Carbon Credits (Carbon Farming Initiative—Source Separated Organic Waste) Methodology Determination 2016

I, Greg Hunt, Minister for the Environment, make the following determination.

Dated 4 February 2016

Greg Hunt
Minister for the Environment

OPC61323 - C

Contents

Part 1—Preliminary

1 Name

This is the *Carbon Credits (Carbon Farming Initiative—Source Separated Organic Waste) Methodology Determination 2016*.

2 Commencement

(1) Each provision of this determination specified in column 1 of the table commences, or is taken to have commenced, in accordance with column 2 of the table. Any other statement in column 2 has effect according to its terms.

Commencement information		
Column 1	**Column 2**	**Column 3**
Provisions	**Commencement**	**Date/Details**
1. The whole of this determination	The day after this determination is registered.	

Note: This table relates only to the provisions of this determination as originally made. It will not be amended to deal with any later amendments of this determination.

(2) Any information in column 3 of the table is not part of this determination. Information may be inserted in this column, or information in it may be edited, in any published version of this determination.

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 determination commences; and

(b) ends on the day before this determination would otherwise be repealed under subsection 50(1) of the *Legislative Instruments Act 2003*.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*.

activity area means the area that contains the specific location or locations at which a source separation activity is implemented.

Note: The activity area for a source separation activity must be in one State or Territory only (see subsection 15(1)).

Federal Register of Legislative Instruments F2016L00098

aggregated waste diversion activity has the meaning given by section 12.

amendment Act has the meaning given by subsection 19(5).

anaerobic digester means a system that consists of:

(a) one or more closed units designed to promote anaerobic digestion; and

(b) a biogas collection system; and

(c) any equipment associated with the transfer of biogas to a combustion device.

Note: Examples of anaerobic digesters include the following:

(a) covered anaerobic lagoons;

(b) plug-flow reactors;

(c) continuously stirred tank reactors;

(d) fixed film digesters;

(e) upflow anaerobic sludge blanket digesters.

anaerobic digestion means a biological process in which organic matter is broken down by microorganisms in the absence of oxygen.

appropriate measuring requirements, in relation to a measurement or estimate, means requirements that are consistent with:

(a) requirements that apply in relation to similar measurements or estimates under the NGER (Measurement) Determination; or

(b) relevant standards and other requirements under the *National Measurement Act 1960*.

biobased product means a product that:

(a) is manufactured by a waste treatment facility or unit; and

(b) contains material that was previously eligible organic material diverted from landfill by a source separation activity.

Note: Examples of biobased products include the following:

(a) compost;

(b) landscape mulch;

(c) mine site remediation material;

(d) soil conditioner.

biofilter means an engineered system that contains living compost-like material through which biogas passes for methane oxidation.

biogas collection efficiency means the percentage of biogas generated in an anaerobic digester that is sent to a combustion device.

biosolids means a mixture of mainly water and organic materials that:

(a) is produced entirely from domestic or commercial waste water treatment processes; and

(b) has undergone further processing to significantly reduce disease-causing pathogens and volatile organic matter; and

(c) has been stabilised for beneficial use.

charity diversion activity has the meaning given by section 14.

combustion device means:

(a) a boiler, or an internal combustion engine, that is operated in accordance with the manufacturer's instructions; or

(b) a flare that has a monitoring and control system and is operated in accordance with the manufacturer's instructions; or

(c) a device:

(i) that combusts biogas with a destruction efficiency of at least 98%; and

(ii) that is operated in accordance with the manufacturer's instructions; and

(iii) the combustion process of which is controlled using a monitoring and control system.

commercial and industrial waste means waste generated from fixed point sources related to manufacturing, wholesale, retail, professional services and administration sectors.

commercial food waste activity has the meaning given by subsection 13(2).

composting process means a biological process in which organic matter in solid waste is broken down by microorganisms in the presence of oxygen, whether or not the process includes the use of pasteurisation to produce a suitable biobased product.

construction and demolition waste means waste generated from construction and demolition activities.

declaration day, for an SSOW project, means the day the project is declared to be an eligible offsets project.

dwelling means a self-contained suite of rooms, whether comprising the whole or a part of a building, that:

(a) contain cooking and bathing facilities; and

(b) are intended for long-term residential use;

but does not include a suite of rooms in a building that offers institutional care or temporary accommodation.

Note: A hospital is an example of a building that offers institutional care, and a motel, hostel or holiday apartment is an example of a building that offers temporary accommodation.

eligible organic material means material (other than biosolids or wastewater) that consists of any of the following waste mix types:

(a) food;

(b) textiles;

(c) garden and park;

(d) wood and wood waste;

(e) sludge;

(f) nappies;

(g) rubber and leather.

Note: Paper and cardboard are not eligible organic material.

eligible waste treatment technology means any of the following:

(a) enclosed composting technology;

(b) open windrow composting;
(c) one or more anaerobic digesters and the transfer of biogas to a combustion device for destruction;
(d) process engineered fuel manufacture.

enclosed composting technology:
(a) means a semi-enclosed, or fully enclosed, alternative waste or composting technology in which the composting process occurs within a reactor that:
(i) has hard walls or doors on all 4 sides, or uses engineered soft covers; and
(ii) sits on a floor; and
(iii) has a permanent positive or negative aeration system; and
(b) may include open windrow composting to further refine compost products after the composting process mentioned in paragraph (a) is completed.

Note: Examples of enclosed composting technology include the following:
(a) composting tunnels;
(b) composting digesters;
(c) composting maturation halls.

expansion waste diversion activity has the meaning given by section 11.

intention notice time has the meaning given by subsection 19(5).

major venting event: a ***major venting event*** occurs when biogas in the storage capacity of an anaerobic digester is released to the atmosphere in a way that does not represent the proper operation of the anaerobic digester, including:
(a) when the biogas is released intentionally (for example, for safety or maintenance purposes); and
(b) when the biogas is released unintentionally (for example, as a result of a system failure).

monitoring and control system, for a flare or other device, means a system that consists of:
(a) a monitoring system that detects combustion and monitors if the combustion is operating at the manufacturer's specifications for the complete combustion of methane; and
(b) an associated control system that shuts down biogas flow to the flare or other device when the flare or device is not operating at the manufacturer's specifications for the complete combustion of methane.

Note: An example of a monitoring and control system for a flare is a flare management system that incorporates a UV detection sensor.

monitoring requirements means the requirements set out in sections 59 and 60.

municipal food and garden and park waste activity has the meaning given by subsection 13(5).

municipal food waste activity has the meaning given by subsection 13(3).

municipal garden and park waste activity has the meaning given by subsection 13(4).

municipal solid waste means waste that is:

(a) generated from the domestic sector; and

(b) collected in household garbage, recycling, mixed organics, garden organics or local government clean-up collections; and

(c) classified as either municipal solid waste class I or municipal solid waste class II (within the meaning of the NGER (Measurement) Determination).

new waste diversion activity has the meaning given by section 10.

NGA Factors document means the document entitled "National Greenhouse Accounts Factors", published by the Department and as in force from time to time.

NGER (Measurement) Determination means the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*.

NGER Regulations means the *National Greenhouse and Energy Reporting Regulations 2008*.

nominated waste treatment facility or unit, for a source separation activity that is implemented by an SSOW project, means a waste treatment facility or unit at which eligible organic material diverted from landfill by the activity will be processed, nominated as such in:

(a) the application made under section 22 of the Act in relation to the project; or

(b) a notification given to the Regulator by the project proponent under section 53 or 54 of this determination.

non-monitored period has the meaning given by subsection 62(1).

open windrow composting means a composting process in which open air windrows are managed to maintain aerobic conditions, whether by regular turning or aeration.

original activity has the meaning given by subsection 16(1).

potential activity has the meaning given by subsection 17(1).

process engineered fuel manufacture means a process:

(a) by which a solid or liquid combustible fuel substitute is produced from eligible organic material that would otherwise enter landfill; and

(b) that may include further sorting of waste that was separated at the point of generation, separation of recyclable material, size reduction and screening.

registered charity means an entity that is registered under the *Australian Charities and Not-for-profits Commission Act 2012* as the type of entity mentioned in column 1 of item 1 of the table in subsection 25-5(5) of that Act.

relevant 24-month period, for an SSOW project, means the 24-month period ending:

(a) if the project meets the substitute newness requirement mentioned in subsection 19(3)—at the intention notice time; or

(b) otherwise—on the day before the application under section 22 of the Act is made in relation to the project.

separated at the point of generation has the meaning given by section 6.

source separation activity has the meaning given by subsection 8(2).

source separation bin means a container that is intended to contain:

(a) a particular waste mix type; or

(b) a particular combination of waste mix types.

Note: A container for mixed organics that is intended to contain a combination of food and garden and park waste is an example of a container that is intended to contain a particular combination of waste mix types.

SSOW project (short for source separated organic waste project) has the meaning given by subsection 8(3).

sub-activity has the meaning given by subsection 12(2).

substitute newness requirement has the meaning given by subsections 19(2) and (3).

trial waste diversion activity: a ***trial waste diversion activity*** is undertaken in an activity area by a project proponent if the trial waste diversion activity:

(a) involves eligible organic material being separated at the point of generation and diverted from landfill; and

(b) is undertaken at no more than 20% of sites at which a source separation bin is to be located in the activity area.

waste audit means a waste audit undertaken in accordance with section 61.

waste mix type means any of the following:

(a) food;

(b) paper and cardboard;

(c) textiles;

(d) garden and park;

(e) wood and wood waste;

(f) sludge;

(g) nappies;

(h) rubber and leather;

(i) inert waste (including concrete, metal, plastic and glass).

waste stream means any of the following:

(a) municipal solid waste;

(b) commercial and industrial waste;

(c) construction and demolition waste.

waste treatment facility or unit means a facility or unit that:

(a) accepts and processes waste using eligible waste treatment technology; and

(b) produces biobased products from the waste processed; and

(c) if Commonwealth, State or Territory legislative requirements apply to the operation of the facility or unit—is operated in accordance with those requirements.

6 Meaning of *separated at the point of generation*

(1) Subject to subsection (2), waste is ***separated at the point of generation*** if:

(a) the waste is disposed of into a source separation bin located where the waste is generated; and

(b) the waste consists of a waste mix type that the bin is intended to contain.

(2) For the purposes of a charity diversion activity, food is ***separated at the point of generation*** if the food is separated from other waste at the location where the waste is generated.

