Carbon Credits (Carbon Farming Initiative—Beef Cattle Herd Management) Methodology Determination 2015

made under 106(1) of the

Carbon Credits (Carbon Farming Initiative) Act 2011

Compilation No. 1

Compilation date: 25 May 2017

Includes amendments up to: F2017L00596

Prepared by the Department of the Environment and Energy

About this compilation

This compilation

This is a compilation of the *Carbon Credits (Carbon Farming Initiative—Beef Cattle Herd Management) Methodology Determination 2015* that shows the text of the law as amended and in force on 25 May 2017 (the ***compilation date***).

The notes at the end of this compilation (the ***endnotes***) include information about amending laws and the amendment history of provisions of the compiled law.

Uncommenced amendments

The effect of uncommenced amendments is not shown in the text of the compiled law. Any uncommenced amendments affecting the law are accessible on the Legislation Register (www.legislation.gov.au). The details of amendments made up to, but not commenced at, the compilation date are underlined in the endnotes. For more information on any uncommenced amendments, see the series page on the Legislation Register for the compiled law.

Application, saving and transitional provisions for provisions and amendments

If the operation of a provision or amendment of the compiled law is affected by an application, saving or transitional provision that is not included in this compilation, details are included in the endnotes.

Modifications

If the compiled law is modified by another law, the compiled law operates as modified but the modification does not amend the text of the law. Accordingly, this compilation does not show the text of the compiled law as modified. For more information on any modifications, see the series page on the Legislation Register for the compiled law.

Self-repealing provisions

If a provision of the compiled law has been repealed in accordance with a provision of the law, details are included in the endnotes.

Contents

Part 1—Preliminary

1 Name

This is the *Carbon Credits (Carbon Farming Initiative—Beef Cattle Herd Management) Methodology Determination 2015*.

2 Commencement

This determination commences on the day after it is registered.

3 Authority

This determination is made under subsection 106(1) of the *Carbon Credits (Carbon Farming Initiative) Act 2011*.

4 Duration

This determination remains in force for the period that:
  (a) begins when this instrument commences; and
  (b) ends on the day before this instrument would otherwise be repealed under subsection 50(1) of the *Legislative Instruments Act 2003*.

5 Definitions

In this determination:

Act means the *Carbon Credits (Carbon Farming Initiative) Act 2011*.

ANZSIC class means the industry classification and code for that number published in the *Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006*.

arm's length agistment arrangement means a written contract:
  (a) under which a party with more grazing available than is needed for its own cattle allows the other party to use the spare grazing capacity; and
  (b) where the parties are not linked entities.

assessment day, for a herd of a project, means the day of the calendar year specified as the assessment day for the herd in accordance with subsection 8(4), or as varied under subsection 8(5).

Note: The assessment day for the herd will need to be set so that any annual muster and weighing of animals that is needed to provide data in accordance with section 25 can be done within six weeks before or after the day. For the first and last assessment days, weights taken more than two weeks from the assessment day will be need be adjusted by linear projection in accordance with subsections 25(7) to (11).

A project can be divided into several herds with different assessment days.

assessment year, for a herd of a project, means a period of 12 months that:
  (a) begins on or after the date of the relevant application for the herd; and
  (b) begins on the day after one assessment day and ends on the next assessment day; and

(c) ends during the crediting period.

Note: A project can be divided into several herds with different assessment days, and therefore different assessment years. The first assessment year of a herd may begin before the beginning of the crediting period, provided that it ends during the crediting period. In this case there will be 7 assessment years, with the last ending within 12 months before the end of the crediting period.

baseline reference date, for a herd of a project, means the day of the calendar year specified as the baseline reference date for the herd in accordance with paragraph 8(6)(e) and subsection 16(1).

Note: This date is the end of the period of 7 years in which the emissions intensity reference period can be set.

business operation means an operation consisting of the whole or a part of an entity or group of entities:

(a) that involves pasture grazing of cattle; and

(b) in relation to which a livestock inventory of those cattle is maintained.

Note: A business operation that defines a herd of cattle for a project must satisfy the separate business operation requirement (section 10) and the herd continuity requirement (section 11).

cattle means beef cattle.

crude protein means the total protein equivalent in a feed, based on an assumed nitrogen content of 16% of the total protein equivalent of the feed. Crude protein includes true protein and non-protein nitrogen.

dry matter means the total weight of a feed minus the weight of its water content.

dry matter digestibility means the percentage of dry matter in a feed able to be digested by cattle, as determined by an in-vitro testing method.

eligible herd management project means a herd management project that has been declared an eligible offsets project under section 27 of the Act.

emissions intensity reference period, for a herd—see subsection 16(4).

entity has the same meaning as in the *A New Tax System (Goods and Services Tax) Act 1999*.

Note: See section 184.1 of that Act. The definition covers all kinds of legal persons and other things that in practice are treated as having a separate identity in the same way as a legal person does, and so can be registered for GST. These include an individual, a body corporate, a corporation sole, a body politic, a partnership, any other unincorporated association or body of persons, a trust or a superannuation fund.

full data herd—see subsection 16(2).

herd of a business operation, at a particular time, means all cattle that are on the livestock inventory of the business operation at that time.

Note: An animal *in utero* will not be a separate member of the herd.

Herd Management Calculator means the Calculator that is published from time to time on the Department's website with a statement that:

(a) it is the Beef Cattle Herd Management Calculator for this determination; and

(b) if it differs from the version that was on the website at the time of commencement of this determination—the differences consist only of one of more of the following:

     (i) updates to inputs and variables used by the Calculator that are consistent with either or both of the following:

       (A) the National Inventory Report;

       (B) the carbon dioxide equivalence and applicable methods under subsection 10(3) of the *National Greenhouse and Energy Reporting Act 2007*;

    (ii) updates that have a minor effect on the calculation of abatement;

   (iii) updates that are necessary or incidental to updates referred to in subparagraph (i) or (ii).

herd management project—see section 6.

input date—see section 24.

input group—see section 24.

limited data herd—see subsection 16(3).

linked, of an entity: if:

  (a) 2 entities are members of a group that constitutes the parent entity of a business operation; or

  (b) 2 entities are related entities within the meaning given by section 9 of the *Corporations Act 2001*; or

  (c) 2 entities are both linked to a third entity under paragraph (a) or (b);

the 2 entities are ***linked*** to each other.

linked, of a business operation: if:

  (a) 2 entities are linked to each other; and

  (b) each entity is, or is part of the parent entity of, a different business operation;

the 2 business operations are ***linked*** to each other.

linked, of a herd: if 2 business operations are linked to each other, their respective herds are ***linked*** to each other.

livestock class means a subset of the herd corresponding to the age and gender divisions for beef cattle specified in the Herd Management Calculator.

monthly input day—see subsection (6) of Schedule 1.

monthly period—see subsection (5) of Schedule 1.

National Inventory Report means the most recently published document that is:

  (a) known as the National Inventory Report; and

  (b) prepared by the Department in fulfilment of obligations that Australia has under the Climate Change Convention.

non-protein nitrogen means substances that are not proteins but can be converted into proteins by microbes in the ruminant stomach and includes urea, nitrates, biuret, and ammonia.

parent entity, of a business operation, means:

(a) if the business operation (whether or not it is itself an entity or group of entities) is only a part of a larger entity or a group of entities—the entity or group of entities of which it is a part; and

(b) otherwise—the business operation.

project activity—see subsection 17(1).

region means an area of Australia in which beef cattle farming is undertaken, as published in the National Inventory Report.

registered entity means an entity that is registered on the Australian Business Register under the *A New Tax System (Australian Business Number) Act 1999*.

relevant application, for a herd—see subsection 8(4).

