



Australian Government
Department of Industry, Science,
Energy and Resources

National Greenhouse and Energy Reporting Scheme – 2021 Amendments

Departmental commentary

May 2021

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Overview

The National Greenhouse and Energy Reporting (**NGER**) Scheme is a national system for reporting greenhouse gas (**GHG**) emissions, energy consumption and energy production by Australian corporations. This document has been prepared by the Department of Industry, Science, Energy and Resources to outline proposed amendments (the **2021 NGER Amendments**) to the *National Greenhouse and Energy Reporting Regulations 2008* (the **NGER Regulations**) and *National Greenhouse and Energy Reporting (Measurement) Determination 2008* (the **Measurement Determination**).

The NGER Regulations were made under section 77 of the *National Greenhouse and Energy Reporting Act 2007* (**NGER Act**). The NGER Regulations identify the requirements reporters must meet when reporting under the NGER Scheme.

The Measurement Determination provides the methods for the estimation of GHG emissions and the production and consumption of energy. The scope of the Determination follows international classification systems and includes emissions from:

- the combustion of fuel for energy;
- the extraction, production, flaring, processing and distribution of fossil fuels and carbon capture and storage (**fugitive emissions**);
- industrial processes where a mineral, chemical or metal product is formed using a chemical reaction that generates greenhouse gases as a by-product as well as emissions of hydrofluorocarbons and sulphur hexafluoride resulting from their use by certain industries; and
- waste disposal – either in landfill, as management of wastewater or from waste incineration.

The 2021 NGER Amendments amend the NGER Regulations and the Measurement Determination to:

- a. introduce a new method providing explicit reporting guidance for **hydrogen production** facilities whose primary product is hydrogen for use outside of the facility;
- b. expand on the method for estimating fugitive emissions from the transport and injection of greenhouse gases for **Carbon Capture and Storage (CCS)** to also include Enhanced Oil Recovery (EOR) where it is conducted for commercial reasons as part of oil and gas production;
- c. update methods for estimating fugitive emissions from **oil and natural gas** facilities to reflect the latest available research and reflect the results of Leak Detection and Repair (LDAR) programs.

In making these draft amendments publicly available the Department seeks views on their practical operation and application.

This consultation will inform the finalisation of the draft amendment instruments, which will be legislative instruments for the purposes of the *Legislation Act 2003*.

The amendments are intended to commence on 1 July 2021 and would affect NGER reports to be submitted by 31 October 2022.

Further information on the NGER scheme is available at:

<http://www.cleanenergyregulator.gov.au/NGER/Pages/default.aspx>

Information for respondents

4 May 2021	Consultation draft available on the Department of Industry, Science, Energy and Resources' website
21 May 2021	Submissions on the consultation draft close.
Commencement	The amendments are proposed to commence on 1 July 2021 and affect NGER reports to be submitted by corporations by 31 October 2022

Submissions

Submissions are invited from all interested stakeholders. Submissions should be lodged electronically via the consultation website or sent by email to nationalgreenhouseaccounts@industry.gov.au.

Submissions may be made publicly available. If a stakeholder wishes their submission (or extracts of a submission) to be kept confidential, this should be clearly indicated in the submission.

A: Hydrogen production

(pp 115-118 in Draft Compilation of Planned Amendments)

This is a new method that provides guidance for facilities where the main product is hydrogen for use outside of the facility, such as for bulk hydrogen exports or for domestic use in transport or industry.

It does not apply to the production of ammonia where it is used as a carrier for hydrogen. This is covered by an existing NGER Scheme method for Ammonia Production.

The method provides guidance for the estimation of Scope 1 emissions from steam reforming processes used to produce hydrogen from fossil fuel feedstocks, such as natural gas and coal.

The method is similar to the Ammonia Production methods (Division 4.3.1), due to the same steam reforming processes being used in ammonia production to produce hydrogen as a precursor to ammonia.

Proposed amendments to Schedule 3 of the Regulations require reporting of the production volumes by type of production method – from fossil fuel feedstocks using the NGER Scheme method, or from electrolysis.

The Australian Government is working both domestically and internationally through the International Partnership on Hydrogen and Fuel Cells in the Economy (IPHE) on the development of a hydrogen certification (or Guarantee of Origin) scheme. This new NGER method will also inform the hydrogen certification scheme, which will be a key part of demonstrating the carbon footprint of hydrogen produced in Australia.