7 References to factors and parameters from external sources

(1) If a calculation in this determination 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.

(2) Subsection (1) does not apply if:

(a) the determination specifies otherwise; or

(b) it is not possible to define or calculate the factor or parameter by reference to the instrument or writing as in force at the end of the reporting period.

Part 2—Source separated organic waste projects

8 Source separated organic waste projects

(1) For paragraph 106(1)(a) of the Act, this determination applies to an offsets project that satisfies the following:

(a) the project involves the implementation of one or more source separation activities that divert eligible organic material from landfill;

(b) each source separation activity can reasonably be expected to result in eligible carbon abatement.

Note: Paper and cardboard are not eligible organic material for the purposes of this determination (see the definition of ***eligible organic material*** in section 5).

(2) Each of the following is a ***source separation activity***:

(a) a new waste diversion activity;

(b) an expansion waste diversion activity;

(c) an aggregated waste diversion activity;

(d) a charity diversion activity.

(3) A project covered by subsection (1) is an ***SSOW project***.

Part 3—Project requirements

Division 1—General requirements

9 Operation of this Division

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

10 Requirements for new waste diversion activities

(1) An activity is a ***new waste diversion activity*** if:
  (a) the requirements set out in subsections (2) and (3) are met; and
  (b) the activity is not a sub-activity in an aggregated waste diversion activity.

(2) The activity must involve eligible organic material being:
  (a) separated at the point of generation from a single waste stream; and
  (b) diverted from landfill; and
  (c) processed at a waste treatment facility or unit using eligible waste treatment technology.

(3) During the relevant 24-month period for the project, material consisting of the same waste mix type or types as the eligible organic material diverted from landfill by the activity must have been:
  (a) generated in the activity area; and
  (b) primarily disposed of in landfill.

(4) In determining whether the requirement in paragraph (3)(b) is met, disregard any trial waste diversion activity that was undertaken by the project proponent in the activity area during the relevant 24-month period for the project if the trial waste diversion activity ceased 12 months or more before the end of that 24-month period.

Note: If a trial waste diversion activity ceased less than 12 months before the end of the 24-month period, an activity that expands the trial waste diversion activity may be an expansion waste diversion activity under section 11.

11 Requirements for expansion waste diversion activities

(1) An activity is an ***expansion waste diversion activity*** if:
  (a) either:
    (i) the requirements set out in subsections (2) and (3) are met; or
    (ii) the requirements set out in subsections (4) and (5) are met; and
  (b) the activity is not a sub-activity in an aggregated waste diversion activity.

Expansion of an existing activity

(2) The activity must involve eligible organic material being:
  (a) separated at the point of generation from a single waste stream; and

(b) diverted from landfill; and
(c) processed at a waste treatment facility or unit using eligible waste treatment technology;

as a result of the expansion of an existing activity.

(3) During the relevant 24-month period for the project, material consisting of the same waste mix type or types as the eligible organic material diverted from landfill by the activity must have been:
(a) generated in the activity area; and
(b) diverted from landfill by the existing activity; and
(c) processed at a waste treatment facility or unit using eligible waste treatment technology.

Expansion of a trial waste diversion activity

(4) The activity must involve eligible organic material being:
(a) separated at the point of generation from a single waste stream; and
(b) diverted from landfill; and
(c) processed at a waste treatment facility or unit using eligible waste treatment technology;

as a result of the expansion of a trial waste diversion activity that was undertaken by the project proponent in the activity area during the relevant 24-month period for the project.

(5) The trial waste diversion activity must either:
(a) be ongoing; or
(b) have ceased less than 12 months before the end of the relevant 24-month period for the project.

Note: If the trial waste diversion activity ceased 12 months or more before the end of the relevant 24-month period, the activity that expands the trial waste diversion activity may be a new waste diversion activity under section 10.

12 Requirements for aggregated waste diversion activities

(1) A project proponent that undertakes 2 or more activities may choose to include some or all of the activities in an ***aggregated waste diversion activity*** if:
(a) were the activities not included, they would be new waste diversion activities or expansion waste diversion activities; and
(b) the eligible organic material diverted from landfill by the included activities is processed at the same waste treatment facility or unit.

(2) An activity that is included in an aggregated waste diversion activity is a ***sub-activity***.

Note 1: An aggregated waste diversion activity may consist of both activities that would otherwise be new waste diversion activities and activities that would otherwise be expansion waste diversion activities.

Note 2: An aggregated waste diversion activity is a single source separation activity.

(3) If:

(a) the project proponent decides to no longer include a particular sub-activity in an aggregated waste diversion activity; and

(b) as a result of that decision, the aggregated waste diversion activity consists of only one remaining sub-activity;

the project proponent may continue to treat the remaining sub-activity as an aggregated waste diversion activity.

Note: The project proponent must notify the Regulator if the project proponent decides to no longer include a particular sub-activity in an aggregated waste diversion activity (see section 55).

13 Requirements for particular kinds of new waste diversion activities, expansion waste diversion activities and aggregated waste diversion activities

(1) An activity that is a new waste diversion activity, an expansion waste diversion activity or a sub-activity in an aggregated waste diversion activity may (but need not) be:

(a) a commercial food waste activity; or

(b) a municipal food waste activity; or

(c) a municipal garden and park waste activity; or

(d) a municipal food and garden and park waste activity.

Note: If a new waste diversion activity, an expansion waste diversion activity or a sub-activity is of a kind mentioned in any of paragraphs (a) to (d), the table in section 33 may be used to work out the quantity of a waste mix type present in material collected by the activity or sub-activity (see sections 31 and 32).

(2) To be a ***commercial food waste activity***, the activity must meet the following requirements:

(a) the activity must involve the waste mix type food being separated at the point of generation from the waste stream commercial and industrial waste;

(b) the food waste must be primarily free of packaging when it is separated at the point of generation;

(c) the food waste must be disposed of into a source separation bin that is intended to contain only that waste mix type.

(3) To be a ***municipal food waste activity***, the activity must meet the following requirements:

(a) the activity must involve the waste mix type food being separated at the point of generation from the waste stream municipal solid waste;

(b) the food waste must be disposed of into a source separation bin that is intended to contain only that waste mix type.

(4) To be a ***municipal garden and park waste activity***, the activity must meet the following requirements:

(a) the activity must involve the waste mix type garden and park being separated at the point of generation from the waste stream municipal solid waste;

(b) the garden and park waste must be disposed of into a source separation bin that is intended to contain only that waste mix type.

(5) To be a ***municipal food and garden and park waste activity***, the activity must meet the following requirements:

(a) the activity must involve the waste mix type food and the waste mix type garden and park being separated at the point of generation from the waste stream municipal solid waste;

(b) the food waste, and garden and park waste, must be disposed of into a source separation bin that is intended to contain only both of those waste mix types;

(c) the implementation of the activity must include community education and engagement activities.

14 Requirements for charity diversion activities

(1) An activity is a ***charity diversion activity*** if the requirements set out in subsections (2) and (3) are met.

(2) The activity must involve eligible organic material that consists of the waste mix type food being:

(a) separated at the point of generation from the waste stream commercial and industrial waste; and

(b) diverted from landfill; and

(c) used by one or more registered charities for a charitable purpose.

Note: For the definition of ***charitable purpose***, see section 2B of the *Acts Interpretation Act 1901*.

(3) During the relevant 24-month period for the project, the waste mix type food must have been:

(a) generated in the activity area; and

(b) primarily disposed of in landfill.

(4) In determining whether the requirement in paragraph (3)(b) is met, disregard any activity of a kind mentioned in subsection (2) that was undertaken by the project proponent in the activity area during the relevant 24-month period for the project if the activity involved food being diverted from landfill to a registered charity on no more than 5 occasions during that 24-month period.

15 Implementation of source separation activities

(1) The activity area for a source separation activity must be in one State or Territory only.

(2) The activity area for a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity must not include a location if:

(a) the location is on an area of land where a suburban development:

(i) has occurred during the relevant 24-month period for the project; or

(ii) will occur while the project is being implemented; and

(b) the development is part of a precinct, master plan or other major suburban development scheme that has the stated aim of creating more than 400 dwellings; and

(c) waste generated at each dwelling was not primarily disposed of in landfill, or diverted from landfill by an existing activity or a trial waste diversion activity, for the whole of the relevant 24-month period for the project.

(3) The project may involve the implementation of 2 or more source separation activities in the same activity area even if the activities (or any of them) are not sub-activities in an aggregated waste diversion activity.

16 Information to be included in application for declaration—original activities

(1) The application made under section 22 of the Act in relation to the project must include the following for each of the project's source separation activities (an ***original activity***) identified at the time of making the application:

(a) a detailed description of the nature of:

(i) the activity; or

(ii) for aggregated waste diversion activities—each sub-activity in the aggregated waste diversion activity;

(b) a detailed description of the kind of eligible organic material that will be diverted from landfill by the activity;

(c) details of the activity area;

(d) for expansion waste diversion activities and sub-activities that would otherwise be expansion waste diversion activities—information about the existing activity, or trial waste diversion activity, that is to be expanded and the nature of the expansion;

(e) for new waste diversion activities, expansion waste diversion activities and aggregated waste diversion activities—a description of each eligible waste treatment technology to be used to process the eligible organic material diverted from landfill by the activity and details of each waste treatment facility or unit nominated as a facility or unit at which the eligible organic material will be processed;

(f) for charity diversion activities—a description of the process by which food will be separated at the point of generation and details of the registered charity or charities to which the food will be diverted.

Note: If the activity is a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity, the information provided for the purpose of paragraph (1)(c) may identify the activity area by reference to the area in which the activity is to be implemented rather than each site at which a source separation bin is to be located.

(2) For each of the project's original activities, the application must be accompanied by appropriate evidence of the following:

(a) that the requirement set out in subsection 10(3), 11(3), 11(5) or 14(3), as applicable to the activity, has been met by:

(i) the activity; or

(ii) if the activity is an aggregated waste diversion activity—each sub-activity in the aggregated waste diversion activity;

(b) for charity diversion activities, new waste diversion activities and sub-activities that would otherwise be new waste diversion activities—the landfill that, during the relevant 24-month period for the project, received material consisting of the same waste mix type or types as the eligible

organic material to be diverted by the activity or sub-activity (if such evidence is available);

(c) for expansion waste diversion activities and sub-activities that would otherwise be expansion waste diversion activities—the number and volume of source separation bins used by the existing activity, or trial waste diversion activity, during the relevant 24-month period for the project, and the waste mix types collected in those bins during that period.