Rule means the *Carbon Credits (Carbon Farming Initiative) Rule 2015*.

season means a 3 month period, grouped by calendar month in the following way: Spring (September, October and November); Summer (December, January and February); Autumn (March, April and May); and Winter (June, July and August).

section 22 application, in relation to a herd management project, means the application under section 22 of the Act for the declaration of the project as an eligible offsets project.

t CO$_2$-e means tonnes of carbon dioxide equivalent.

weighing group—see subsection 24(2).

Note: Other words and expressions used in this determination have the meaning given by the Act. These terms include:

> **Climate Change Convention**
> **crediting period**
> **eligible offsets project**
> **emission**
> **greenhouse gas**
> **offsets project**
> **offsets report**
> **project**
> **project proponent**
> **reporting period**

Part 2—Herd management projects

6 Herd management projects

(1) For paragraph 106(1)(a) of the Act, this determination applies to an emissions avoidance offsets project that can reasonably be expected to result in eligible carbon abatement through reducing emissions from one or more herds of cattle, by any of the following:

    (a) increasing the ratio of weight to age of the herd;

    (b) reducing the average age of the herd;

    (c) reducing the proportion of unproductive animals in the herd;

    (d) changing the ratio of livestock classes within the herd to increase total annual liveweight gain of the herd.

(2) A project covered by subsection (1) is a *herd management project*.

Part 3—Project requirements

Summary

The project proponent must specify at least one herd for the project in the section 22 application, and may specify other herds later (these do not extend the crediting period).

A herd is specified by specifying the business operation to which it is attached—the herd consists, at any particular time, of the cattle that are on the livestock inventory of the business operation at that time. A business operation does not need to be a separate legal entity, as long as its associated herd is managed as a discrete set of animals over time that can be clearly identified by auditors in the records of its parent entity.

Each herd has an "assessment day", which the project proponent must specify in the application (although it may be changed if necessary before the start of the crediting period). Each "assessment year" (the annual cycle for measuring the abatement for the herd) will begin immediately after the assessment day of one calendar year and end on the assessment day of the next. The calculator requires data inputs of the weights of animals present in the herd at the end of an assessment day, and these normally require the weighing of the animals, or of statistically valid samples of the animals, within six weeks before or after the day. (There are alternative provisions for obtaining weights that apply in some circumstances, including where normal mustering is delayed by a natural disturbance). Different herds may have different assessment days. The assessment day for the herd cannot be changed after the first offsets report relating to the herd has been given to the Regulator.

The calculator also requires data inputs of the weights of animals entering or leaving the herd during an assessment year. These may be aggregated monthly.

For each herd, the project proponent must have historical emissions intensity data that enables the baseline data to be calculated. The historical data is calculated for annual cycles that fall within the period of 7 years that ends on the baseline reference date. This is likely to coincide with the assessment day for measuring abatement, but it is not required to.

The majority of the cattle must be in herds that have full historical data (data from 3 full years that are not more than 7 years before the first assessment year of the herd). The baseline emissions of such herds are calculated using the data from that herd only.

The remainder of the herds of the project may have only partial historical data (data from 2 previous years). When calculating the baseline emissions of such a herd, a cap is imposed that is based on historical data from full data herds.

To comply with this determination:

    (a)   for each herd, the business operation and its livestock inventory must be maintained separately from any others that are part of the project, and have continuity over time; and

(b)   each herd must be managed separately and must not be pastured with herds not in a project except under an arm's length agistment agreement; and

(c)   when cattle are moved to or from the herd (by moving them into or out of the livestock inventory):

(i)   if it is not a transfer from or to a linked herd, it must be a purchase or sale at fair value; and

(ii)   if it is a transfer from or to a linked herd it: it must be for a genuine business purpose; it must be recorded as a transaction at fair value, with a statement of the business purpose; and there must be physical movement of the cattle.

A project proponent with several herds may find it preferable to include all of them in the project, even if some are not expected to generate significant emission reductions, in order to allow joint pasturing and to simplify transfers from one herd to another.

Herds with different assessment cycles

The determination allows the project proponent to combine herds with different assessment days in a single project.

The determination also allows each herd to have its own reporting cycle, providing a separate offsets report for each herd. However, it is not necessary to do this, even if the herds have different assessment days. If the proponent has a single reporting cycle with the same reporting periods covering all herds, the offsets report for a reporting period must cover the abatement calculations for each herd with an assessment year that finishes during the reporting period. The abatement is calculated for the whole of each such assessment year, even if it started before the reporting period.

In the last reporting period for the project, there will be no abatement calculated for a herd in relation to time after its last assessment year.

Setting a crediting period for the project

To ensure that the project proponent can get credit in relation to the full 7 assessment years for each initial herd, it should, in its section 22 application, specify a date for the commencement of the crediting period that is later than the declaration date for the project (which is the default date for the beginning of the crediting period under the Act).

The date specified should be after all the initial herds of the project will have had at least one assessment day. This will ensure that they all have one assessment year for each year of the crediting period. (The first assessment year for each herd will begin before the crediting period.)

7 Operation of this Part

For paragraph 106(1)(b) of the Act, this Part sets out requirements that must be met for a herd management project to be an eligible offsets project.

8 Specifying herds of the project

Herd to be identified by specifying business operation

(1) In the section 22 application, the project proponent must specify at least one herd of the project by specifying the business operation to which it relates.

(2) At least one herd specified in the section 22 application must be a full data herd.

(3) The project proponent may also apply to the Regulator in writing for a herd that relates to another specified business operation to be a herd of the project.

Note: This subsection allows the project proponent to add a herd after the project has started, but doing this does not change the crediting period for the project.

Assessment day to be specified

(4) For each herd, the relevant section 22 application or application under subsection (3) in relation to the herd (the **relevant application** for the herd) must specify a day of the calendar year to be the **assessment** day for the herd.

Note: The assessment day for the herd sets the annual cycles for measurement of abatement. It will need to be set so that any annual muster and weighing of animals that is needed to provide data in accordance with section 25 can be done within 6 weeks before or after the day. Different herds of the project may have different assessment days.

(5) The project proponent may change the assessment day for a herd by specifying a new assessment day in the first offsets report relating to the herd.

Other information required in application

(6) The relevant application must also include the following information for each herd and its related business operation:

   (a) if the business operation consists of a registered entity or group of entities—details of the entity or entities;

   (b) if the business operation does not consist of a registered entity or a group of registered entities—a description of the business operation, including how it satisfies the separate business requirement under subsection 10(3);

   (c) if the business operation is different from its parent entity— details of the entity or entities that make up the parent entity;

   (d) if the entity or entities making up the business operation or its parent entity have changed since the beginning of the emissions intensity reference period—a description of the changes and details of all the entities;

   (e) the baseline reference day for the herd for the purposes of subsection 16(1);

   (f) the number of cattle in the herd on the baseline reference day;

   (g) the years constituting the emissions intensity reference period for the herd;

   (h) the land on which the cattle of the herd grazed in each year of the emissions intensity reference period, other than under an arm's length agistment arrangement;

   (i) to the extent possible, the land on which the cattle of the herd are expected to graze during each year of the crediting period (including under an arm's length agistment arrangement).

9 Requirements for herds of the project

Requirements for a herd at time of application

(1) A herd must not be specified in a section 22 application or an application under subsection 8(3) unless:

   (a) it has satisfied the following since the beginning of its emissions intensity reference period:

   (i) the separate business operation requirement (section 10);

   (ii) the herd continuity requirement (section 11);

   (iii) the herd management requirement (section 14);

   (iv) the animal identification requirement (section 15); and

   (b) it is either a full data herd or a limited data herd.

(2) A limited data herd must not be specified in a section 22 application or an application under subsection 8(3) unless:

   (a) there is at least one full data herd (a *reference herd* for the limited data herd) that is, or was, specified in the section 22 application; and

   (b) the limited data herds together had a smaller number of cattle on their baseline references dates than the reference herds together had on their baseline reference dates.

