly outlining the status of the forest land. While it may be possible to use regulation 10(3)b¹⁵ to include this information, this type of notice will be required relatively often so a standard reference is more beneficial.

Proposed change: It is proposed to amend Forms 1 and 2 in Schedule 3 of the Regulations to specify a fourth class of land: 'pre-1990 offsetting forest land under the Climate Change Response Act 2002'.

Reason: to remedy this gap in the Regulations and ensure that land status notices can be registered for pre-1990 offsetting forest land.

5.2.9 Pre-1990 offsetting forest carbon calculation

The rules for applying look-up tables in the Regulations are not sufficiently well defined for the purpose of calculating the carbon stock of pre-1990 offsetting forest land or offsetting forest land in all situations. Also, a definition of forest type is required for use in calculating carbon stocks for offsetting cases. It is not explicit that the present definitions of forest type include offsetting cases, and the definition is also duplicated under both regulations 16 and 22. A single definition of forest type applying to all forest activities, located in the interpretation section of the regulations where it would be expected, is preferable.

Proposed change: It is proposed to ensure that the existing rules for applying carbon lookup tables also explicitly apply to pre-1990 offsetting forest land and offsetting forest land; and to place a single definition of forest type in the interpretation section of the Regulations that covers pre-1990 forest land, pre-1990 offsetting forest land, offsetting forest land¹⁶ and post-1989 forest land; and base it on the *intended predominant forest species* (as proposed in para 6.2.5 above).

Reason: to remedy several minor gaps in the Regulations relating to carbon stock calculations for offsetting cases, and to ensure that the Regulations contain a clear and consistent definition for forest type.

¹⁵ A notice may contain any additional information that the EPA thinks fit;

¹⁶ Pre-1990 offsetting forest land and Offsetting forest land are defined in s4 of the Act.

6 How to make a submission

MPI would like to hear your views on the proposed changes to the Regulations listed above, particularly if you are a current participant. For each proposed change, MPI would especially like feedback on:

- Would the proposed changes create any relevant problems, alternatives or impacts (positive or negative) that MPI should consider?
- Do you consider the proposed changes to be beneficial or not?
- Do you consider the proposals would simplify your participation in the ETS?

All other comments on the proposed changes are also welcome.