Note: A project that does not have the required appropriate evidence for each original activity or for the whole of the relevant 24-month period for the project does not meet the requirements to be an eligible offsets project.

(3) For paragraph (2)(a), the appropriate evidence must consist of:

(a) weighbridge evidence from an accepted industry weighbridge that meets appropriate measuring requirements; or

(b) waste transport contracts and invoices that provide evidence of material disposed of in landfill.

(4) For paragraph (2)(c), the appropriate evidence must consist of waste management records for the existing activity, or trial waste diversion activity, that provide details of the service arrangement, including the number and volume of source separation bins.

17 Information to be included in application for declaration—potential activities

(1) This section applies to the application made under section 22 of the Act in relation to the project if there are one or more activities (a ***potential activity***) that are:

(a) source separation activities that the project is likely to implement but that are not able to be identified at the time the application is made; or

(b) if the project's original activities include an aggregated waste diversion activity—activities that the project proponent is likely to include in the aggregated waste diversion activity but that are not able to be identified at the time the application is made.

(2) The application must include a description of:

(a) the likely nature of the potential activity; and

(b) the kind of eligible organic material that is likely to be diverted from landfill by the potential activity.

Note: If a potential activity is included in the calculation of the project's activity abatement portions for a reporting period because of paragraph 25(1)(b), the offsets report about the project for the reporting period must include the same information and evidence as would be required to be provided under section 16 if the potential activity were able to be identified at the time the application under section 22 of the Act is made in relation to the project (see section 50).

18 Information to be included in application for declaration—trial waste diversion activities etc.

(1) Subsection (2) applies to the application made under section 22 of the Act in relation to the project if:

(a) the project's source separation activities include a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity; and

(b) a trial waste diversion activity was undertaken by the project proponent in the activity area during the relevant 24-month period for the project.

(2) The application must:

(a) contain a detailed description of the nature of the trial waste diversion activity, including the eligible organic material diverted from landfill by the activity; and

(b) be accompanied by evidence of:

(i) the number and volume of source separation bins used by the trial waste diversion activity; and

(ii) the duration of the trial waste diversion activity, including the date it ceased (if it has ceased).

(3) Subsection (4) applies to the application made under section 22 of the Act in relation to the project if:

(a) the project's source separation activities include a charity diversion activity; and

(b) an activity of a kind mentioned in subsection 14(2) was undertaken by the project proponent in the activity area during the relevant 24-month period for the project.

(4) The application must be accompanied by evidence of the number of occasions on which food was diverted from landfill to a registered charity by the activity during that 24-month period.

Division 2—Additionality requirements

19 Requirement in lieu of newness requirement

(1) For subparagraph 27(4A)(a)(ii) of the Act, the substitute newness requirement is in lieu of the newness requirement for an SSOW project.

(2) The project meets the ***substitute newness requirement*** if it has not begun to be implemented.

(3) The project also meets the ***substitute newness requirement*** if:

(a) the project proponent or project proponents for the project:

(i) gave the Regulator a written notice of intention to make an application in relation to the project that satisfied:

(A) paragraphs (1)(a) to (d) of item 388B of Schedule 1 to the amendment Act; or

(B) paragraphs (1)(a) to (d) of item 388C of that Schedule; and

(ii) made the application under section 22 of the Act, or were taken to have done so under the Act, before 1 July 2016; and

(b) the project had not begun to be implemented at the intention notice time.

(4) A determination as to whether a project has begun to be implemented at a particular time is to be done as if for the purposes of subparagraph 27(4A)(a)(i) of the Act (so that subsections 27(4B) to (4E) of the Act apply).

(5) In this section:

amendment Act means the *Carbon Farming Initiative Amendment Act 2014*.

intention notice time has the same meaning as in item 388B or 388C of Schedule 1 to the amendment Act, as appropriate.

Note: Transitional provisions in the *Carbon Farming Initiative Amendment Act 2014* allowed prospective proponents who gave notice of their intentions before the date of Proclamation of that Act to have the newness of their projects assessed as at the time of their notice, provided that they made the section 22 application before 1 July 2015. The effect of this section is to extend this deadline to 1 July 2016 for this determination.

Part 4—Net abatement amount

Division 1—Preliminary

20 Operation of this Part

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 an SSOW project that is an eligible offsets project.

21 Overview of gases accounted for in abatement calculations

The following table provides an overview of the greenhouse gases and emissions sources that are relevant to working out the carbon dioxide equivalent net abatement amount for an SSOW project.

Greenhouse gases and emissions sources

Item	Relevant calculation	Emissions source	Greenhouse gas
1	Baseline emissions	The decomposition of eligible organic material at landfill	Methane (CH_4)
2	Project emissions	Fuel consumption	Carbon dioxide (CO_2) Methane (CH_4) Nitrous oxide (N_2O)
3	Project emissions	Electricity consumption	Carbon dioxide (CO_2) Methane (CH_4) Nitrous oxide (N_2O)
4	Project emissions	Emissions from composting processes	Methane (CH_4) Nitrous oxide (N_2O)
5	Project emissions	Emissions from anaerobic digester leakage or venting events	Methane (CH_4) Nitrous oxide (N_2O)
6	Project emissions	Emissions from the combustion of biogas	Methane (CH_4) Nitrous oxide (N_2O)

Division 2—Method for calculating net abatement amount

22 Summary

The carbon dioxide equivalent net abatement amount for a reporting period is worked out by adding together the activity abatement portion for the reporting period and any activity abatement portions from previous reporting periods that have accrued. The accrued activity abatement portions must not have been used to calculate the carbon dioxide equivalent net abatement amount for a previous reporting period.

23 Net abatement amount

The carbon dioxide equivalent net abatement amount for a reporting period, in tonnes CO_2-e, is worked out using the formula (***equation 1***):

$$A_N = A_0 + A_{Acc}$$

where:

A_N means the carbon dioxide equivalent net abatement amount for the reporting period, in tonnes CO_2-e.

A_0 means activity abatement portion A_0 for the reporting period, in tonnes CO_2-e, worked out in accordance with section 26.

A_{Acc} means the amount, in tonnes CO_2-e, that is the sum of each activity abatement portion that:

(a) has accrued from a previous reporting period (see subsection 26(3)); and

(b) has not been used before to calculate the carbon dioxide equivalent net abatement amount.

Note: The no double counting test in section 15A of the Act means that abatement will only be reflected in the unit entitlement for a certificate of entitlement in respect of an eligible offsets project if it has not been reflected in the unit entitlement for another certificate or project.

Division 3—Method for calculating activity abatement portions

Subdivision A—Activity abatement portions

24 Summary

The activity abatement portions for a reporting period are worked out by dividing into 7 equal portions the abatement resulting from the project's source separation activities during the reporting period. One portion is used to calculate the carbon dioxide equivalent net abatement amount for the reporting period and the 6 other portions accrue over time to be used in subsequent reporting periods.

25 Activities to be included in calculations

(1) The calculation of the activity abatement portions for a reporting period must include:
  (a) each of the project's original activities; and
  (b) if one or more of the project's potential activities are implemented during the reporting period—each potential activity implemented.

(2) Despite subsection (1), the project proponent may choose not to include an activity or sub-activity in the calculation of the activity abatement portions for a reporting period if the activity or sub-activity ceases being implemented during the reporting period.

(3) If, under subsection (2), the project proponent chooses not to include an activity or sub-activity in the calculation of the activity abatement portions for a reporting period, the activity or sub-activity must not be included in the calculation of the activity abatement portions for any subsequent reporting period.

(4) An activity must not be included in the calculation of the activity abatement portions for a reporting period if:
  (a) it is not an original activity or a potential activity identified in the application made under section 22 of the Act in relation to the project; or
  (b) the project has been divided into 2 or more specified parts for the purpose of section 77A of the Act and the activity is not included in the part of the project to which the calculation relates.

26 Calculation and accrual of activity abatement portions

Calculation of activity abatement portions

(1) Subject to subsection (2), the activity abatement portions for a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 2***):

$$A_Y = \frac{\sum_a \left(E_{B,a} - E_{P,a}\right) \times IF_n}{7}$$

where:

A_Y means activity abatement portion A_0, A_1, A_2, A_3, A_4, A_5 or A_6, in tonnes CO_2-e.

$E_{B,a}$ means the baseline emissions for source separation activity a during the reporting period, in tonnes CO_2-e, worked out using equation 3.

$E_{P,a}$ means the project emissions for source separation activity a, in tonnes CO_2-e, worked out in accordance with section 37.

IF_n means the improvement factor for the reporting period, worked out in accordance with section 48.

a means a source separation activity that is included in the calculation of the activity abatement portions for the reporting period in accordance with section 25.

Note 1: The denominator is 7 because this is the number of years in the crediting period for emissions avoidance projects (see section 69 of the Act).

Note 2: An aggregated waste diversion activity is a single source separation activity.

(2) The activity abatement portions for the reporting period are taken to be zero if the reporting period is not included in a crediting period for the project.

Accrual of activity abatement portions

(3) The activity abatement portions for a reporting period accrue as follows:
(a) A_1 accrues 1 year after the end of the reporting period;
(b) A_2 accrues 2 years after the end of the reporting period;
(c) A_3 accrues 3 years after the end of the reporting period;
(d) A_4 accrues 4 years after the end of the reporting period;
(e) A_5 accrues 5 years after the end of the reporting period;
(f) A_6 accrues 6 years after the end of the reporting period.

Subdivision B—Calculations relating to baseline emissions

27 Summary

The baseline emissions for a source separation activity during a reporting period are the emissions that would have resulted if the eligible organic material diverted from landfill by the activity during the reporting period had entered landfill instead.

28 Baseline emissions

(1) The baseline emissions for a source separation activity during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 3***):

$$E_{B,a} = \left(1 - W_{LFG}\right) \times M_B \times \left(1 - OF_{LF}\right) \times GWP_{CH_4}$$

where:

$E_{B,a}$ means the baseline emissions, in tonnes CO_2-e.

W_{LFG} means the average capture rate set out in the table in subsection (2) for methane emissions from landfill in the State or Territory in which the activity area is located.

M_B means the methane generation potential of the degradable organic carbon content in the eligible organic material diverted from landfill by the source separation activity during the reporting period, in tonnes CH_4, worked out using equation 4.