(3) A herd must not be specified in a section 22 application or an application under subsection 8(3) unless it can be expected to satisfy the following for the period from the date of the relevant application to the end of the crediting period:

   (a) the separate business operation requirement (section 10);

   (b) the herd continuity requirement (section 11);

   (c) the movement of cattle requirement (section 12);

   (d) the co-grazing requirement (section 13); the

   (e) the herd management requirement (section 14);

   (f) the animal identification requirement (section 15).

Effect of herd ceasing to exist or failing to comply with herd continuity requirement

(4) If, during:

   (a) the period beginning on the date of the relevant application for a herd of the project and ending immediately before the first assessment year for the herd; or

   (b) an assessment year for the herd;

   either:

   (c) the business operation to which the herd relates ceases to exist (because the business operation that it relates to ceases to exist); or

   (d) the herd fails to satisfy the herd continuity requirement (section 11);

   the herd is taken to continue to exist as a herd of the project, with zero members, from the beginning of that period until the end of the crediting period.

   Note: An offsets report will be required to record the herd as existing, but as having had zero members.

Effect of failure to comply with another requirement listed in subsection (3)

(5) If a herd of the project fails or ceases to satisfy any other provision listed in subsection (3) for an assessment year, the herd is taken, for the purposes of abatement calculations and offsets reports only, to have had zero members throughout the assessment year.

> Note: An offsets report will be required to record the herd as existing, but as having had zero members during that assessment year. Abatement can be claimed for later assessment years if the failure is rectified

10 Separate business operation requirement

(1) A herd of the project satisfies the separate business operation requirement for a period if the business operation for the herd satisfies subsection (2) or (3) throughout the period.

Entire entities

(2) A business operation satisfies this subsection if it consists of a registered entity or a group of registered entities.

Discrete operations

(3) A business operation satisfies this subsection at a time if:
  (a) its parent entity consists of a registered entity or a group of registered entities; and
  (b) it maintains a livestock inventory that is separate from other livestock inventories of its parent entity; and
  (c) after the date of the relevant application—the herd is managed as a discrete group of animals over time; and
  (d) it is possible to account for all cattle entering or leaving the livestock inventory (including movements to and from other livestock inventories of the parent entity, and including movements that are not sales or purchases).

> Examples: A registered entity that owns several properties may maintain them as separate business operations.
>
> Several herds may be maintained on a single property, as long as they are managed as discrete groups—eg animals in each livestock class may be managed as a separate herd, mustered at different times.

> Note: The effect of paragraph (c) is that a proponent may decide at the time of the section 22 application that herds that have been managed together during the emissions intensity reference period should be treated separately during the crediting period, for example to allow annual musters with different assessment days. This will be possible only if the proponent has the data relating to the emissions intensity reference period that allows the emissions intensity of each herd to be calculated.

11 Herd continuity requirement

(1) A herd satisfies the herd continuity requirement for a period if it satisfies the following throughout the period:
  (a) where the business operation consists of a registered entity or a group of registered entities—at any change in the entities, the livestock inventories of the entities are transferred in such a way that the same animals are on the livestock inventory of the business operation before and after the change;
  (b) at any change in the registered entity or entities that constitute its parent entity, the livestock inventories of the entities are transferred in such a way that the same

animals are on the livestock inventory of the business operation before and after the change;

(c) there is no break in the continuity of its livestock inventory, and, in particular, its livestock inventory continues to be maintained separately from other livestock inventories of its parent entity;

(d) the information referred to in Schedule 1 is available for the herd.

Example: There is a merger between two companies, one a backgrounding operation for a feedlot and the other a breeding property that supplies cattle for background fattening before feed-lotting. If the herds are kept separate and under separate management after the merger, and there is no change to their inventories, there would be no break in continuity for the two business operations.

(2) A livestock inventory that is temporarily empty does not necessarily have a break in its continuity.

Example: The livestock inventory of a business operation is temporarily empty because the cattle are sold off due to drought, with the intention of restocking when the drought ends and continuing in the project, as indicated, for example, in the offsets reports.

12 Requirement relating to movements of cattle

Note: This section does not apply to cattle that enter the herd by birth or as feral animals or cleanskins, rather than by moving from another herd. (Animals that enter as feral animals or cleanskins are covered by subsection (9) of Schedule 1).

(1) A herd satisfies the movement of cattle requirement for a period if, throughout the period:

(a) any movement of cattle to or from the herd, other than a movement from or to a linked herd, is a purchase or sale at fair value; and

(b) any movement of cattle between the herd and a linked herd:

(i) is for a genuine business purpose that accords with established industry practice; and

(ii) is recorded as a transaction at fair value; and

(iii) results in a physical movement from one property to another within 6 months; and

Note: The project proponent will need to keep a record of the business purpose of such a movement—see paragraph 28A(c).

(c) no movements to the herd take place from another herd of the project whose last assessment year has finished at the time of the movement; and

(d) no movements from the herd take place after the end of its last assessment year to another herd of the project whose last assessment year has not finished at the time of the movement.

Note: Additional record requirements apply to movements in the last year of the crediting period for the purposes of ensuring compliance with paragraphs (c) and (d)—see paragraph 28A(d).

(2) For this section, ignore any movement that involves only cattle leaving the herd for the purpose of being exported live, or being slaughtered, as soon as practicable.

13 Requirement relating to co-grazing

A herd satisfies the co-grazing requirement for a period if cattle are not grazed with other cattle at any time during the period except in circumstances where all the following apply:

(a) either:

(i) the other cattle are part of a herd of an eligible herd management project (and are therefore accounted for separately); or

(ii) the cattle of the herd are under an arm's length agistment arrangement; or

(iii) the other cattle are under an arm's length agistment arrangement;

(b) each animal of the herd is identifiable as a member of the herd (eg through tagging);

(c) the average liveweight of each input group of the herd will be available for each date in relation to which an input to Calculator will be required under Schedule 1.

14 Requirements relating to the management of herds

A herd satisfies the herd management requirement for a period if, throughout the period:

(a) the cattle of the herd are grazed in Australia; and

(b) the feed of the cattle comes principally from grazing or forage; and

(c) the cattle of the herd are managed in a way consistent with:

(i) ANZSIC class 0142 (beef cattle farming); or

(ii) ANZSIC class 0144 (sheep-beef cattle farming); or

(iii) ANZSIC class 0145 (grain-sheep or grain-beef cattle farming).

Note 1:   Herds managed in a way consistent with ANZSIC class 0143 (beef cattle feedlots) do not meet the requirements of this Part.

Note 2:   Members of a herd (that is, individual animals) might leave and join the herd over time.

15 Animal identification requirement

A herd satisfies the animal identification requirement for a period if, throughout the period, the project proponent is able to identify the members of each group of animals in the herd for which inputs are required by Schedule 1.

16 Baseline reference date and emissions intensity reference period

The baseline reference date for a herd

(1) For the purposes of this section, the project proponent must set for each herd a date, within the period of 12 months before the date of the relevant application, to be the **baseline reference date** for the herd.

Note: The baseline reference date should be set in accordance with the business-as-usual history of mustering and weighing of the herd so that the data required for this section is obtainable in accordance with section 27. For most herds, it is likely to be the same day of the year as the assessment day.

Full data herd

(2) A herd is a **full data herd** if, the herd has a period of a whole number of years:

(a) that ended on the baseline reference date for the herd; and

(b) consisted of no more than 7 years; and

(c) for each year of which the project proponent has the data necessary to calculate the liveweight gain of the herd in accordance with section 26; and

(d) that included the 3 most recent years preceding the baseline reference date, and no other years, for which the liveweight gain of the herd was greater than zero.

Note: If there was liveweight gain in each of the 3 years leading up to the baseline reference date, this will constitute the period for this subsection. However, for each year in which there was no liveweight gain, the period can be extended back to include a year in which there was liveweight gain, up to a maximum of 7 years.

