National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)

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

Dated 26 June 2015

Greg Hunt
Minister for the Environment

OPC60859 - C

Contents

1 Name

This is the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)*.

2 Commencement

(1) Each provision of this instrument 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. Sections 1 to 4 and anything in this instrument not elsewhere covered by this table	The day after this instrument is registered.	
2. Schedule 1	1 July 2015.	1 July 2015
3. Schedule 2	1 July 2016.	1 July 2016
4. Schedule 3, item 1	1 July 2015.	1 July 2015
5. Schedule 3, item 2	1 July 2016.	1 July 2016

Note: This table relates only to the provisions of this instrument as originally made.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

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

3 Authority

This instrument is made under the *National Greenhouse and Energy Reporting Act 2007*.

4 Schedules

Each instrument that is specified in a Schedule to this instrument is amended or repealed as set out in the applicable items in the Schedule concerned, and any other item in a Schedule to this instrument has effect according to its terms.

Schedule 1—Fugitive emissions and scope 2 emissions

National Greenhouse and Energy Reporting (Measurement) Determination 2008

1 Section 1.8 (definition of *applicable State or Territory legislation*)

After "coal mining health and safety,", insert "including such a law that prescribes performance-based objectives,".

2 Paragraph 3.6(2)(b)

Omit "3.12", substitute "3.13".

3 At the end of subsection 3.6(2)

Add:

Note: Any estimates of emissions must be consistent with the principles in section 1.13.

4 Section 3.13

Omit "measured in accordance with section 1.34", substitute "consistent with an appropriate standard or applicable State or Territory legislation".

5 At the end of section 3.13

Add:

Note: The performance characteristics of PEM equipment includes calibration.

6 Paragraphs 3.43(1)(b) and (c)

Repeal the paragraphs, substitute:

(b) if estimating emissions of methane released—one of the following methods must be used:
  (i) method 1 under section 3.44;
  (ii) method 2A under section 3.45A; and

(c) if estimating emissions of nitrous oxide released—one of the following methods must be used:
  (i) method 1 under section 3.44;
  (ii) method 2A under section 3.45A.

7 Section 3.45 (heading)

Repeal the heading, substitute:

3.45 Method 2—oil or gas exploration (flared carbon dioxide emissions)

8 Subsection 3.45(2)

Omit "method 1, but the carbon dioxide emissions factor $\boldsymbol{EF_h}$", substitute "method 1 under section 3.44, but the carbon dioxide emissions factor $\boldsymbol{EF_{ij}}$".

9 After section 3.45

Insert:

3.45A Method 2A—oil or gas exploration (flared methane or nitrous oxide emissions)

For subparagraphs 3.43(1)(b)(ii) and (c)(ii), method 2A is:

$$E_{ij} = Q_h \times EF_{hij} \times OF_i$$

where:

EF**hij* is the emission factor of gas type (j***), being methane or nitrous oxide, for the total hydrocarbons (***h***) within the fuel type (***i***) in oil or gas exploration during the year, mentioned for the fuel type in the table in subsection 3.44(2) and measured in CO_2-e tonnes per tonne of the fuel type (***i***) flared.

E**ij* is the fugitive emissions of gas type (j***), being methane or nitrous oxide, from fuel type (***i***) flared from oil or gas exploration during the year, measured in CO_2-e tonnes.

OF**i* is 0.98, which is the destruction efficiency of fuel type (i***) flared.

Q**h* is the total quantity of hydrocarbons (h***) within the fuel type (***i***) in oil or gas exploration during the year, measured in tonnes in accordance with Division 2.3.3 for gaseous fuels or Division 2.4.3 for liquid fuels.

10 Paragraphs 3.51(1)(b) and (c)

Repeal the paragraphs, substitute:

(b) if estimating emissions of methane released—one of the following methods must be used:
  (i) method 1 under section 3.52;
  (ii) method 2A under section 3.53A; and

(c) if estimating emissions of nitrous oxide released—one of the following methods must be used:
  (i) method 1 under section 3.52;
  (ii) method 2A under section 3.53A.

11 After section 3.53

Insert:

3.53A Method 2A—crude oil production (flared methane or nitrous oxide emissions)

For subparagraphs 3.51(1)(b)(ii) and (c)(ii), method 2A is:

$$E_{ij} = Q_h \times EF_{hij} \times OF_i$$

where:

EF**hij* is the emission factor of gas type (j***), being methane or nitrous oxide, for the total hydrocarbons (***h***) within the fuel type (***i***) in crude oil production during the year, mentioned for the fuel type in the table in subsection 3.52(2) and measured in CO_2-e tonnes per tonne of the fuel type (***i***) flared.