OF_{LF} means the oxidation factor for near surface methane in landfill mentioned in subsection 5.4(1) of the NGER (Measurement) Determination.

GWP_{CH_4} means the value specified as the Global Warming Potential for methane in regulation 2.02 of the NGER Regulations.

(2) The following table sets out the average capture rate for methane emissions from landfill in each State and Territory.

Average capture rate for methane emissions from landfill (W_{LFG})

Item	State or Territory	Average capture rate
1	New South Wales	0.37
2	Victoria	0.45
3	Queensland	0.30
4	Western Australia	0.30
5	South Australia	0.29
6	Tasmania	0.39
7	Australian Capital Territory	0.66
8	Northern Territory	0.18

29 Methane generation potential of degradable organic carbon content in eligible organic material

The methane generation potential of the degradable organic carbon content in the eligible organic material diverted from landfill by a source separation activity during a reporting period, in tonnes CH_4, is worked out using the formula (***equation 4***):

$$M_B = \sum_w \left(EO_w \times DOC_w \times DOC_{F,w} \right) \times MCF \times W_{LFG,CH_4} \times F_{C \to CH_4}$$

where:

M_B means the methane generation potential of the degradable organic carbon content in the eligible organic material diverted from landfill by the source separation activity during the reporting period, in tonnes CH_4.

EO_w means the quantity of waste mix type w present in the eligible organic material diverted from landfill by the source separation activity during the reporting period, in tonnes, worked out using:

(a) if the source separation activity is a charity diversion activity—sub-method 1 in section 30; or

(b) if the source separation activity is a new waste diversion activity or an expansion waste diversion activity—sub-method 2 in section 31; or

(c) if the source separation activity is an aggregated waste diversion activity—sub-method 3 in section 32.

DOC_w means the degradable organic carbon value for waste mix type w mentioned in section 5.12 of the NGER (Measurement) Determination.

$DOC_{F,w}$ means the fraction of degradable organic carbon dissimilated for waste mix type w mentioned in section 5.14A of the NGER (Measurement) Determination.

MCF means the methane correction factor for aerobic decomposition mentioned in section 5.14B of the NGER (Measurement) Determination.

W_{LFG,CH_4} means the fraction, by volume of methane generated in landfill gas, mentioned in section 5.14C of the NGER (Measurement) Determination.

$F_{C \to CH_4}$ means the factor to convert a mass of carbon to a mass of methane, being 1.336.

w means a waste mix type present in the eligible organic material.

30 Quantity of a waste mix type in eligible organic material—sub-method 1

(1) Subject to subsection (2), the quantity of waste mix type w present in the eligible organic material diverted from landfill by a charity diversion activity during a reporting period is worked out using the formula (***equation 5***):

$$EO_W = \left(Q_{MC} - Q_{RJ} \right) \times W_{EO,w} \times LFD$$

where:

EO_W means the quantity of waste mix type w present in the eligible organic material diverted from landfill by the activity during the reporting period, in tonnes.

Q_{MC} means the total quantity of material collected by the activity during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

Q_{RJ} means the quantity of material collected by the activity that is rejected during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

$W_{EO,w}$ means the default proportion of the waste mix type food in the material collected by the activity during the reporting period, being 0.95.

LFD means the landfill diversion factor, being 0.75.

w means a waste mix type present in the eligible organic material.

(2) If the amount worked out under subsection (1) for a waste mix type is less than zero, the quantity of the waste mix type present in the eligible organic material diverted from landfill by the activity during the reporting period is taken to be zero.

31 Quantity of a waste mix type in eligible organic material—sub-method 2

(1) The quantity of waste mix type w present in the eligible organic material diverted from landfill by a new waste diversion activity or an expansion waste diversion activity during a reporting period (***EO_w***) is worked out as follows:

(a) in accordance with subsection (2), work out the quantity of waste mix type w present in the eligible organic material diverted from landfill by the activity to each nominated waste treatment facility or unit for the activity during the reporting period;

(b) add together the quantity worked out for each facility or unit.

Note: The project proponent must notify the Regulator if there is a change to which waste treatment facility or unit will process the eligible organic material diverted from landfill (see section 54).

(2) Subject to subsection (3), the quantity of waste mix type w present in the eligible organic material diverted from landfill by a new waste diversion activity or an expansion waste diversion activity to a waste treatment facility or unit during a reporting period is worked out using the formula (***equation 6***):

$$EO_{W,f} = \left(Q_{MC,f} - Q_{RJ,f}\right) \times W_{EO,w} \times LFD \times EX$$

where:

$EO_{W,f}$ means the quantity of waste mix type w present in the eligible organic material diverted from landfill by the activity to waste treatment facility or unit f during the reporting period, in tonnes.

$Q_{MC,f}$ means the total quantity of material collected by the activity and sent to waste treatment facility or unit f during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

$Q_{RJ,f}$ means the quantity of material collected by the activity and sent to waste treatment facility or unit f that is rejected during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

$W_{EO,w}$ means the proportion of waste mix type w in the material collected by the activity during the reporting period, worked out:

(a) if the activity is of a kind mentioned in the table in section 33 and $W_{EO,w}$ for the activity has not been worked out in accordance with the monitoring requirements for a previous reporting period—in accordance with:
(i) the table in section 33; or
(ii) the monitoring requirements; or
(b) otherwise—in accordance with the monitoring requirements.

LFD means the landfill diversion factor, being:
(a) if waste mix type w is garden and park—the diversion factor set out in the table in section 34 for the waste mix type garden and park diverted from landfill in the State or Territory in which the activity area is located; or
(b) otherwise—1.

EX means:
(a) if the activity is an expansion waste diversion activity—the expansion proportion for the eligible organic material diverted from landfill by the activity during the reporting period, worked out using equation 8; or
(b) otherwise—1.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the activity during the reporting period.

w means a waste mix type present in the eligible organic material.

(3) If the amount worked out under subsection (2) for a waste mix type is less than zero, the quantity of the waste mix type present in the eligible organic material diverted from landfill by the activity to the waste treatment facility or unit during the reporting period is taken to be zero.

32 Quantity of a waste mix type in eligible organic material—sub-method 3

(1) The quantity of waste mix type w present in the eligible organic material diverted from landfill by an aggregated waste diversion activity during a reporting period (EO_w) is worked out as follows:
(a) in accordance with subsection (2), work out the quantity of waste mix type w present in the eligible organic material diverted from landfill by the activity to each nominated waste treatment facility or unit for the activity during the reporting period;
(b) add together the quantity worked out for each facility or unit.

Note 1: The eligible organic material diverted from landfill by the sub-activities included in the aggregated waste diversion activity must be processed at the same waste treatment facility or unit (see paragraph 12(1)(b)). However, the facility or unit that processes the material diverted by the sub-activities may change during a reporting period.

Note 2: The project proponent must notify the Regulator if there is a change to which waste treatment facility or unit is to process the eligible organic material diverted from landfill (see section 54).

(2) Subject to subsection (3), the quantity of waste mix type w present in the eligible organic material diverted from landfill by an aggregated waste diversion activity to a waste treatment facility or unit during a reporting period is worked out using the formula (***equation 7***):

$$EO_{W,f} = \sum_{sa} \left[\left(Q_{MC,sa,f} - Q_{RJ,sa,f} \right) \times W_{EO,w,sa} \times LFD \times EX_{sa} \right]$$

where:

***EO*$_{W,f}$** means the quantity of waste mix type w present in the eligible organic material diverted from landfill by the aggregated waste diversion activity to waste treatment facility or unit f during the reporting period, in tonnes.

***Q*$_{MC,sa,f}$** means the total quantity of material collected by sub-activity sa and sent to waste treatment facility or unit f during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

***Q*$_{RJ,sa,f}$** means the quantity of material collected by sub-activity sa and sent to waste treatment facility or unit f that is rejected during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

***W*$_{EO,w,sa}$** means the proportion of waste mix type w in the material collected by sub-activity sa during the reporting period, worked out:

(a) if the sub-activity is of a kind mentioned in the table in section 33 and $W_{EO,w,sa}$ for the sub-activity has not been worked out in accordance with the monitoring requirements for a previous reporting period—in accordance with:
  (i) the table in section 33; or
  (ii) the monitoring requirements; or
(b) otherwise—in accordance with the monitoring requirements.

LFD means the landfill diversion factor, being:

(a) if waste mix type w is garden and park—the diversion factor set out in the table in section 34 for the waste mix type garden and park diverted from landfill in the State or Territory in which the activity area is located; or
(b) otherwise—1.

***EX*$_{sa}$** means:

(a) if sub-activity sa would otherwise be an expansion waste diversion activity—the expansion proportion for the eligible organic material diverted from landfill by the sub-activity during the reporting period, worked out as ***EX*** using equation 8; or
(b) otherwise—1.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the aggregated waste diversion activity during the reporting period.

sa means a sub-activity included in the aggregated waste diversion activity, other than a sub-activity that is not included in the calculation of the activity abatement portions for the reporting period in accordance with section 25.

w means a waste mix type present in the eligible organic material.

(3) If the amount worked out under subsection (2) for a waste mix type is less than zero, the quantity of the waste mix type present in the eligible organic material

diverted from landfill by the aggregated waste diversion activity to the waste treatment facility or unit during the reporting period is taken to be zero.

33 Default proportion of waste mix type w in material collected

The following table sets out the default proportion of waste mix type w in material collected by a new waste diversion activity, an expansion activity, or a sub-activity in an aggregated waste diversion activity, of a particular kind.

Proportion of waste mix type w in material collected ($W_{EO,w}$)

Item	Kind of activity or sub-activity	Proportion of waste mix type w	
		Garden and park	Food
1	Commercial food waste	0.00	0.95
2	Municipal food waste	0.00	0.80
3	Municipal garden and park waste	0.96	0.00
4	Municipal food and garden and park waste	0.70	0.10

34 Landfill diversion factor

The following table sets out the landfill diversion factor for the waste mix type garden and park diverted from landfill in each State and Territory.