Mirroring provisions in the Ammonia method, the hydrogen method provides for the capture of CO₂ and transfer off site, such as to a Carbon Capture and Storage (CCS) facility or other uses.

Amendments will require separate reporting of the amount of hydrogen produced from fossil fuel feedstocks and from electrolyzers.

B: Enhanced oil recovery (EOR)

(pp 109-114 in Draft Compilation of Planned Amendments; captured for enhanced oil recovery defined at p 3)

EOR is a commercial process pioneered in the USA where compressed CO₂ is injected into depleted oil or gas reservoirs to raise the pressure in the geological formation and improve the economic production of hydrocarbons. The majority of injected CO₂ is recovered during hydrocarbon production and recycled in the process. Like any oil and gas operation, there are a certain amount of leaks and vents of CO₂ associated with the technology.

While EOR is not currently undertaken in Australia, recent interest in the technology suggests it would be beneficial to establish the data collection arrangements necessary to reflect the activity in the national inventory should it occur in the future.

The method amendments will allow the NGER Scheme to reflect fugitive emissions from the transport of a greenhouse gas captured for an EOR activity. Reporting of the movements of captured CO₂ between facilities and associated fugitives would be required under associated matters to be identified for the purposes of Schedule 3 of the Regulations.

The method is designed to allow for the reporting of transfers of CO₂ from capturing facilities to EOR sites, and to report losses during the transport and injection phases.

The amendment does not imply EOR is a form of permanent geological storage, and does not provide methods for losses of any injected CO₂ via leaks in the geological formation, as there are no provisions under existing oil and gas production licencing regimes for such monitoring activities.

C: Update to oil and gas fugitive emissions methods

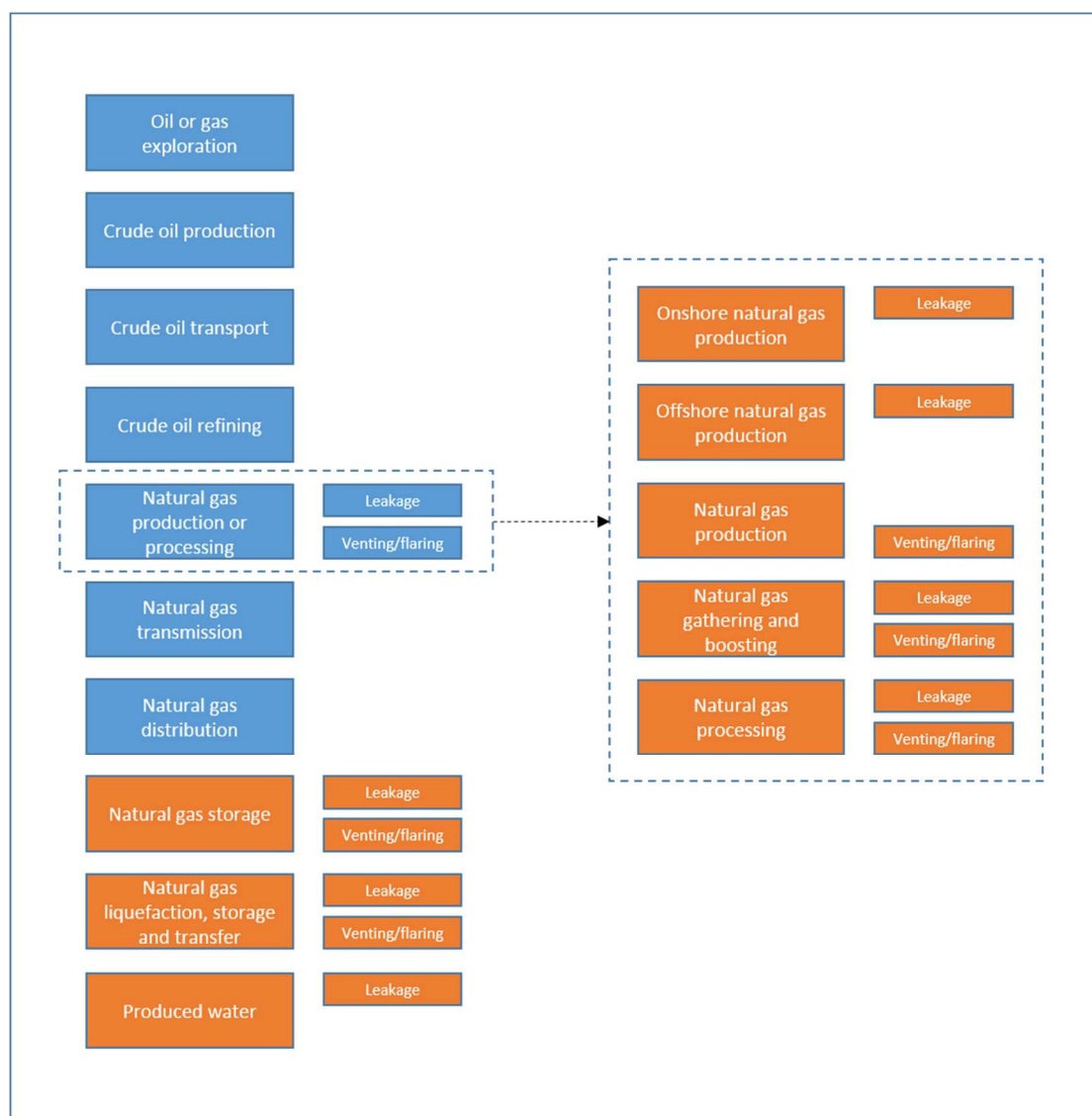
(pp 3-107 in Draft Compilation of Planned Amendments; pp 122 and following list associated matters to be identified for the purposes of Schedule 3 of the NGER Regulations)