E_{ij} is the fugitive emissions of gas type (***j***), being methane or nitrous oxide, from fuel type (***i***) flared from crude oil production during the year, measured in CO_2-e tonnes.

OF_i is 0.98, which is the destruction efficiency of fuel type (***i***) flared.

Q_h is the total quantity of hydrocarbons (***h***) within the fuel type (***i***) in crude oil production during the year, measured in tonnes in accordance with Division 2.3.3 for gaseous fuels or Division 2.4.3 for liquid fuels.

12 Section 3.55

Repeal the section.

13 Paragraphs 3.62(4)(b) and (c)

Repeal the paragraphs, substitute:

(b) if estimating emissions of methane released—one of the following methods must be used:
  (i) method 1 under section 3.67;
  (ii) method 2A under section 3.68A; and

(c) if estimating emissions of nitrous oxide released—one of the following methods must be used:
  (i) method 1 under section 3.67;
  (ii) method 2A under section 3.68A.

14 After section 3.68

Insert:

3.68A Method 2A—crude oil refining (flared methane or nitrous oxide emissions)

For subparagraphs 3.62(4)(b)(ii) and (c)(ii), method 2A is:

$$E_{ij} = Q_h \times EF_{hij} \times OF_i$$

where:

EF_{hij} is the emission factor of gas type (***j***), being methane or nitrous oxide, for the total hydrocarbons (***h***) within the fuel type (***i***) in crude oil refining during the year, mentioned for the fuel type in the table in subsection 3.67(2) and measured in CO_2-e tonnes per tonne of the fuel type (***i***) flared.

E_{ij} is the fugitive emissions of gas type (***j***), being methane or nitrous oxide, from fuel type (***i***) flared from crude oil refining during the year, measured in CO_2-e tonnes.

OF_i is 0.98, which is the destruction efficiency of fuel type (***i***) flared.

Q_h is the total quantity of hydrocarbons (***h***) within the fuel type (***i***) in crude oil refining during the year, measured in tonnes in accordance with Division 2.3.3.

15 Paragraphs 3.83(3)(b) and (c)

Repeal the paragraphs, substitute:

(b) if estimating emissions of methane released—one of the following methods must be used:
  (i) method 1 under section 3.85;
  (ii) method 2A under section 3.86A; and
(c) if estimating emissions of nitrous oxide released—one of the following methods must be used:
  (i) method 1 under section 3.85;
  (ii) method 2A under section 3.86A.

16 Section 3.86 (formula)

Repeal the formula, substitute:

$$E_{ico_2} = Q_h \times EF_{hi} \times OF_i + QCO_2$$

17 Section 3.86 (definition of *EF*$_h$)

Repeal the definition.

18 Section 3.86 (after the definition of *Q*$_h$)

Insert:

EF*$_{hi}$** is the carbon dioxide emission factor for the total hydrocarbons (h***) within the fuel type (***i***) in the natural gas production and processing during the year, measured in CO_2-e tonnes per tonne of fuel type (***i***) flared, estimated in accordance with Division 2.3.3.

19 After section 3.86

Insert:

3.86A Method 2A—natural gas production and processing (flared methane or nitrous oxide emissions)

For subparagraphs 3.83(3)(b)(ii) and (c)(ii), method 2A is:

$$E_{ij} = Q_h \times EF_{hij} \times OF_i$$

where:

EF*$_{hij}$** is the emission factor of gas type (j***), being methane or nitrous oxide, for the total hydrocarbons (***h***) within the fuel type (***i***) in natural gas production and processing during the year, mentioned for the fuel type in the table in subsection 3.85(2) and measured in CO_2-e tonnes per tonne of the fuel type (***i***) flared.

E*$_{ij}$** is the fugitive emissions of gas type (j***), being methane or nitrous oxide, from fuel type (***i***) flared from natural gas production and processing during the year, measured in CO_2-e tonnes.

OF*$_i$** is 0.98, which is the destruction efficiency of fuel type (i***) flared.

Q*$_h$** is the total quantity of hydrocarbons (h***) within the fuel type (***i***) in natural gas production and processing during the year, measured in tonnes in accordance with Division 2.3.3.