Landfill diversion factor for the waste mix type garden or park (*LFD*)

Item	State or Territory	Landfill diversion factor
1	New South Wales	0.30
2	Victoria	0.19
3	Queensland	0.15
4	Western Australia	0.25
5	South Australia	0.25
6	Tasmania	0.19
7	Australian Capital Territory	0.05
8	Northern Territory	0.15

35 Expansion proportion

The expansion proportion for the eligible organic material diverted from landfill by an expansion waste diversion activity, or a sub-activity that would otherwise be an expansion waste diversion activity, during a reporting period is worked out using the formula (***equation 8***):

$$EX = 1 - \frac{\sum_{s}\left(HQ_{B,s} \times V_{B,s}\right)}{\sum_{s}\left(Q_{B,s} \times V_{B,s}\right)}$$

where:

EX means the expansion proportion for the eligible organic material diverted from landfill by the activity or sub-activity during the reporting period.

$\boldsymbol{HQ_{B,s}}$ means the greatest quantity of source separation bins of bin size s that, on any one day during the relevant 24-month period for the project, were used in the activity area to divert the eligible organic material from landfill, worked out using the appropriate evidence that accompanied the application under subsection 16(2).

$\boldsymbol{V_{B,s}}$ means the volume of source separation bins of bin size s.

$\boldsymbol{Q_{B,s}}$ means the quantity of source separation bins of bin size s that are used in implementing the activity or sub-activity during the reporting period, worked out in accordance with the monitoring requirements.

s means a source separation bin size.

Subdivision C—Calculations relating to project emissions

36 Summary

The project emissions for a source separation activity during a reporting period are the emissions that result from carrying out the activity during the reporting period.

37 Project emissions

(1) The project emissions for a source separation activity during a reporting period, in tonnes CO_2-e, are worked out using:

(a) for a charity diversion activity—sub-method 1 in subsection (3); or

(b) for a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity—subject to subsection (2), either:

(i) sub-method 1 in subsection (3); or

(ii) sub-method 2 in subsection (4).

(2) If sub-method 2 is used to work out the project emissions for a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity for a reporting period, that sub-method must be used to work out the project emissions for the activity for all subsequent reporting periods.

Sub-method 1

(3) The project emissions for a source separation activity during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 9***):

$$E_{P,a} = E_{B,a} \times W_{PE}$$

where:

$E_{P,a}$ means the project emissions, in tonnes CO_2-e.

$E_{B,a}$ means the baseline emissions for the source separation activity during the reporting period, in tonnes CO_2-e, worked out using equation 3.

W_{PE} means the default proportion of project emissions produced by processing eligible organic material diverted from landfill by the source separation activity, being:

(a) if the source separation activity is a charity diversion activity—0.10; or

(b) if the source separation activity is a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity—0.15.

Sub-method 2

(4) The project emissions for a source separation activity during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 10***):

$$E_{P,a} = \sum_{f} \left[\left(\frac{\sum_{w} EO_{w,f}}{TW_f} \right) \times \left(E_{F,f} + E_{EP,f} + E_{EO,f} \right) \right]$$

where:

$E_{P,a}$ means the project emissions, in tonnes CO_2-e.

$EO_{w,f}$ means the quantity of waste mix type w present in the eligible organic material diverted from landfill by the source separation activity to waste treatment facility or unit f during the reporting period, in tonnes, worked out in accordance with:

(a) if the source separation activity is a new waste diversion activity or an expansion waste diversion activity—subsection 31(2); or

(b) if the source separation activity is an aggregated waste diversion activity—subsection 32(2).

TW_f means the total quantity of waste processed at waste treatment facility or unit f during the reporting period, in tonnes, worked out using equation 11.

$E_{F,f}$ means the emissions from fuel used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out using equation 12.

$E_{EP,f}$ means the emissions from purchased electricity used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out using equation 13.

$E_{EO,f}$ means the emissions from the processing of eligible organic material at waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out using equation 14.

w means a waste mix type present in the eligible organic material.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

38 Total quantity of waste

The total quantity of waste processed at a waste treatment facility or unit during a reporting period, in tonnes, is worked out using the formula (***equation 11***):

$$TW_f = Q_{TWC,f} - Q_{TRW,f}$$

where:

TW_f means the total quantity of waste processed at waste treatment facility or unit f during the reporting period, in tonnes.

$Q_{TWC,f}$ means the total quantity of waste received by waste treatment facility or unit f during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

$Q_{TRW,f}$ means the total quantity of residual waste disposed of in landfill after processing by waste treatment facility or unit f during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

39 Emissions from fuel

The emissions from fuel used by a waste treatment facility or unit during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 12***):

$$E_{F,f} = \sum_i \sum_j \frac{Q_{F,i,f} \times EC_i \times EF_{ij}}{1\,000}$$

where:

$E_{F,f}$ means the emissions from fuel used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e.

$Q_{F,i,f}$ means the quantity of fuel type i used by waste treatment facility or unit f during the reporting period, worked out in accordance with the monitoring requirements.

EC_i means:

(a) if $Q_{F,i,f}$ is measured in gigajoules—1; or

(b) otherwise—the energy content factor, in gigajoules per tonne, gigajoules per kilolitre or gigajoules per cubic metre, mentioned in Part 1, 2 or 3 of Schedule 1 to the NGER (Measurement) Determination for fuel type i.

EF_{ij} means the emission factor, in kilograms CO_2-e per gigajoule, mentioned in Part 1, 2 or 3 of Schedule 1 to the NGER (Measurement) Determination for greenhouse gas type j and fuel type i.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

i means a fuel type, other than biogas generated by waste treatment facility or unit f.

j means a greenhouse gas type, being carbon dioxide, methane or nitrous oxide.

40 Emissions from purchased electricity

(1) The emissions from purchased electricity used by a waste treatment facility or unit during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 13***):

$$E_{EP,f} = Q_{EP,f} \times \frac{EF_{EP}}{1\,000}$$

where:

$E_{EP,f}$ means the emissions from purchased electricity used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e.

$Q_{EP,f}$ means the quantity of electricity purchased by waste treatment facility or unit f during the reporting period, in kilowatt hours, worked out in accordance with the monitoring requirements.

EF_{EP} means:

(a) for electricity obtained from an electricity grid that is a grid in relation to which the NGA Factors document in force on the declaration day for the project includes an emissions factor—that factor, in kilograms CO_2-e per kilowatt hour; or

(b) for electricity obtained from an electricity grid not covered by paragraph (a) or from a source other than an electricity grid:

(i) if the supplier of the electricity is able to provide an emissions factor that reflects the emissions intensity of the electricity (worked out in accordance with subsection (2)) and is applicable on the declaration day for the project—that factor, in kilograms CO_2-e per kilowatt hour; or

(ii) otherwise—the emissions factor, in kilograms CO_2-e per kilowatt hour, for off-grid electricity included in the NGA Factors document in force on the declaration day for the project.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

(2) For subparagraph (b)(i) of the definition of EF_{EP} in subsection (1), the emissions factor must be worked out:

(a) on a sent-out basis; and

(b) using a measurement or estimation approach that is consistent with the NGER (Measurement) Determination.

(3) Section 7 does not apply to the parameter EF_{EP}.

41 Emissions from processing eligible organic material

The emissions from the processing of eligible organic material at a waste treatment facility or unit during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 14***):

$$E_{EO,f} = \left(E_{Compost,f} + E_{AD,f} + E_{Com,f} \right)$$

where:

$E_{EO,f}$ means the emissions from the processing of eligible organic material at waste treatment facility or unit f during the reporting period, in tonnes CO_2-e.

$E_{Compost,f}$ means the emissions from composting processes used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out in accordance with section 42.

$E_{AD,f}$ means the emissions from anaerobic digesters used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out using equation 17.

$E_{Com,f}$ means the emissions from combustion devices used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out using equation 21.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

42 Emissions from composting processes

(1) The emissions from composting processes used by a waste treatment facility or unit during a reporting period, in tonnes CO_2-e, are worked out using:

(a) if open windrow composting, or enclosed composting technology that includes open windrow composting, is used during the reporting period—sub-method 1 in subsection (6); or

(b) if enclosed composting technology that does not include open windrow composting is used during the reporting period—subject to subsections (2) to (5) and section 62, either:

(i) sub-method 1 in subsection (6); or

(ii) sub-method 2 in subsection (7).

Note 1: Sub-method 1 uses default emissions factors to calculate emissions and sub-method 2 uses direct measurement to calculate emissions.

Note 2: If, under subsection (5), sub-method 2 must be used to calculate the emissions but the project proponent fails to monitor the parameter $DM_{Compost,j,f}$ as required by the monitoring requirements, the emissions are to be worked out in accordance with section 62.

(2) If sub-method 1 is used to work out the emissions of methane for a reporting period, that sub-method must also be used to calculate the emissions of nitrous oxide for the reporting period.

(3) Sub-method 2 may only be used to work out the emissions for a reporting period if the parameter $DM_{Compost,j,f}$ is monitored as required by section 60 during the reporting period.

(4) If sub-method 2 is used to work out the emissions of nitrous oxide for a reporting period, that sub-method must also be used to work out the emissions of methane for the reporting period.

(5) If sub-method 2 is used to work out the emissions of a greenhouse gas type (whether methane or nitrous oxide) for a reporting period, that sub-method must be used to calculate the emissions of that greenhouse gas type for all subsequent reporting periods.

Sub-method 1

(6) The emissions from composting processes used by a waste treatment facility or unit during the reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 15***):

$$E_{Compost,f} = Q_{Compost,f} \times EF_{Compost,j} \times \left(1 - RE_{Compost}\right)$$

where:

$E_{Compost,f}$ means the emissions from composting processes used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, being methane or nitrous oxide.

$Q_{Compost,f}$ means the quantity of eligible organic material composted by waste treatment facility or unit f during the reporting period, in tonnes, worked out in accordance with the monitoring requirements.

$EF_{Compost,j}$ means the emission factor, in tonnes CO_2-e, mentioned in subsection 5.22(2) of the NGER (Measurement) Determination for greenhouse gas j and the composting process.

$RE_{Compost}$ means:

(a) if a biofilter is used to filter emissions from the composting processes before release to the atmosphere—10%; or

(b) otherwise—0.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

j means a greenhouse gas type, being methane or nitrous oxide.

Sub-method 2

(7) The emissions from composting processes used by a waste treatment facility or unit during the reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 16***):

$$E_{Compost,f} = DM_{Compost,j,f} \times \left(1 - RE_{Compost}\right)$$

where:

$E_{Compost,f}$ means the emissions from composting processes used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, being methane or nitrous oxide.

$DM_{Compost,j,f}$ means the direct measurement emissions from composting processes used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e, worked out in accordance with the monitoring requirements.