The proposed amendments update provisions for the estimation and reporting of fugitive oil and gas emissions.

The 2021 NGER Amendments bring the NGER oil and gas reporting provisions into alignment with estimation methods applied in the Australian Government's National Inventory Report submitted under the United Nations Framework Convention on Climate Change and its Kyoto Protocol, and take into account developments in the empirical evidence base regarding leakages from oil and gas operations.

The proposed amendments introduce greater delineation of emission sources within the oil and gas production chain (current and proposed oil and gas emissions sources are illustrated in **Figure 1**). The segment of the oil and gas production chain currently termed *natural gas production or processing* is split into separate segments for *onshore natural gas production*; *offshore natural gas production*; *natural gas gathering and boosting*; and *natural gas processing*. New segments also are introduced for *natural gas storage*; *natural gas liquefaction, storage and transfer*; and *produced water*.

Figure 1: Overview of oil and natural gas emission sources. The proposed amendments introduce greater delineation of emission sources within the oil and natural gas production chain (current Measurement Determination sources in blue; proposed new sources in orange)



New methods introduced by the proposed amendments primarily relate to the reporting of emissions from leakages. Methods for estimating emissions from **venting** (disposal of gas by release to the atmosphere) and **flaring** (disposal of oil or gas by combustion) remain largely unchanged.

As is the case for other areas of the NGER Scheme, the proposed amendments allow reporters flexibility to choose from a hierarchy of estimation methods. For a given source in the proposed provisions:

- **Method 1** is the method used in Australia's National Inventory Report, frequently applying default emission factors on the basis of throughput of oil or gas through the segment;
- **Method 2 and Method 3**, where available, provide for more complex estimation of emissions, such as by applying emission factors on a per-piece-of-equipment and per-component basis;

- **Method 4**, where available, provides for the estimation of emissions using direct measurement by reporters.

The estimation methods in the proposed amendments are informed by empirical studies of the Australian oil and gas industry where available. In other cases, methods are informed by overseas evidence, including inventory materials published by the US Environmental Protection Agency (USEPA) and the American Petroleum Institute (API), in particular the *Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry 2009* (the **API Compendium**).

The proposed amendments have been developed in consultation with relevant industry participants.

Leak Detection and Repair (LDAR)

To enable the results of active leak management efforts to be reflected in reported NGER emissions, the proposed amendments allow reporters to apply per-component ‘leak’ and ‘no-leak’ emissions factors based on the results of leak detection and repair (LDAR) programs to detect leaking components at their facilities.

Results of LDAR programs may be taken into account in estimating leakages in *onshore and offshore natural gas production, natural gas gathering and boosting, natural gas processing, natural gas storage, and natural gas liquefaction, storage and transfer*.