Limited data herd

(3) A herd is a **limited data herd** if:
  (a) it is not a full data herd; and
  (b) it has a period of a whole number of years:
    (i) that ended on the baseline reference date for the herd; and
    (ii) consisted of no more than 7 years; and
    (iii) for each year of which the project proponent has the data necessary to calculate the liveweight gain of the herd in accordance with section 26; and
    (iv) that included the 2 most recent years preceding the baseline reference date, and no other years, for which the liveweight gain of the herd was greater than zero.

Note: If there was liveweight gain in each of the 2 years leading up to the baseline reference date, this will constitute the period for this subsection. However, for each year in which there was no liveweight gain, the period can be extended back to include a year in which there was liveweight gain, up to a maximum of 7 years.

The effect of paragraph (a) is that a herd that had 3 years of liveweight gain within the 7 years before the baseline reference date must enter that project as a full data herd.

Emissions intensity reference period

(4) For this determination, the **emissions intensity reference period** for a herd is:
  (a) for a full data herd—the 3 years mentioned in paragraph (2)(d); and
  (b) for a limited data herd—the 2 years mentioned in subparagraph (3)(b)(iv).

Note: The years in the emissions intensity reference period need not be consecutive.

Each herd in the project will have its own emissions intensity reference period. Each such period might consist a different set of years.

Definitions

(5) For this section:

liveweight gain for the herd for the year means the liveweight gain calculated using Equation 5 (section 21C).

17 Project activity

Requirement to implement project activity

(1) For each year in the crediting period and for each herd in the project, the project proponent must implement at least one agricultural practice that complies with subsection (2) (a **project activity**).

Note: If there is more than one herd in the project, different project activities could be implemented in relation to each herd.

The project activities for a year must be reported in the offsets report. They can change from year to year but must comply with subsection (2).

(2) An agricultural practice must be one that:

(a) can reasonably be expected to reduce emissions from the herd through one of the measures specified in paragraphs 6(1)(a) to (d); and

(b) either:

   (i) was not undertaken in relation to the herd during the emissions intensity reference period; or

   (ii) is a variation of a practice that was undertaken in relation to the herd during the emissions intensity reference period; and

(c) does not consist of feeding non-protein nitrogen to a herd; and

(d) does not consist only of grazing the herd on a different area of land.

Note 1: In relation to paragraph (2)(c), Part 4 of this determination does not calculate abatement resulting from feeding non-protein nitrogen to cattle. The *Carbon Credits (Carbon Farming Initiative) (Reducing Greenhouse Gas Emissions by Feeding Nitrates to Beef Cattle) Methodology Determination 2014* applies to projects that involve feeding non-protein nitrogen to cattle. Projects that feed non-protein nitrogen to cattle and herd management projects can be applied to the same herd.

Note 2: Paragraph (2)(d) does not prevent an agricultural practice that consists of grazing the herd on a different area of land in combination with another agricultural practice from complying with this section, so long as, when taken together, there is an agricultural practice that complies with this section.

Initial assessment of agricultural practice for compliance with subsection (2)

(3) The proponent must nominate at least one agricultural practice as a project activity in the section 22 application.

(4) For each practice, the section 22 application must contain the following:

   (a) a description of the practice;

   (b) an explanation of how the practice complies with paragraph (2)(a);

   (c) evidence to support the explanation;

   (d) if the proponent considers that the practice satisfies subparagraph (2)(b)(i)—a statement of that fact;

   (e) if the proponent considers that the practice satisfies subparagraph (2)(b)(ii)—a description of:

      (i) the previous practice; and

      (ii) the variation;

   (f) a statement that the practice does not consist of feeding non-protein nitrogen to a herd; and

   (g) a statement that the practice does not consist only of grazing the herd on a different area of land.

Subsequent changes to agricultural practice

(5) If the proponent subsequently wishes to implement a different agricultural practice as a project activity, the agricultural practice must comply with subsection (2).

18 Project not to involve feeding of cattle on cleared land

(1) The project must not involve the feeding of cattle on land that has been, for the purposes of the project, partially or wholly cleared of perennial woody vegetation.

(2) This section does not apply to the extent that clearing of land was required by law.

(3) If:
    (a) land has been partially or wholly cleared of perennial woody vegetation; and

    (b) the land would have been so cleared even if the project had not been undertaken;

the clearing is taken, for the purposes of this determination, not to have been for the purposes of the project.

18A Transition from earlier version of this determination

Note: Under the previous version of this determination, all herds in a project had the same assessment day, and the first assessment year began with the crediting period. A project proponent who transitions from the previous version of the determination to this version before having submitted an offsets report under the previous version will be able to:

    (a)   set different assessment days for each herd; and

    (b)   subject to section 69 of the Act, re-set the start time for the crediting period to a date when all the herds have had a first muster, so that each herd will be able to generate seven years of credits. (Section 69, in certain circumstances, allows a project proponent to vary the start time previously set for a crediting period to another time up to 18 months after the declaration of the project.)

(1) This section applies to a project if:
    (a) after the transition date, this determination as it stood before the transition date applied to a project in accordance with subsection 126(2) of the Act; and

    (b) the project proponent, under section 128 of the Act:
        (i) requested the Regulator to approve, under section 130 of the Act, the application to the project of this determination as it now stands; and

        (ii) with the request, provided, for each *pre-transition* herd of the project, any information required under section 8 as it now stands that was not provided with the original section 22 application; and

    (c) the Regulator has approved the application.

(2) The information is taken to have been provided in the original section 22 application.

Note: This provision ensures that, eg, definitions that refer to information provided in the section 22 application operate correctly.

(3) Each pre-transition herd of the project is taken to satisfy subsections 9(1) and 9(3) as a full data herd.

(4) In this section:

pre-transition herd, in relation to a project to which subsection (1) applies, means a herd that was part of the project at the time of the request to the Regulator under section 130 (ie, it was not added to the project at the time of transition as a result of a concurrent application).

transition date means the date on which the *Carbon Credits (Carbon Farming Initiative—Beef Cattle Herd Management) Methodology Variation 2017* commenced.

Part 4—Net abatement amount

Division 1—The net abatement amount

19 Method for calculating the net abatement amount

(1) For paragraph 106(1)(c) of the Act, this Part specifies the method for working out the carbon dioxide equivalent net abatement amount for a reporting period for a herd management project that is an eligible offsets project.

> Note: Unless the project proponent divides the project into parts under section 77A of the Act (see also section 31 of this determination), an offsets report must relate to a reporting period that applies to the whole project. The proponent may choose a period between 6 months and 2 years. The reporting period need not align with the assessment years of any herd of the project. The offsets report will cover the abatement calculated for each assessment year of any of the herds that ends during the reporting period.

(2) For such a project, the carbon dioxide equivalent net abatement amount, A, in t CO_2-e, is given by the following formula:

$$A = \sum_{\substack{\text{all herds } H \\ \text{reported on}}} \sum_{\substack{\text{all asssessment years } y \text{ of the herd} \\ \text{that end during the reporting period}}} A_{H,y} \qquad \textbf{\textit{Equation 1}}$$

where:

$A_{H,y}$ = the abatement amount for herd H and for an assessment year y of the herd that ends in the reporting period, in t CO_2-e, given by subsection (3).

(3) For Equation 1, the abatement amount for herd H and for an assessment year y of the herd that ends in the reporting period, in t CO_2-e, $A_{H,y}$, is:

  (a) given by the formula below, if it gives a positive amount; and
  (b) zero otherwise.

$$A_{H,y} = BE_{H,y} - PE_{H,y} \qquad \textbf{\textit{Equation 2}}$$

where:

$BE_{H,y}$ = the baseline emissions for herd H and for an assessment year y of the herd that ends in the reporting period, in t CO_2-e, given by Division 2.

$PE_{H,y}$ = the project emissions for herd H and for an assessment year y of the herd that ends in the reporting period, in t CO_2-e, given by Division 3.