$RE_{Compost}$ means:

(a) if a biofilter is used to filter emissions from the composting processes before release to the atmosphere—10%; or

(b) otherwise—0.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

j means a greenhouse gas type, being methane or nitrous oxide.

43 Emissions from anaerobic digesters

The emissions from an anaerobic digester used by a waste treatment facility or unit during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 17***):

$$E_{AD,f} = \gamma \times \left[\left(\frac{1}{CE} - 1\right) \times \sum_{h} M_{Sent,h} + \sum_{q} M_{Vent,q}\right]$$

where:

$E_{AD,f}$ means the emissions from an anaerobic digester used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e.

γ means the factor, mentioned in subsection 5.4(1) of the NGER (Measurement) Determination, that converts cubic metres of methane to tonnes CO_2-e at standard conditions.

CE means the biogas collection efficiency of an anaerobic digester, being 0.98.

$M_{Sent,h}$ means the volume of methane sent to combustion device h during the reporting period, in cubic metres, worked out in accordance with section 44.

$M_{Vent,q}$ means the volume of methane vented due to major venting event q during the reporting period, in cubic metres, worked out using equation 20.

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

h means a combustion device used by waste treatment facility or unit f during the reporting period.

q means a major venting event associated with the anaerobic digester.

44 Volume of methane sent to a combustion device

(1) The volume of methane sent to a combustion device during a reporting period, in cubic metres, is worked out using:

(a) for a combustion device that is not an internal combustion engine—sub-method 1 in subsection (2); or

(b) for a combustion device that is an internal combustion engine—either:

(i) sub-method 1 in subsection (2); or

(ii) sub-method 2 in subsection (3).

Note: Sub-method 1 uses the volume of biogas sent to a combustion device and sub-method 2 uses the electricity produced by an internal combustion engine.

Sub-method 1

(2) The volume of methane sent to a combustion device during the reporting period, in cubic metres, is worked out using the formula (***equation 18***):

$$M_{Sent,h} = Q_{BG,h} \times W_{BG,CH_4}$$

where:

$M_{Sent,h}$ means the volume of methane sent to combustion device h, in cubic metres.

$Q_{BG,h}$ means the volume of biogas sent to combustion device h, in cubic metres, worked out in accordance with the monitoring requirements.

W_{BG,CH_4} means the fraction of biogas that is methane, being:

(a) if this parameter is, or is required to be, monitored continuously—the fraction worked out in accordance with the monitoring requirements; or

(b) otherwise—the fraction mentioned in subsection 5.37(2) of the NGER (Measurement) Determination.

h means:

(a) a combustion device used during the reporting period; or

(b) if a single pipe is used to send methane to more than one combustion device during the reporting period and the combustion devices are of the same kind—all of those devices.

Sub-method 2

(3) The volume of methane sent to an internal combustion engine during the reporting period, in cubic metres, is worked out using the formula (***equation 19***):

$$M_{Sent,h} = \frac{Q_{EG,h} \times F_{MWh \rightarrow GJ}}{EE_h \times EC_{BG}}$$

where:

***M*$_{Sent,h}$** means the volume of methane sent to internal combustion engine h, in cubic metres.

***Q*$_{EG,h}$** means the quantity of electricity generated by internal combustion engine h (whether supplied to the grid or used on-site), in megawatt hours, worked out in accordance with the monitoring requirements.

***F*$_{MWh \rightarrow GJ}$** means 3.6, being the factor to convert megawatt hours to gigajoules.

***EE*$_h$** means:

(a) the factor for the electrical efficiency of internal combustion engine h determined in accordance with:

(i) the manufacturer's specifications for the combustion of biogas; and

(ii) if the specifications set out a range of such efficiencies—the highest of those efficiencies; or

(b) if no such factor can be determined in accordance with the manufacturer's specifications—36%.

***EC*$_{BG}$** means the energy content factor, in gigajoules per cubic metre, mentioned in Part 2 of Schedule 1 to the NGER (Measurement) Determination for sludge biogas that is captured for combustion (methane only).

h means:

(a) an internal combustion engine used during the reporting period; or

(b) if a single pipe is used to send methane to more than one internal combustion engine during the reporting period and those engines have the same electrical efficiency—all of those engines.

45 Volume of methane vented due to a major venting event

If a major venting event associated with an anaerobic digester occurs during a reporting period, the volume of methane vented due to the major venting event, in cubic metres, is worked out using the formula (***equation 20***):

$$M_{Vent,q} = \left(MS_{BCS} + \left(FR_q \times t_q \right) \right) \times W_{BG,CH_4}$$

where:

***M*$_{Vent,q}$** means the volume of methane vented due to major venting event q, in cubic metres.

***MS*$_{BCS}$** means the maximum biogas storage capacity of the anaerobic digester, in cubic metres, worked out in accordance with the monitoring requirements.

FR_q means the average total daily flow of biogas from the anaerobic digester for the 7 days before major venting event q, in cubic metres per day, worked out in accordance with the monitoring requirements.

t_q means the number of days for all or part of which major venting event q is uncontrolled, worked out in accordance with the monitoring requirements.

W_{BG,CH_4} means:

(a) if this parameter is, or is required to be, monitored continuously—the fraction worked out in accordance with the monitoring requirements; or

(b) otherwise—the fraction mentioned in subsection 5.37(2) of the NGER (Measurement) Determination.

q means a major venting event associated with the anaerobic digester.

46 Emissions from combustion devices

The emissions from combustion devices used by a waste treatment facility or unit during a reporting period, in tonnes CO_2-e, are worked out using the formula (***equation 21***):

$$E_{Com,f} = \frac{\sum_{h} M_{Sent,h} \times EC_{BG} \times \sum_{j} EF_{j}}{1\,000}$$

where:

$E_{Com,f}$ means the emissions from combustion devices used by waste treatment facility or unit f during the reporting period, in tonnes CO_2-e.

$M_{Sent,h}$ means the volume of methane sent to combustion device h, in cubic metres, worked out in accordance with section 44.

EC_{BG} means the energy content factor, in gigajoules per cubic metre, mentioned in Part 2 of Schedule 1 to the NGER (Measurement) Determination for sludge biogas that is captured for combustion (methane only).

EF_j means the emission factor, in kilograms of CO_2-e per gigajoule, mentioned in Part 2 of Schedule 1 to the NGER (Measurement) Determination for greenhouse gas type j and sludge biogas that is captured for combustion (methane only).

f means a waste treatment facility or unit that is a nominated waste treatment facility or unit for the source separation activity during the reporting period.

h means a combustion device used by waste treatment facility or unit f during the reporting period.

j means a greenhouse gas type, being methane or nitrous oxide.

Subdivision D—Calculation of improvement factor

47 Summary

The improvement factor for a reporting period accounts for business-as-usual improvements in waste management over time.

48 Improvement factor

The improvement factor for a reporting period is the improvement factor set out in the following table for the crediting period year in which the reporting period ends.

Improvement factors

Item	Crediting period year	Improvement factor
1	1	1.000
2	2	0.979
3	3	0.958
4	4	0.937
5	5	0.916
6	6	0.895
7	7	0.874

Note: The improvement factor applies a yearly decay rate of 2.1% to account for business-as-usual improvements in resource recovery over time.

Part 5—Reporting, record-keeping and monitoring requirements

Note: Other reporting, record-keeping and monitoring requirements are set out in regulations and rules made under the Act.

Division 1—Offsets report requirements

49 Operation of this Division

For paragraph 106(3)(a) of the Act, this Division sets out information that must be included in an offsets report about an SSOW project that is an eligible offsets project.

50 Information about source separation activities

The offsets report about an SSOW project for a reporting period must:

(a) identify each source separation activity (whether an original activity or a potential activity) included in the calculation of the activity abatement portions for the reporting period; and

(b) include the following information for each such activity:

(i) the State or Territory in which the activity area is located (if not included in a previous offsets report about the project);

(ii) for charity diversion activities, new waste diversion activities and aggregated waste diversion activities that include a sub-activity that would otherwise be a new waste diversion activity—the landfill that, during the relevant 24-month period for the project, received material consisting of the same waste mix type or types as the eligible organic material diverted by the activity during the reporting period (if known and not included in a previous offsets report about the project);

(iii) for new waste diversion activities, expansion waste diversion activities and aggregated waste diversion activities—each eligible waste treatment technology used to process the eligible organic material diverted from landfill by the activity during the reporting period and each waste treatment facility or unit that was a nominated waste treatment facility or unit for the activity during the reporting period;

(iv) each waste mix type present in the eligible organic material diverted from landfill by the activity during the reporting period;

(v) the value of parameter EO_W for the activity for the reporting period, worked out in accordance with section 30 or subsection 31(1) or 32(1) (as applicable);

(vi) for charity diversion activities—the value of parameter Q_{MC} for the activity for the reporting period, worked out in accordance with the monitoring requirements;

(vii) for new waste diversion activities and expansion waste diversion activities—the value of parameter $Q_{MC,f}$ for each nominated waste

treatment facility or unit for the activity for the reporting period, worked out in accordance with the monitoring requirements;

(viii) for aggregated waste diversion activities—the value of parameter $Q_{MC,sa,f}$ for each nominated waste treatment facility or unit for each sub-activity for the reporting period, worked out in accordance with the monitoring requirements;

(ix) if the value of parameter $W_{EO,w}$ for the activity, or the value of parameter $W_{EO,w,sa}$ for each sub-activity if the activity is an aggregated waste diversion activity, was worked out for the reporting period using waste audits, the results of the waste audits (including a value for each proportion mentioned in paragraphs 61(5)(a) to (d)); and

(c) if a potential activity has been included in the calculation of the activity abatement portions for the reporting period because of paragraph 25(1)(b)—include the same information and evidence as would have been required to be provided under section 16 if the activity were able to be identified at the time the application under section 22 of the Act was made in relation to the project; and

(d) if, under subsection 25(2), the project proponent chooses not to include a particular activity in the calculation of the activity abatement portions for the reporting period—identify the activity not included and the reasons why it was not included.

51 Determination of certain factors and parameters

(1) If, in the circumstances described in paragraph 7(2)(b), a factor or parameter is defined or calculated for a reporting period by reference to an instrument or writing as in force from time to time, the offsets report about the project for the reporting period must include the following information for the factor or parameter:

(a) the versions of the instrument or writing used;

(b) the start and end dates of each use;

(c) the reasons why it was not possible to define or calculate the factor or parameter by reference to the instrument or writing as in force at the end of the reporting period.