LDAR programs must be undertaken in accordance with applicable US monitoring requirements and may use either USEPA Method 21 survey instruments or optical gas imaging cameras.

Combustion slip

Recent literature has shown that a significant fraction of methane emissions at upstream oil and gas facilities is attributed to incomplete combustion in engines on site (termed ‘combustion slip’)¹, and that these emissions are strongly dependent on engine technology type².

Under UNFCCC emissions reporting rules, combustion slip is accounted for under fuel combustion rather than fugitive sources. The draft amendments (pp 14 - 15 of the Draft Compilation) therefore make associated amendments to section 2.19 of the Measurement Determination (Emissions released from the combustion of gaseous fuels - Available methods) to require emissions reports for these facilities to use technology dependent methane emission factors provided in the 2006 IPCC Guidelines, or factors estimated based on the manufacturer’s specifications for equipment under relevant operational conditions.

Table 1 sets out a detailed commentary and associated references for the proposed amendments related to fugitive oil and gas emissions.

¹[Zimmerle et al \(May 2020\), Methane Emissions from Gathering Compressor Stations in the U.S.](#)

²[Vaughn et al 2021 – Methane Exhaust Measurements at the Gathering Compressor Stations in the United States](#)

Table 1. Reference and detailed commentary

Reference	Detailed commentary
Division 1.1.2—Definitions and interpretation	<p>Provides new and amended definitions (in both Measurement Determination and Regulations) to support the proposed amendments.</p> <p>Amends section 1.10 to include sources for each newly delineated segments of the oil and gas production chain.</p>
<p>Section 2.19</p> <p>Division 2.3.5- Method 2- Emissions of methane from the combustion of gaseous fuels</p>	<p>Makes associated amendments to section 2.19 of the Measurement Determination (Emissions released from the combustion of gaseous fuels- Available methods) to require emissions reports for upstream oil and gas facilities to use technology dependent methane emission factors provided in the 2006 IPCC Guidelines, or factors estimated based on the manufacturer’s specifications for equipment under relevant operational conditions.</p>
Part 2.4—Emissions released from the combustion of liquid fuels	<p>Makes amendments to prescribed sampling standards as a result of changes to fuel definitions above.</p>
Part 3.3—Oil and natural gas—fugitive emissions	<p>Provides estimation methods for emissions from oil and gas sources.</p>
Division 3.3.1—Preliminary	<p>Provides an overview of the new Part 3.3 and rules for interpretation of terms as used in industry.</p>
Division 3.3.2—Oil or gas exploration and development	<p>See below.</p>
Subdivision 3.3.2.1—Preliminary	<p>Sets the application of the division.</p>
Subdivision 3.3.2.2—Oil or gas exploration and development (emissions that are flared)	<p>Provides estimation methods for emissions from flaring in oil or gas exploration and development activities and remains substantively unchanged, with minor amendments to table items 1 and 2 allow reporting of emissions from flaring of all relevant gaseous and liquid fuels.</p>
Subdivision 3.3.2.3—Oil or gas exploration and development—fugitive emissions from system upsets, accidents and deliberate releases	<p>Provides estimation methods for emissions from deliberate releases from process vents, system upsets and accidents in oil or gas exploration and development activities.</p>