> Note: Herd annual abatement amounts that are less than zero are not deducted from the carbon dioxide equivalent net abatement amount. This is possible from a greenhouse gas accounting perspective because of the variance discount applied to baseline emissions, which reduces positive herd annual abatement amounts (see section 21).

20 Gases accounted for in abatement calculations

The following table specifies the greenhouse gases and emissions sources that are relevant to working out the carbon dioxide equivalent net abatement amount for a herd management project.

Gases accounted for in abatement calculations			
Item	Relevant emissions calculation	Emissions source	Greenhouse gas
1	Baseline emissions and project emissions	Enteric fermentation	Methane (CH_4)
2	Baseline emissions and project emissions	Dung and urine	Nitrous oxide (N_2O)

Division 2—The baseline emissions

21 The baseline emissions

Note: The baseline emissions, for each year in the reporting period and for each herd in the project, is the estimated methane and nitrous oxide emissions for each year in the reporting period and for each herd that would have occurred had the project not been undertaken, and discounted by the 4% variance discount.

For each herd H in the project and each assessment year y of the herd that ends in the reporting period, the baseline emissions $BE_{H,y}$ is given by the following formula:

$$BE_{H,y} = \frac{96}{100} \times LWG_{H,y} \times BAEI_H$$	***Equation 3***

where:

$LWG_{H,y}$ = the liveweight gain for herd H for assessment year y of the herd, in tonnes, as given by Equation 5.

$BAEI_H$ = the baseline annual emissions intensity for herd H, given by:

    (a) if herd H is a full data herd—the historical annual emissions intensity for herd H ($HAEI_H$), in t CO_2-e per tonne of liveweight, as given by Equation 4; and

    (b) if herd H is the limited data herd—the lower of the following, in t CO_2-e per tonne of liveweight:

        (i) the historical annual emissions intensity for herd H ($HAEI_H$), as given by Equation 4;

        (ii) the reference emissions intensity for the project ($HAEI_R$), as given by Equation 4A.

Note: The factor $^{96}/_{100}$ represents a variance discount, which is applied to account for emissions reductions that were due only to environmental variations and compensates for years when herd annual abatement amounts are less than zero.

21A Historical annual emissions intensity

(1) For the definition of $BAEI_H$ in Equation 3, the historical annual emissions intensity, $HAEI_H$, for herd H, in t CO_2-e per tonne of liveweight, is given by the following formula, where the sums are over all years y of the emissions intensity reference period:

$$HAEI_H = \frac{\sum_y TE_{H,y}}{\sum_y LWG_{H,y}}$$	***Equation 4***

where:

$TE_{H,y}$ = the total emissions of herd H, in t CO_2-e, for year y of the emissions intensity reference period, as calculated in accordance with Division 4.

$LWG_{H,y}$ = the liveweight gain for herd H for year y of the emissions intensity reference period, in tonnes, as given by Equation 5.

(2) For subsection (1):

(a) take into account only emissions from the emissions sources specified in the table in section 20; and

(b) assume that the herd's diet in the emissions intensity reference period consisted entirely of pasture from the region referred to in item 1 of the table in Schedule 1.

21B Reference emissions intensity for a limited data herd

For the definition of $BAEI_H$ in Equation 3, the reference emissions intensity for the project, $HAEI_R$, in t CO_2-e per tonne of liveweight, is given by the following formula, where the sums are over:

(a) all the herds H that are reference herds for the limited data herd under subsection 9(2); and

(b) for each herd H, all years y of the emissions intensity reference period for that herd:

$$HAEI_R = \frac{\sum_H \sum_y TE_{H,y}}{\sum_H \sum_y LWG_{H,y}}$$

Equation 4A

where:

$TE_{H,y}$ and $LWG_{H,y}$ for herd H and year y of the emissions intensity reference period have the same values as for equation 4.

21C Liveweight gain for a year

For Equations 3, 4 and 4A, the liveweight gain for herd H for year y (whether a year of the emissions intensity reference period or an assessment year of the herd) in tonnes, $LWG_{H,y}$, is given by the following formula:

$$LWG_{H,y} = LW_{End} + LW_{Departures} - LW_{Start} - LW_{Arrivals}$$

Equation 5

where:

LW_{End} = the total liveweight in tonnes of animals in the herd at the end of the year.

$LW_{Departures}$ = the total liveweight in tonnes of animals leaving the herd during the year.

LW_{Start} = the total liveweight in tonnes of animals in the herd at the beginning of the year.

$LW_{Arrivals}$ = the total liveweight in tonnes of animals entering the herd during the year.

Division 3—The project emissions

22 Project emissions

For each year in the reporting period and for each herd in the project, the project emissions are the methane and nitrous oxide emissions from the sources referred to in the table in section 20, expressed as their carbon dioxide equivalent.

Division 4—Use of Herd Management Calculator to perform calculations

23 Requirement to use Herd Management Calculator

When performing calculations for the purposes of this Part:
- (a) the Herd Management Calculator, as in force at the end of the relevant reporting period, must be used for any calculation for which it can appropriately be used in relation to a herd for each assessment year of the herd that ends in the reporting period and for each year of the emissions intensity reference period; and
- (b) the inputs required by the Herd Management Calculator (which are specified in Schedule 1 and Schedule 2) must be entered:
  - (i) in the specified units; and
  - (ii) in the manner and form required by the Herd Management Calculator; and
- (c) if a calculation includes a factor or parameter that is defined or calculated by reference to another instrument or writing, the factor or parameter to be used for a reporting period is the factor or parameter referred to in, or calculated by reference to, the instrument or writing as in force at the end of the reporting period.

  Note: Paragraph (c) includes the global warming potentials for methane and nitrous oxide prescribed by the *National Greenhouse and Energy Reporting Regulations 2008*.

24 Assessment of average liveweight for inputs into the Calculator

(1) For this determination:
- (a) each livestock class of a group or subgroup that requires an input into the Herd Management Calculator under Inputs 2(b), 2(d), 3(b), 4(d), 5(d), 6(b) or 7(d) of Schedule 1 is an *input group*; and
- (b) the date in relation to which the input is required is the *input date*.

  Note: The input dates are the assessment days that begin and end the calculation year together with either:
  - (a) the days on which animals entered or left the herd; or
  - (b) the days on which the animals are taken to have entered or left the herd under subclause (7) of Schedule 1 (the mid-point days of each month).

(2) For the purpose of establishing the average liveweight of an input group for an input date, the project proponent may either treat the input group as a single *weighing group* or divide it into several *weighing groups*, each of which is dealt with by one of the methods set out in section 25.

  Note: A project proponent might wish to do this to apply different methods under subsection 25(1) to different weighing groups. See the examples at the end of that subsection.

(3) If an input group is divided into several weighing groups, the average liveweight of the input group is the weighted average of the average liveweight of the weighing groups.

(4) If, for an assessment year of a herd, the average liveweight of any input group is not available in accordance with this section and section 25, equation 2 is taken to give an abatement amount for the herd ($A_{H,y}$) of zero for that assessment year.

25 Inputs relating to the crediting period

Sections 25 and 26, as well as Schedule 1, allow for some flexibility in how the proponent can obtain the average liveweights that are to be entered into the calculator.

However, it is expected that in most cases, the proponent will follow the following procedure.

For inputs to the calculator, whenever animals enter or leave the herd:

(a)   they are treated as having entered or left at the mid-point of the month in which they entered or left;

(b)   if they enter or leave by being bought or sold, the sale weights are used.

Animals that are born into the herd are entered into the calculator as having entered the herd by birth in the month in which they were branded, and are assigned a weight at branding of 75 kg.

In addition, there will be an annual muster at which all animals that are less than 3 years old, but are expected spend more than 12 months in the herd, will be weighed (or suitable samples of them will be weighed). The muster will take place within the period from 6 weeks before to 6 weeks after the assessment day. (For the first and last assessment days only, weights that are taken outside the period from 2 weeks before to 2 weeks after the assessment day must be adjusted by linear projection. This is because weights taken outside that period could produce discrepancies in the calculations for one assessment year that are not automatically corrected in the next.)