(2) If a parameter is determined under section 62 for the purpose of working out the activity abatement portions for an SSOW project for a reporting period, the offsets report about the project for the reporting period must include the following information for the parameter:

(a) the name of the parameter;

(b) the start and end of the non-monitored period for which the parameter was determined;

(c) the reasons why the project proponent failed to monitor the parameter as required by the monitoring requirements;

(d) either:

(i) if the parameter is $DM_{Compost,j,f}$—the value of the parameter $E_{Compost,f}$ and how that value was determined; or

(ii) otherwise—the value of the parameter and how that value was determined.

Division 2—Notification requirements

52 Operation of this Division

For paragraph 106(3)(b) of the Act, this Division sets out notification requirements for an SSOW project that is an eligible offsets project.

53 Implementation of potential activities

(1) This section applies if:
  (a) one or more of an SSOW project's potential activities are implemented during a reporting period; and
  (b) the potential activity is a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity.

(2) The project proponent must, within 14 days after the potential activity starts to be implemented, notify the Regulator, in writing, of:
  (a) each waste treatment facility or unit nominated as a facility or unit at which eligible organic material diverted from landfill by the activity will be processed; and
  (b) each eligible waste treatment technology to be used to process the eligible organic material.

54 Change to nominated waste treatment facility or unit

(1) If:
  (a) an SSOW project involves the implementation of a new waste diversion activity, an expansion waste diversion activity or an aggregated waste diversion activity; and
  (b) there is a change to which waste treatment facilities or units are to process eligible organic material diverted from landfill by the activity;

the project proponent must, within 14 days after the change occurs, notify the Regulator, in writing, of the change.

(2) A notification under subsection (1) must include:
  (a) details of each waste treatment facility or unit that, as a result of the change, is to be nominated as a facility or unit at which eligible organic material diverted from landfill by the activity is to be processed; and
  (b) details of each waste treatment facility or unit that has previously been, but is no longer, a nominated waste treatment facility or unit for the activity; and
  (c) a description of each eligible waste treatment technology that was, or is to be, used to process the eligible organic material at each facility or unit mentioned in paragraph (a) or (b).

55 Change to sub-activities included in aggregated waste diversion activities

If:

(a) an SSOW project involves the implementation of an aggregated waste diversion activity; and

(b) the project proponent decides to no longer include a particular sub-activity in the aggregated waste diversion activity;

the project proponent must, within 30 days after making the decision, notify the Regulator, in writing, of the decision.

Division 3—Record-keeping requirements

56 Operation of this Division

For paragraph 106(3)(c) of the Act, this Division sets out record-keeping requirements for an SSOW project that is an eligible offsets project.

57 Record-keeping requirements—waste audits

If the project proponent chooses to use waste audits to monitor one or more of the project's source separation activities or sub-activities, the project proponent must keep a record of evidence that each waste audit undertaken consists of at least 2 audit periods that occur at times representative of relevant seasonal variation.

Division 4—Monitoring requirements

58 Operation of this Division

For paragraph 106(3)(d) of the Act, this Division sets out:

(a) requirements to monitor an SSOW project that is an eligible offsets project (see sections 59 and 60); and

(b) requirements to undertake waste audits for the purpose of monitoring an SSOW project that is an eligible offsets project (see section 61); and

(c) certain consequences if the project proponent fails to monitor the project as required (see section 62).

59 Requirements to monitor certain parameters—charity diversion activities

(1) The project proponent for an SSOW project must, for each of the project's charity diversion activities, monitor and determine a parameter set out in an item of the following table in accordance with the instructions in the item.

Monitored parameters

	Parameter	Description	Unit	Measurement procedure (including frequency as required)	Determination of parameter from measurements
1	Q_{MC}	Quantity of material collected	t	Measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements. Frequency—for each load of material collected	Cumulative value for the activity for the reporting period
2	Q_{RJ}	Quantity of rejected material disposed of	t	Either: (a) measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements; or (b) evidenced by invoices or contractual arrangements. Frequency—for each load of rejected	Cumulative value for the activity for the reporting period

Monitored parameters				
Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
			material disposed of	

(2) Any equipment or device used to monitor a parameter must be calibrated by an accredited third party technician at intervals, and using methods, that are in accordance with the manufacturer's specifications.

60 Requirements to monitor certain parameters—other source separation activities

Parameters to be monitored for each nominated waste treatment facility or unit

(1) The project proponent for an SSOW project must, for each nominated waste treatment facility or unit for each of the project's new waste diversion activities, expansion waste diversion activities and aggregated waste diversion activities, monitor and determine a parameter set out in an item of the following table in accordance with the instructions in the item.

Monitored parameters for each nominated waste treatment facility or unit					
	Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
1	$DM_{Compost,j,f}$	Direct measurement emissions from composting processes at the facility or unit	t	If monitored continuously for the facility or unit, measured in a manner that is consistent with Part 1.3 of the NGER (Measurement) Determination. Frequency—if sub-method 2 in section 42 is, or must be, used to calculate $E_{Compost,f}$ for the facility or unit, continuous	Cumulative value for the facility or unit for the reporting period
2	FR_q	Average total daily flow of biogas from an anaerobic digester for the	m^3/day	Calculated from $Q_{BG,h}$, as monitored in accordance with item 4 of this table	For each major venting event

Monitored parameters for each nominated waste treatment facility or unit					
	Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
		7 days before a major venting event			
3	MS_{BCS}	Maximum biogas storage capacity of anaerobic digesters	m^3	Either: (a) measured directly; or (b) calculated using the manufacturer's specifications for the anaerobic digesters	If sub-method 2 in section 37 is, or must be, used to calculate $E_{P,a}$ for the activity for which the facility or unit is nominated, at the following times: (a) when the anaerobic digesters are installed; (b) when the anaerobic digesters are upgraded in a way that changes the storage capacity
4	$Q_{BG,h}$	Volume of biogas sent to combustion devices	m^3	Estimated in accordance with Division 2.3.6 of the NGER (Measurement) Determination. Frequency—if sub-method 1 in section 44 is, or must be, used to calculate $M_{Sent,h}$ for the facility or unit, continuous	If W_{BG,CH_4} is monitored continuously for the facility or unit, the cumulative value for the time interval used to determine W_{BG,CH_4} for equation 18. Otherwise, the cumulative value for the facility or unit for the reporting period
5	$Q_{Compost,f}$	Quantity of eligible organic material composted at the facility or unit	t	Measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements. Frequency—if	Cumulative value for the facility or unit for the reporting period

Monitored parameters for each nominated waste treatment facility or unit					
	Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
				sub-method 1 in section 42 is, or must be, used to calculate $E_{Compost,f}$ for the facility or unit, for each load of compost produced	
6	$Q_{EG,h}$	Quantity of electricity generated by internal combustion engines (whether supplied to the grid or used on-site)	MWh	Estimated in accordance with Part 6.1 of the NGER (Measurement) Determination. Frequency—if sub-method 2 in section 44 is, or must be, used to calculate $M_{Sent,h}$ for the facility or unit, continuous	Cumulative value for the facility or unit for the reporting period
7	$Q_{EP,f}$	Quantity of electricity purchased by the facility or unit	kWh or GJ	Evidenced by invoices, contractual arrangements or industry metering records. If $Q_{EP,f}$ is measured in gigajoules, the quantity of kilowatt hours must be calculated by dividing the amount of gigajoules by the conversion factor of 0.0036. Frequency—if sub-method 2 in section 37 is, or must be, used to calculate $E_{P,a}$ for the activity for which the facility or unit is nominated, continuous	Cumulative value for the facility or unit for the reporting period
8	$Q_{F,i,f}$	Quantity of each fuel type used by the facility or unit	Either: (a) t (for solid fuel); or	Either: (a) monitored in accordance with section 2.25 or 2.36, or	Cumulative value for the facility or unit for the reporting period

Monitored parameters for each nominated waste treatment facility or unit					
	Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
			(b) m^3(for gas fuel); or (c) kL (for liquid fuel); or (d) GJ	Division 2.4.6, of the NGER (Measurement) Determination (as applicable to the fuel type); or (b) evidenced by invoices, contractual arrangements or industry metering records. Frequency—if sub-method 2 in section 37 is, or must be, used to calculate $E_{P,a}$ for the activity for which the facility or unit is nominated, continuous	
9	$Q_{MC,f}$, $Q_{MC,sa,f}$	Quantity of material collected and sent to the facility or unit	t	Measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements. Frequency—for each load of material received by the facility or unit	Cumulative value for the facility or unit for the reporting period
10	$Q_{RJ,f}$, $Q_{RJ,sa,f}$	Quantity of rejected material disposed of	t	Either: (a) measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements; or (b) evidenced by invoices or contractual arrangements. Frequency—for each load of rejected	Cumulative value for the facility or unit for the reporting period

Monitored parameters for each nominated waste treatment facility or unit					
	Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
				material disposed of	
11	$Q_{TRW,f}$	Total quantity of residual waste disposed of in landfill by the facility or unit	t	Measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements. Frequency—if sub-method 2 in section 37 is, or must be, used to calculate $E_{P,a}$ for the activity for which the facility or unit is nominated, for each load of residual waste disposed of in landfill by the facility or unit	Cumulative value for the facility or unit for the reporting period
12	$Q_{TWC,f}$	Total quantity of waste received by the facility or unit	t	Measured using an accepted industry weighbridge or other scale that meets appropriate measuring requirements. Frequency—if sub-method 2 in section 37 is, or must be, used to calculate $E_{P,a}$ for the activity for which the facility or unit is nominated, for each load of waste received by the facility or unit	Cumulative value for the facility or unit for the reporting period
13	t_q	Number of days for all or part of which a major venting event is uncontrolled	Whole days		If sub-method 2 in section 37 is, or must be, used to calculate $E_{P,a}$ for the activity for which the facility or unit is nominated, for each major venting

Monitored parameters for each nominated waste treatment facility or unit					
	Parameter	**Description**	**Unit**	**Measurement procedure (including frequency as required)**	**Determination of parameter from measurements**
					event
14	W_{BG,CH_4}	Fraction of the volume of biogas sent to combustion devices that is methane	Fraction	If monitored continuously for the facility or unit, estimated in accordance with Division 2.3.6 of the NGER (Measurement) Determination. Frequency—subject to subsection (2), continuously for the facility or unit or not at all	If monitored continuously for the facility or unit: (a) for equation 18, the average value for a time interval not greater than 1 hour must be paired to measurements of $Q_{BG,h}$ for the same time interval; and (b) for equation 20, the average value for the period of 7 days before a major venting event

Parameter W_{BG,CH_4}

(2) If the project proponent chooses to monitor parameter W_{BG,CH_4} continuously for a nominated waste treatment facility or unit for a source separation activity, the project proponent must monitor the parameter at that frequency for the facility or unit for the remainder of the project.