20 After subsection 7.1(2) (before the note)

Insert:

(3) The facilities to which this Chapter applies include a facility the operation of which is constituted by an electricity transmission network or distribution network that consumes electricity through electricity losses.

21 Subsections 7.2(3) and 7.3(3)

After "purchased", insert "(or lost)".

22 Part 6 of Schedule 1

Repeal the Part, substitute:

Part 6—Indirect (scope 2) emission factors from consumption of purchased electricity from grid

Indirect (Scope 2) Emissions Factors from Consumption of Purchased Electricity from Grid		
Item	**State, Territory or grid description**	**Emission factor kg CO_2-e/kWh**
77	New South Wales and Australian Capital Territory	0.84
78	Victoria	1.13
79	Queensland	0.79
80	South Australia	0.56
81	South West Interconnected System in Western Australia	0.76
82	Tasmania	0.12
83	Northern Territory	0.67

Schedule 2—Biological treatment of solid waste

National Greenhouse and Energy Reporting (Measurement) Determination 2008

1 Paragraph 1.3(4)(d)

After "landfill", insert "or other facilities,".

2 Section 1.8

Insert:

biological treatment of solid waste:

(a) means an alternative waste treatment activity consisting of a composting or anaerobic digestion process in which organic matter in solid waste is broken down by microorganisms; but

(b) does not include solid waste disposal in a landfill.

Note: Chapter 5 (waste) deals with solid waste disposal in a landfill as well as the biological treatment of solid waste (whether at a landfill or at a facility elsewhere).

3 Subsection 1.10(1)

Omit "column 3", substitute "the column headed 'Source of emissions'".

4 Subsection 1.10(1) (after table item 4A)

Insert:

4AA	Biological treatment of solid waste

5 Section 5.2

Repeal the section, substitute:

5.2 Application

(1) This Part applies to emissions released from:

(a) the decomposition of organic material from:

(i) solid waste disposal in a landfill; or

(ii) the biological treatment of solid waste at a landfill or at a facility elsewhere; and

(b) flaring of landfill gas.

(2) This Part does not apply to solid waste disposal in a landfill unless:

(a) the landfill was open for the acceptance of waste on and after 1 July 2012; and

(b) during a year, the landfill emits more than 10 000 tonnes of CO_2-e from solid waste disposal in the landfill.

(3) This Part does not apply to the biological treatment of solid waste at a facility (whether at a landfill or at a facility elsewhere) unless, during a year, the facility emits more than 10 000 tonnes of CO_2-e from the biological treatment of solid waste at the facility.

6 Subsection 5.3(1)

Omit "Subject to section 1.18 for emissions released from the operation of a facility that is constituted by a landfill during a year:", substitute "For the purposes of this Part, subject to section 1.18, for estimating emissions released from the operation of a facility (including a facility that is a landfill) during a year:".

7 Paragraphs 5.3(a) and (b)

Omit "the landfill", substitute "a landfill".

8 Paragraphs 5.3(1)(c) and (d)

Omit "at the landfill", substitute "at the facility".

9 Section 5.22 (heading)

Repeal the heading, substitute:

5.22 Method 1—emissions of methane and nitrous oxide from biological treatment of solid waste

10 Subsections 5.22(1) and (2)

Omit "landfill" (wherever occurring), substitute "facility".

11 Section 5.22AA (heading)

Repeal the heading, substitute:

5.22AA Method 4—emissions of methane and nitrous oxide from biological treatment of solid waste

Schedule 3—Application and transitional

National Greenhouse and Energy Reporting (Measurement) Determination 2008

1 Chapter 9

Insert in their appropriate numerical positions:

9.3 Amendments made by the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 1)*

(1) The amendments made by Schedule 1 to the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 1)* apply in relation to the financial year starting on 1 July 2015 and later financial years.

(2) This section is repealed on 1 November 2015.

9.4 Amendments made by the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)*

(1) The amendments made by Schedule 1 to the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)* apply in relation to the financial year starting on 1 July 2015 and later financial years.

(2) This section is repealed on 1 November 2015.

2 Chapter 9

Insert in its appropriate numerical position:

9.5 Amendments made by the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)*

(1) The amendments made by Schedule 2 to the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2015 (No. 2)* apply in relation to the financial year starting on 1 July 2016 and later financial years.

(2) This section is repealed on 1 November 2016.