Animals over 3 years old will be taken to have the weights derived in accordance with paragraph (1)(e).

For animals that that are expected to spend less than 12 months in the herd, the proponent will wait until they are sold, and will then use linear projection under paragraph (1)(h) to derive weights for the assessment day. (Note that dates used for linear projection must be after the date of application and before the end of the crediting period.)

If the animals recorded by the muster are the same as the animals on the livestock inventory on the assessment day, these figures will be used as the input figures for the end of one year and the beginning of the next. However, if any animals enter or leave the herd:

(a)   between the muster and the assessment day, where the muster is earlier; or

(b)   between the assessment day and the muster, where the muster is later;

the arrivals and departures will be entered into the calculator in the normal way, for the assessment year in which they occur, and the input figures for the assessment day will be adjusted accordingly.

(1) For an input relating to the crediting period, the average liveweight of a weighing group must be ascertained by one of the following methods:
  (a) weighing all the animals in the weighing group and calculating the average;
  (b) weighing all the animals in a statistically valid sample from the weighing group and estimating the average liveweight from the sample in accordance with, and to an accuracy that is consistent with, industry practice;
  (c) for a weighing group with an input date at the start of the first assessment year of the herd—applying the average weight of the relevant livestock class of the herd as a whole, calculated in accordance with subsection (4);

(d) for a weighing group with an input date at the start of a later assessment year of the herd—applying the average weight of the relevant input group from the end of the previous year, identified in accordance with subsection (5);

(e) for cows or bulls aged 3 years or more—applying a figure derived in accordance with subsection (5) from the hot standard carcase weights of all animals of the relevant livestock class culled from the herd during the year of the input date;

(f) where the animals in the weighing class were bought or sold on the input date—calculating the average weight from the data in the relevant sale records or receipts;

(g) for a weighing class that consists of animals entering the herd by birth, and the input date is the date of their branding—applying a default branding weight of 75 kg;

(h) by linear projection in accordance with subsections (7) to (12).

Note 1: Values ascertained consistently with Accounting Standard AASB 141—*Agriculture* would be expected to comply with paragraph (b).

Note 2: If animals are bought or sold within 1 month before or after an assessment day, paragraph (f) allows sale records or receipts to be used for the assessment day input as well as the input for entering or leaving the herd (ie, the same weight may be used for both).

Note 3: For input groups to which paragraph (g) applies, see item 5 in Schedule 1.

Example 1: For paragraph (d), for a herd with an assessment day of 31 December, suppose a group of cattle that are in the livestock class of 1-2 year old steers at the start of year 2 are sold in August of year 2 when they are in the livestock class of 2-3 year old steers. Some of the animals had been in the herd for the whole of year 1, while others had been purchased in March of year 1 as steers less than one year old.

At the start of year 2, the animals form an input group requiring an average weight to be entered into the Calculator for the start of year 2. They could be divided into two weighing groups based on their history. The animals that had been in the herd for the whole of year 1 can be taken to have the average weight of 1-2 year-old steers that were entered into the Calculator for paragraph 2(d) of Schedule 1 at the end of the previous year. The rest of the animals can be taken to have the average weight that the under one year olds purchased in March of year 1 had reached by the end of that year, as entered into the Calculator for paragraph 6(b) of Schedule 1.

Example 2: A project proponent could collect all the data required for input weights as follows:
- within 6 weeks before or after the start of the first assessment year, take weights or sample weights of each livestock class (possibly relying on paragraph 1(c) and subsection (9))
- ensure that weights are recorded in the sale records or receipts for each sale or purchase
- within 6 weeks before or after the end of each assessment year, take weights or sample weights of each livestock class in the resident herd and in each group of animals that entered the herd during the year (possibly relying on paragraph 1(c) and subsection (10)).

Time of weighing—assessment days

(2) For an input date that is an assessment day, if average liveweight is to be ascertained under paragraph (1)(a), (b) or (c), the weighing must be done within the following periods:

(a) for the first assessment day and last assessment day (beginning of the first assessment year and end of the last assessment year)—within 2 weeks before or after the assessment day;

(b) for any other assessment day—within 6 weeks before or after the assessment day.

Time of weighing—other input dates

(3) For an input date that is not an assessment day, if average liveweight is to be ascertained under paragraph (1)(a), (b) or (c), the weighing must be done within the monthly period in which the input date falls.

> Note: Subsections (2) and (3) are not relevant where the project proponent is using weights in sales records or receipts under paragraph (1)(f).

For the first assessment day, average weight of a livestock class may be used for all input groups in the class

(4) For the purposes of paragraph (1)(c), the project proponent may calculate the average liveweight of all animals in the herd of a particular livestock class at the start of the first assessment year of the herd by:

(a) weighing all the animals in the livestock class and calculating the average; or

(b) weighing all the animals in a statistically valid sample from the livestock class and estimating the average liveweight from the sample in accordance with, and to an accuracy that is consistent with, industry practice.

Using weights calculated for inputs at the end of one year in calculating inputs at the beginning of the next year

(5) For the purposes of paragraph (1)(d), an input group from the previous year is relevant to the weighing group if:

(a) the input date of the input group was the end of the previous year; and

(b) all the animals in the weighing group were in the input group.

Estimation using hot standard carcase weight and dress out percentage

(6) For the purposes of paragraph (1)(e), liveweight of a group of animals that are slaughtered may be estimated by converting hot standard carcase weights for the animals into liveweight using:

(a) the abattoir records of dress out percentage for the group of animals; or

(b) a default dress out percentage of 55%.

Linear projection from known weights

(7) Linear projection may be used to establish the average weight of a weighing group on an input date if there are two dates for the group, **Date 1** and **Date 2**, such that:

(a) Date 1 is before Date 2; and

(b) for each of Date 1 and Date 2, either:

(i) it is an input date for the same group, and the average weight is available in accordance with this section, other than by use of linear projection (paragraph (1)(h) and this subsection); or

(ii) it is a monthly input day for subsection (6) of Schedule 1 and the average weight of the animals in the group can be established for the date using a method listed in paragraph (1)(a), (b) or (f), as if it were an input date; and

(c) there is no date between Date 1 and Date 2 that satisfies subparagraph (a)(i); and

(d) both dates are after the date of the relevant application and no later than the last day of the crediting period; and

(e) subsection (8), (9), (10) or (11) is satisfied.

Case A—General—dates on either side of input date and no more than 12 months apart

(8) This subsection is satisfied if:
   (a) Date 1 is before the input date and Date 2 is after the input date; and
   (b) the two dates are no more than 12 months apart.

Case B—Input date is the first assessment day—early or late muster

(9) This subsection is satisfied if:
   (a) the input date is the start date of the first assessment year; and
   (b) Date 1 is either 4 weeks before the input date or 4 weeks after the input date; and
   (c) average liveweight for Date 1 is ascertained under paragraph (1)(a), (b) or (c) from weighing within 2 weeks before or after Date 1; and
   (d) Date 2 is after the input date and no later than the next assessment day.

   Note: If both Date 1 and Date 2 are after the input date, the average weights from those 2 dates will be projected back to the input date.

Case C—Input date is the last assessment day—early or late muster

(10) This subsection is satisfied if:
   (a) the input date is the last day of the last assessment year; and
   (b) Date 1 is before the input date and no earlier than the previous assessment day; and
   (c) Date 2 is either 4 weeks before the input date or 4 weeks after the input date; and
   (d) average liveweight for Date 2 is ascertained under paragraph (1)(a), (b) or (c) from weighing within 2 weeks before or after Date 2.

   Note: If both Date 1 and Date 2 are before the input date, the average weights from those 2 dates will be projected forward to the input date.