Note 1: If the project proponent initially chooses not to monitor the parameter continuously, the project proponent may subsequently choose to monitor the parameter continuously. However, once the project proponent chooses to monitor the parameter continuously, that is how the parameter must be monitored for the remainder of the project.

Note 2: If the project proponent initially chooses not to monitor the parameter continuously, the fraction mentioned in subsection 5.37(2) of the NGER (Measurement) Determination is used for the purposes of equations 18 and 20. However, if the project proponent initially or subsequently chooses to monitor the parameter continuously and then, during a reporting period, fails to do so, the parameter is determined in accordance with section 62 of this determination.

Parameters to be monitored for each activity or sub-activity

(3) The project proponent for an SSOW project must, for each of the project's new waste diversion activities and expansion waste diversion activities and each sub-activity included in each of the project's aggregated waste diversion

activities, monitor and determine a parameter set out in an item of the following table in accordance with the instructions in the item.

Monitored parameters for each activity or sub-activity

	Parameter	Description	Unit	Measurement procedure (including frequency as required)	Determination of parameter from measurements
1	$Q_{B,s}$	Quantity of each size of source separation bins used by the activity or sub-activity		Evidenced by invoices, contractual arrangements or waste management records	Total number of source separation bins of each bin size for the activity or sub-activity for the reporting period
2	$W_{EO,w}$, $W_{EO,w,sa}$	Proportion of a waste mix type in material collected by the activity or sub-activity	Fraction	If waste audits are undertaken to monitor the activity or sub-activity, calculated using the results of the waste audits. Frequency—subject to subsection (4), in accordance with section 61	Average value for: (a) the waste audit or audits undertaken during the reporting period to monitor the activity or sub-activity; or (b) if no waste audits were undertaken during the reporting period—the most recent waste audit undertaken to monitor the activity or sub-activity

Parameters $W_{EO,w}$ and $W_{EO,w,sa}$

(4) If the project proponent chooses to use waste audits to monitor parameter $W_{EO,w}$ for a source separation activity, or parameter $W_{EO,w,sa}$ for a sub-activity included in an aggregated waste diversion activity, the project proponent must monitor the parameter using waste audits for the activity or sub-activity for the whole of the project.

Note: If the project proponent chooses to monitor parameter $W_{EO,w}$ or $W_{EO,w,sa}$ using waste audits and then, during a reporting period, fails to do so, the parameter is determined in accordance with section 62.

Calibration of equipment etc.

(5) Any equipment or device used to monitor a parameter must be calibrated by an accredited third party technician at intervals, and using methods, that are in accordance with the manufacturer's specifications.

61 Requirement to undertake waste audits

(1) The project proponent may choose to undertake waste audits for the purpose of monitoring one or more of the project's source separation activities or sub-activities.

Note: If the project proponent chooses to use waste audits to monitor parameter $W_{EO,w}$ for a source separation activity, or parameter $W_{EO,w,sa}$ for a sub-activity included in an aggregated waste diversion activity, the project proponent must monitor the parameter using waste audits for the whole of the project (see subsection 60(4)).

(2) The waste audits for an activity or sub-activity must meet the following requirements:

(a) the first waste audit for the activity or sub-activity must be undertaken during the first reporting period for the project;

(b) such number of subsequent waste audits as is required by subsection (3) for the activity or sub-activity must be undertaken in later reporting periods for the project;

(c) only one waste audit may be undertaken in any 12-month period;

(d) each waste audit must consist of at least 2 audit periods that occur at times representative of relevant seasonal variation;

(e) each audit period must run for at least 1 week;

(f) during each audit period, at least one sample per day must be taken from a randomly selected truck or other bulk container used by the activity or sub-activity to divert eligible organic material from landfill;

(g) the number of samples taken during each waste audit must be sufficient to obtain statistical confidence of 95% (plus or minus 5%) for each waste mix type present in the eligible organic material diverted from landfill by the activity or sub-activity;

(h) the samples taken must comprise aggregated collected waste from whole loads prior to processing;

(i) the aggregated collected waste must be sorted into eligible organic material, other organic waste and inert waste;

(j) all measurements of quantity must be in tonnes.

Note: The project proponent must keep a record of evidence that each waste audit undertaken consists of at least 2 audit periods that occur at times representative of relevant seasonal variation (see section 57).

(3) For the purposes of paragraph (2)(b), the number of subsequent waste audits required for the activity or sub-activity is as follows:

(a) if the average annual abatement resulting from all of the project's source separation activities is less than 50 000 tonnes CO_2-e—2;

(b) if the average annual abatement resulting from all of the project's source separation activities is 50 000 tonnes CO_2-e or more and less than 150 000 tonnes CO_2-e—3;

(c) if the average annual abatement resulting from all of the project's source separation activities is 150 000 tonnes CO_2-e or more—5.

(4) The waste audits must be conducted by a person who:

(a) is engaged by the project proponent for that purpose; and

(b) has provided the project proponent with written evidence verifying that the person:
  (i) has no conflict of interest in conducting the audit; and
  (ii) possesses a relevant university degree; and
  (iii) has more than 3 years' experience in waste management and conducting audits; and

(c) at the completion of each waste audit, provides the project proponent with written evidence verifying the results of the waste audit, including the calculations, assumptions, information and inputs used.

(5) For the purposes of paragraph (4)(c), the results must include a value (between zero and 1) for each of the following for each waste audit:
  (a) the proportion of eligible organic material in the material collected by the activity or sub-activity;
  (b) the proportion of ineligible organic material in the material collected by the activity or sub-activity;
  (c) the proportion of inert material in the material collected by the activity or sub-activity;
  (d) if the material collected by the activity or sub-activity includes more than 1 waste mix type—the proportion of each waste mix type present in the material.

62 Consequences of not meeting requirement to monitor certain parameters

(1) If, during a particular period (the ***non-monitored period***) in a reporting period, a project proponent for an SSOW project fails, for a nominated waste treatment facility or unit for a source separation activity or sub-activity, to monitor a parameter as required by the monitoring requirements, the value of the parameter for the purpose of working out the activity abatement portions for the reporting period is to be determined for the facility or unit for the non-monitored period in accordance with the following table.

Consequence of not meeting requirement to monitor certain parameters

Item	Parameter	Determination of parameter for non-monitored period
1	W_{BG,CH_4} (see subsection 44(2) and section 45)	The parameter is: (a) for any cumulative period of up to 3 months in any 12 months of a crediting period for the project—the amount set out in section 5.14C of the NGER (Measurement) Determination multiplied by 1.1; and (b) for any period in excess of that 3 months—the amount set out in section 5.14C of the NGER (Measurement) Determination multiplied by 1.5
2	Each of the following: (a) FR_q (see section 45); (b) $Q_{BG,h}$ (see subsection 44(2)); (c) $Q_{Compost,f}$ (see	The project proponent must make a conservative estimate of the parameter having regard to: (a) any relevant measurement or estimation approaches or requirements that apply to the

Consequence of not meeting requirement to monitor certain parameters		
Item	**Parameter**	**Determination of parameter for non-monitored period**
	subsection 42(6)); (d) $Q_{EG,h}$ (see subsection 44(3)); (e) $Q_{EP,f}$ (see subsection 40(1)); (f) $Q_{F,i,f}$ (see section 39); (g) t_q (see section 45)	parameter under the NGER (Measurement) Determination; and (b) any relevant historical data for the project; and (c) any other data for the project that relates to the parameter; and (d) any other matter the project proponent considers relevant

(2) If, during the non-monitored period, the project proponent fails, for one or more of the project's source separation activities or sub-activities, to monitor parameter $W_{EO,w}$ or $W_{EO,w,sa}$ as required by the monitoring requirements, the value of the parameter for the purpose of working out the activity abatement portions for the reporting period is to be determined for the activity or sub-activity by making a conservative estimate of the parameter having regard to:

(a) any relevant measurement or estimation approaches or requirements that apply to the parameter under the NGER (Measurement) Determination; and

(b) any relevant historical data for the project; and

(c) any other data for the project that relates to the parameter; and

(d) any other matter the project proponent considers relevant.

(3) If, during the non-monitored period, the project proponent fails, for a nominated waste treatment facility or unit for a source separation activity or sub-activity, to monitor parameter $DM_{Compost,j,f}$ as required by the monitoring requirements, the emissions ($E_{Compost,f}$) from enclosed composting technology used during the non-monitored period, in tonnes CO_2-e, are worked out for the facility or unit as follows:

(a) for any cumulative period of up to 3 months in any 12 months of a crediting period for the project—using sub-method 1 in subsection 42(6), but multiplying the parameter $EF_{Compost,j}$ by 1.1;

(b) for any period in excess of that 3 months—using sub-method 1 in subsection 42(6), but multiplying the parameter $EF_{Compost,j}$ by 1.5.

(4) To avoid doubt, this section does not prevent the Regulator from taking action under the Act, or regulations or rules made under the Act, in relation to the project proponent's failure to monitor a parameter as required by the monitoring requirements.

Note: Examples of action that may be taken include the following:

(a) if the failure constitutes a breach of a civil penalty provision in section 194 of the Act (which deals with project monitoring requirements), the Regulator may apply for a civil penalty order in respect of the breach;

(b) if false or misleading information was given to the Regulator in relation to the failure, the Regulator may revoke the project's section 27 declaration under regulations or rules made for the purposes of section 38 of the Act;

(c) if the giving of false or misleading information in relation to the failure led to the issue of Australian carbon credit units, the Regulator may require all or some of those units to be relinquished under section 88 of the Act.

Part 6—Dividing an SSOW project

63 Operation of this Part

For subsection 77A(2) of the Act, this Part sets out requirements for dividing an SSOW project that is an eligible offsets project.

64 Requirements for division of project

(1) An SSOW project may only be divided into parts if the project involves the implementation of 2 or more source separation activities.

(2) If an SSOW project is divided into parts, each part must consist of at least one source separation activity.