Reference	Detailed commentary
Subdivision 3.3.2.3.1—Fugitive emissions that result from deliberate releases from process vents, system upsets and accidents—well completions	<p>Method 1 is based on the method used for the National Greenhouse Accounts. Emissions factors are based on US EPA, Natural Gas and Petroleum Systems in the GHG Inventory: Additional Information on the 1990-2015 GHG Inventory (published April 2017) (Annex 3.6: <i>Methodology for Estimating CH₄ and CO₂ Emissions from Natural Gas Systems</i>, Table 3.6-2), except for item 1 (Well completion without hydraulic fracturing) which is based on Day et al (2017), Methane Emissions from CSG Well Completion Activities Report for the Department of the Environment and Energy. Default gas share data is based on USEPA (2017) Natural Gas and Petroleum Systems in the GHG Inventory: Additional Information on the 1990-2015 GHG Inventory (published April 2017) (Table 3.6-4, 1996-2015 average for lower 48 States).</p> <p>Method 4 is based on API Compendium sections 5.7.1 and 5.7.2.</p>
Division 3.3.3—Crude oil production	See below.
Subdivision 3.3.3.2—Crude oil production (non-flared)—fugitive leak emissions of methane	<p>Provides estimation methods for emissions from leakages of methane in crude oil production.</p> <p>Methods 1 and 2 remain substantively unchanged.</p> <p>Method 3 is based on section 6.1.3 of the API Compendium (Table 6-14).</p>
Subdivision 3.3.3.3—Crude oil production (flared)—fugitive emissions of carbon dioxide, methane and nitrous oxide	Provides estimation methods for emissions from flaring in crude oil production and remains substantively unchanged, with minor amendments to table items 1 and 2 allow reporting of emissions from flaring of all relevant gaseous and liquid fuels.
Subdivision 3.3.3.4—Crude oil production (non-flared)—fugitive vent emissions of methane and carbon dioxide	<p>Provides an estimation method for vented emissions in crude oil production.</p> <p>Method 1 remains substantively unchanged, except for prescribing the use of section 3.85P for emissions from well workovers.</p>
Division 3.3.4—Crude oil transport	Provides estimation methods for emissions in crude oil transport, and remains substantively unchanged.
Division 3.3.5—Crude oil refining	See below.
Subdivision 3.3.5.1—Fugitive emissions from crude oil refining and from storage tanks for crude oil	<p>Provides estimation methods for emissions crude oil refining and storage tanks for crude oil.</p> <p>Methods 1 and 2 remain substantively unchanged.</p>

Reference	Detailed commentary
	Introduces a new Method 3 allowing estimation using component emissions factors from section 6.1.3 of the API Compendium.
Subdivision 3.3.5.2—Fugitive emissions from deliberate releases from process vents, system upsets and accidents	Provides estimation methods for emissions from deliberate releases from process vents, system upsets and accidents in crude oil refining, and remains substantively unchanged.
Subdivision 3.3.5.3—Fugitive emissions released from gas flared from the oil refinery	Provides estimation methods for emission flared from oil refineries. A new item 2 is added to the table in s 3.69 to allow reporting of emissions from flaring of crude oil and liquids.
Division 3.3.6A—Onshore natural gas production (other than emissions that are vented or flared)	See below.
Subdivision 3.3.6A.1—Onshore natural gas production, other than emissions that are vented or flared—well-heads	<p>Provides estimation methods for leakages from well-heads in onshore natural gas production.</p> <p>Method 1 is based on the method used for the National Greenhouse Accounts. Emissions factors are based on Day et al (2014) Field Measurements of Fugitive Emissions from Equipment and Well Casings in Australian Coal Seam Gas Production Facilities Report to the Department of the Environment.</p> <p>Method 2 emissions factors and gas share data are based on API Compendium Section 6.1.2, with reciprocating compressor factors based on USEPA 2016 Control Techniques Guidelines for the Oil and Natural Gas Industry (Table 5-2).</p> <p>Method 3 subsection (2) emissions factors are based on API Compendium Section 6.1.3, with gas share data based on API Compendium Section 6.1.2.</p> <p>Method 3 subsection (3) factors are based on Lev-On et al (2007): Derivation of New Emission Factors for Quantification of Mass Emissions When Using Optical Gas Imaging for Detecting Leaks.</p>
Division 3.3.6B—Offshore natural gas production (other than emissions that are vented or flared)	See below.