Allowance for annual muster delayed by natural disturbance

(11) This subsection is satisfied if:
   (a) the input date is an assessment day, other than the end of the last assessment year; and
   (b) Date 1 is before the input date and no earlier than:
      (i) if the project proponent applied subsection (9) to ascertain the average weights for the previous assessment day—the Date 2 used for that calculation; and
      (ii) otherwise—the previous assessment day; and
   (c) Date 2 is after the input date and no later than 3 months after the input date; and
   (d) average liveweight for Date 2 is ascertained under paragraph (1)(a), (b) or (c) from weighing within 2 weeks before or after that date; and
   (e) the Regulator has approved in writing the application of this provision to the input.

(12) The Regulator must not approve the application of subsection (11) unless it is satisfied, on the basis of evidence provided by the project proponent, that because of a natural disturbance or the expectation of a natural disturbance, it was not reasonably practicable for the project proponent to weigh the animals in the weighing group, or a statistically valid sample of the animals, within the period required by subsection (2) or (9).

   Note: If the project proponent is unable to satisfy the Regulator of these matters, so that the average weight of the animals in the weighing group cannot be obtained, the abatement amount for the herd for the assessment year will be taken to be zero—see subsection 24(4).

26 Inputs relating to the emissions intensity period

(1) For an input relating to the emissions intensity reference period, the average liveweight of a weighing group must be ascertained by a method from the first of the following paragraphs that mentions a method for which the relevant data is available:

   (a) a method set out in subsection 25(1), read as if a reference to an assessment year of the herd were a reference to a year of the emissions intensity reference period;

   (b) where the animals in the weighing class were bought or sold within one month before or after the input date—using the indicator price weight in accordance with subsection (2);

   (c) where a method set out in paragraph (a) or (b) can be used to ascertain the average liveweight of the weighing group at:

     (i) a time within 12 months before the input date; and

     (ii) a time within 12 months after the input date;

   using a linear projection between the two figures;

   (d) applying the average liveweight for the relevant livestock class obtained in accordance with subsection (4).

(2) For paragraph (1)(b), the indicator price weight is calculated by converting the numbers sold and their sale price to liveweight using the appropriate prices for the class of animal as published, from time to time, by the body that has been declared to be the industry marketing body under subsection 60(1) of the *Australian Meat and Livestock Industry Act 1997*.

   Note: At the time of commencement of this determination, Meat & Livestock Australia Limited was the declared industry marketing body, and relevant prices were the Eastern States Daily Indicators prices, published on http://www.mla.com.au.

(3) For subsection (2), if the price is given on carcase weight basis, assume a dress out percentage of 55% unless the publication referred to in that subsection indicates otherwise.

(4) For paragraph (1)(d), the average liveweight for a relevant livestock class is the average liveweight of all animals that were bought into or sold from the herd in that livestock class during the course of the emissions intensity reference period, calculated using weight data in the relevant sale records or receipts where this data is available, and the indicator price weight in accordance with subsection (2) if it is not.

Part 5—Reporting, record-keeping and monitoring requirements

Division 1—Operation of this Part

27 Application

For subsection 106(3) of the Act, the project proponent of an eligible offsets project to which this determination applies must comply with the reporting, record-keeping and monitoring requirements in this Part.

Division 2—Offsets report requirements

Note: Other reporting requirements are prescribed in the Rule.

28 Information in each offsets report

For paragraph 106(3)(a) of the Act, the following information must be included in each offsets report in relation to each herd:

(a) a description of the project activity or project activities undertaken in each assessment year of the herd that ends in the reporting period;

(b) all inputs and outputs from the Herd Management Calculator for the reporting period;

(c) the assessment day for the herd;

(d) in the first offsets report relating to the herd, if the assessment day for the herd is a new assessment day specified in accordance with subsection 8(5)—the assessment day originally specified for the herd in the section 22 application or the application under subsection 8(3);

(e) a statement that:

(i) identifies the land on which the herd grazed in each year of the reporting period; and

(ii) indicates that the land was not cleared, for the purposes of the project, partially or wholly of perennial woody vegetation except as allowed under section 18.

Division 3—Record-keeping requirements

Note: Other record-keeping requirements are prescribed in the Rule.

28A General

For each herd, as part of or in addition to the records required by the Rule, the project proponent must maintain a separate and self-contained record in relation to each of the following matters that is in an easily accessible form to facilitate an audit of whether the relevant provisions have been complied with in relation to the herd at all relevant times:

(a) the separate business operation requirements (section 10);

(b) the herd continuity requirements (section 11);

(c) the movement of cattle requirement for movements between a project herd and a linked herd (paragraph 12(1)(b); and

(d) the movement of cattle requirement in relation to the last year of the crediting period (paragraphs 12(1)(c) and (d)).

29 Records that must be kept for purchased feed

(1) This section applies if:
   (a) the project activity is a dietary change for the herd or for a livestock class; and
   (b) some or all of the supplementary feed for the dietary change was purchased.

(2) If the feed was purchased from a commercial feed supplier, the project proponent must keep a commodity vendor declaration form, fodder declaration form, or equivalent specifying the crude protein and dry matter digestibility of the purchased feed.

(3) If the feed was purchased from a person who is not a commercial feed supplier, the project proponent must keep a purchase invoice describing the purchased feed.

   Note: Examples of descriptions for the purposes of subsection (3) include hay, silage and dried distillers grain.

Division 4—Monitoring requirements

Note: Part 17 of the Rule sets out record-keeping requirements that relate to showing that monitoring requirements for the project are being complied with, and to collection of data while monitoring the project.

30 General

(1) The project proponent must undertake sufficient monitoring of each animal in each herd to determine the inputs specified in Schedule 1.

(2) For the crediting period, if the project activity is a dietary change for the herd or for a livestock class, the project proponent must undertake sufficient monitoring to determine the inputs specified in Schedule 2.

(3) For each herd, the project proponent must monitor the following:
   (a) the land on which the herd grazed in each year of the reporting period;
   (b) the cattle of the herd during each year of the reporting period;
   (c) any changes to the entity or entities that constitute:
       (i) the business operation for the herd during the reporting period; or
       (ii) the parent entity of the business operation.

Division 5—Reporting under section 77A of the Act

31 Requirements relating to reporting under section 77A of the Act

For section 77A of the Act, an overall project may only be divided into parts that consist of one or more whole herds.

Schedule 1—Inputs into Herd Management Calculator—general

Note: See sections 23 and 24.

    (1) In this Schedule:

        (a) a reference to a *calculation year* is a reference to the assessment year or year of the emissions intensity reference period for the herd to which the Herd Management Calculator is being applied; and

        (b) where the calculation year is a year of the emissions intensity reference period for the herd, a reference to an *assessment day* for the herd is a reference to the day of the calendar year on which the calculation year ends.

    (2) The start day to be entered for item 1(b) of the table is the assessment day immediately before the beginning of the calculation year.

    (3) A reference in the table to numbers at the start of the year is a reference to numbers at the end of the start day.

    (4) A reference in the table to numbers at the end of the year is a reference to numbers at the end of the assessment day that ends the calculation year.

    (5) The calculation year is divided into 12 *monthly periods*, lasting one month each.

    (6) For each monthly period, there is a *monthly input day*, which is day that includes or starts on the mid-point of the monthly period.

    (7) The project proponent may treat animals that entered or left the herd during a monthly period as having entered or left on the monthly input day.

           Note: This allows the project proponent to consolidate into a single input group animals that were sold at different times within the same month. Paragraph 25(1)(f) allows the sale weights to be used for the input.

    (8) For item 5 of the table, branding includes tagging or other application of identification marks to an unidentified animal.

    (9) For item 5 of the table, feral animals or cleanskins brought into the herd are treated as entering the herd by 'other management action' when they are branded. (They, or suitable samples of them, will need to be weighed at the same time.) If this is done as part of a general muster in which weights are obtained that can be used for the input on an assessment day, the animals may be treated as having been branded on the assessment day.

        Note: The Herd Management Calculator does not require entry of data on deaths or unaccounted departures—these are dealt with by calculations from the other data.

Table of inputs into the Calculator

  (10) Inputs required by the Herd Management Calculator, in relation to a calculation year, are set out in the following table.

Inputs required by the Herd Management Calculator

Item	Group	Input relating to the group		Unit
1	The herd	(a)	region primarily occupied by the herd in the year	Region
		(b)	start day for the calculation year	Date
2	For each livestock class, the group of animals that were in the herd at both the start and the end of the year	(a)	number at the start of the year	Head
		(b)	average liveweight at the start of the year	Kilograms
		(c)	number at the end of the year	Head
		(d)	average liveweight at the end of the year	Kilograms
3	For each livestock class, the group of animals that were in the herd at the start of the year, but left during the year	(a)	number at the start of the year	Head
		(b)	average liveweight at the start of the year	Kilograms

4	Each sub-group of each group defined in item 3, as defined by:
	(a) the date when they left the herd; and
	(b) whether they left:
	    (i) for live export or slaughter; or
	    (ii) for another destination
		(a)	date when they left the herd	Date

		(b)	whether they left for live export or slaughter, or for another destination	Destination
		(c)	number on that date	Head
		(d)	average liveweight on that date	Kilograms

5	For each livestock class, each group of animals that entered the herd during the year, as defined by:
	(a) whether they entered:
	    (i) by birth; or
	    (ii) by purchase or other management action; and
	(b) the date when they entered the herd (this is, the date of branding for animals that entered by birth)
		(a)	date when they entered the herd	Date

		(b)	whether they entered by birth, or by purchase or other management action	Origin
		(c)	number on that date	Head
		(d)	average liveweight on that date	Kilograms
6	For each group defined in item 5—the sub-group of those that did not leave the herd during the year	(a)	number at the end of the year	Head
		(b)	average liveweight at the end of the year	Kilograms

	Inputs required by the Herd Management Calculator		
Item	**Group**	**Input relating to the group**	**Unit**

7	For each group defined in item 5—each sub-group of those that left the herd during the year, as defined by:
	(a) the date when they left; and
	(b) whether they left:
	  (i) for live export or slaughter; or
	  (ii) for another destination
		(a) date when they left the herd
		(b) whether they left for live export or slaughter, or for another destination
		(c) number on that date
		(d) average liveweight on that date
			Date
			Destination
			
			Head
			Kilograms

Schedule 2—Inputs into Herd Management Calculator— dietary change

For paragraph 23(b), for a year in the crediting period during which one of the project activities is a dietary change for the herd, or for a livestock class of the herd, the following table specifies inputs to the Herd Management Calculator.

Note: The inputs are used, with seasonal values of pastures of the region published in the National Inventory Report, to calculate the weighted average of diets for each livestock class.

Dietary change contingent inputs required by the Herd Management Calculator		
Item	**Input**	**Unit**
1	Average dry matter digestibility of diet in each season in the year without dietary change	Percentage of total dry matter
2	Average crude protein of diet in each season of the year without dietary change	Percentage of total dry matter
3	For each livestock class for which a dietary change was a project activity:	
	(a) the period or periods of the year during which more than 50% of the animals in the livestock class experienced the dietary change	Days
	(b) for supplementary feed used for the dietary change that was purchased from a commercial feed supplier— the dietary values of the supplements, as specified in a commodity vendor declaration form, fodder declaration form, or equivalent	Dietary values of supplements
	(c) for supplementary feed used for the dietary change that was not purchased from a commercial feed supplier—the type of supplement	Type of supplement

Endnotes

Endnote 1—About the endnotes

The endnotes provide information about this compilation and the compiled law.

The following endnotes are included in every compilation:

Endnote 1—About the endnotes
Endnote 2—Abbreviation key
Endnote 3—Legislation history
Endnote 4—Amendment history

Abbreviation key—Endnote 2

The abbreviation key sets out abbreviations that may be used in the endnotes.

Legislation history and amendment history—Endnotes 3 and 4

Amending laws are annotated in the legislation history and amendment history.

The legislation history in endnote 3 provides information about each law that has amended (or will amend) the compiled law. The information includes commencement details for amending laws and details of any application, saving or transitional provisions that are not included in this compilation.

The amendment history in endnote 4 provides information about amendments at the provision (generally section or equivalent) level. It also includes information about any provision of the compiled law that has been repealed in accordance with a provision of the law.

Editorial changes

The *Legislation Act 2003* authorises First Parliamentary Counsel to make editorial and presentational changes to a compiled law in preparing a compilation of the law for registration. The changes must not change the effect of the law. Editorial changes take effect from the compilation registration date.

If the compilation includes editorial changes, the endnotes include a brief outline of the changes in general terms. Full details of any changes can be obtained from the Office of the Parliamentary Counsel.

Misdescribed amendments

A misdescribed amendment is an amendment that does not accurately describe the amendment to be made. If, despite the misdescription, the amendment can be given effect as intended, the amendment is incorporated into the compiled law and the abbreviation "(md)" added to the details of the amendment included in the amendment history.

If a misdescribed amendment cannot be given effect as intended, the abbreviation "(md not incorp)" is added to the details of the amendment included in the amendment history.

Endnote 2—Abbreviation key

ad = added or inserted

am = amended

amdt = amendment

c = clause(s)

C[x] = Compilation No. x

Ch = Chapter(s)

def = definition(s)

Dict = Dictionary

disallowed = disallowed by Parliament

Div = Division(s)

exp = expires/expired or ceases/ceased to have effect

F = Federal Register of Legislation

gaz = gazette

LA = *Legislation Act 2003*

LIA = *Legislative Instruments Act 2003*

(md) = misdescribed amendment can be given effect

(md not incorp) = misdescribed amendment cannot be given effect

mod = modified/modification

No. = Number(s)

o = order(s)

Ord = Ordinance

orig = original

par = paragraph(s)/subparagraph(s) /sub-subparagraph(s)

pres = present

prev = previous

(prev…) = previously

Pt = Part(s)

r = regulation(s)/rule(s)

reloc = relocated

renum = renumbered

rep = repealed

rs = repealed and substituted

s = section(s)/subsection(s)

Sch = Schedule(s)

Sdiv = Subdivision(s)

SLI = Select Legislative Instrument

SR = Statutory Rules

Sub-Ch = Sub-Chapter(s)

SubPt = Subpart(s)

underlining = whole or part not commenced or to be commenced

Endnote 3—Legislation history

Name	Registration	Commencement	Application, saving and transitional provisions
Carbon Credits (Carbon Farming Initiative—Beef Cattle Herd Management) Methodology Determination 2015	15 Septemeber 2015 (F2015L01434)	16 September 2015	—
Carbon Credits (Carbon Farming Initiative—Beef Cattle Herd Management) Methodology Variation 2017	24 May 2017 (F2017L00596)	25 May 2017	—

Endnote 4—Amendment history

Provision affected	How affected
Part 1	
s 5	am F2017L00596
Part 2	
s 6	am F2017L00596
Part 3	
Boxed note before s 7	rs F2017L00596
s 8	rs F2017L00596
s 9	rs F2017L00596
s 10	rs F2017L00596
s 11	rs F2017L00596
s 12	rs F2017L00596
s 13	rs F2017L00596
s 14	rs F2017L00596
s 15	rs F2017L00596
s 16	rs F2017L00596
s 18A	ad F2017L00596
Part 4	
s 19	am F2017L00596
s 21	rs F2017L00596
s 21A	ad F2017L00596
s 21B	ad F2017L00596
s 21C	ad F2017L00596
s 23	am F2017L00596
s 24	am F2017L00596
s 25	rs F2017L00596
s 26	am F2017L00596
Part 5	
s 28	am F2017L00596
s 28A	ad F2017L00596
s 30	am F2017L00596
Schedules	
Schedule 1	am F2017L00596