Reference	Detailed commentary
Subdivision 3.3.6B.1—Offshore natural gas production, other than emissions that are vented or flared—offshore platforms	<p>Provides estimation methods for emissions from leakages from offshore platforms.</p> <p>Method 1 is based on the method used for the National Greenhouse Accounts. Emissions factors are based on USEPA (2016) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014 (All Annexes, pp A-203, A-204). Default gas share data is based on USEPA (2017) Natural Gas and Petroleum Systems in the GHG Inventory: Additional Information on the 1990-2015 GHG Inventory (published April 2017) (Table 3.6-4, 1996-2015 average for lower 48 States).</p> <p>Methods 2 and 3 are based on the same data sources as onshore production.</p>
Division 3.3.6C—Natural gas gathering and boosting (other than emissions that are vented or flared)	<p>Provides estimation methods for leakages from natural gas gathering and boosting.</p> <p>Method 1 for gathering and boosting stations is the method used for the National Greenhouse Accounts and is based on Zimmerle et al (2020) Methane Emissions from Gathering Compressor Stations in the U.S.</p> <p>Method 1 for gathering and boosting pipelines is the method used for the National Greenhouse Accounts and is based on API Compendium Section 6.1.2. Default gas share data is based on the same data as for oil or gas exploration development (3.3.2.3).</p> <p>Method 2 for gathering and boosting stations is based on the same sources as for onshore natural gas production. Method 2 emissions factors for gathering and boosting pipelines are based on API Compendium Table C-16.</p> <p>Method 3 is based on the same sources as for onshore natural gas production.</p>
Division 3.3.6D—Produced water from oil and gas exploration and development, crude oil production, natural gas production or natural gas gathering and boosting (other than emissions that are vented or flared)	<p>Provides estimation methods for emissions from produced water from oil and gas exploration and development, crude oil production, natural gas production or natural gas gathering and boosting.</p> <p>Method 1 and 2 emission factors are based on API Compendium Table 5-10. Default gas share data is based on USEPA (2017) Natural Gas and Petroleum Systems in the GHG Inventory: Additional Information on the 1990-2015 GHG Inventory (published April 2017) (Table 3.6-4, 1996-2015 average for lower 48 States).</p>
Division 3.3.6E—Natural gas processing (other than	Provides estimation methods for leakages from natural gas processing.

Reference	Detailed commentary
emissions that are vented or flared)	<p>Method 1 is the method used for the National Greenhouse Accounts. Emissions factors are based on Marchese et al (2015) Methane Emissions from United States Natural Gas Gathering and Processing, with default gas share data based on the same sources as natural gas gathering and boosting.</p> <p>Method 2 emission factors are based on USEPA (2016) Control Techniques Guidelines for the Oil and Natural Gas Industry (Table 5-2), with the factor for screw compressors based on Clearstone Engineering (2014) <i>Update of Fugitive Equipment Emission Factors, Report to Canadian Association of Petroleum Producers</i>, February, 2014 Report 2014-003 and default gas share based on API Compendium section 6.1.2.</p> <p>Method 3 subsection (2) factors are based on API Compendium section 6.1.3 (Table 6-16).</p> <p>Method 3 subsection (3) factors are based on Lev-On et al (2007): Derivation of New Emission Factors for Quantification of Mass Emissions When Using Optical Gas Imaging for Detecting Leaks.</p>
Division 3.3.7—Natural gas transmission (other than emissions that are flared)	<p>Provides estimation methods for leakage from transmission of natural gas and plant condensates.</p> <p>Method 1 is the method used for the National Greenhouse Accounts and is substantively unchanged.</p> <p>Method 2 is based on sections 5 and 6.1.2 of the API Compendium and remains substantively unchanged.</p> <p>A new Method 3 is added based on section 6.1.3 of the API Compendium.</p>
Division 3.3.7A—Natural gas storage (other than emissions that are vented or flared)	<p>Provides estimation methods for leakage from natural gas storage.</p> <p>Method 1 is the method in the National Greenhouse Accounts and is based on USEPA (2016) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014 (All Annexes, Table A-137).</p> <p>Method 2 factors are based on section 6.1.2 of the API Compendium (Table 6-6), with the factor for screw compressors based on Clearstone Engineering (2014) <i>Update of Fugitive Equipment Emission Factors, Report to Canadian Association of Petroleum Producers</i>, February, 2014 Report 2014-003.</p> <p>Method 3 subsection (2) factors are based on section 6.1.3 of the API Compendium (Table 6-18).</p> <p>Method 3 subsection (3) factors are based on Lev-On et al (2007): Derivation of New Emission Factors for Quantification of Mass Emissions When Using Optical Gas Imaging for Detecting Leaks.</p>

Reference	Detailed commentary
Division 3.3.7B—Natural gas liquefaction, storage and transfer (other than emissions that are vented or flared)	<p>Provides estimation methods for leakage from natural gas liquefaction, storage and transfer.</p> <p>Method 1 is the method in the National Greenhouse Accounts and is based on USEPA (2016) Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014 (All Annexes, Table A-137, sum of entries for: <i>LNG Stations, LNG Reciprocating Compressors, LNG Centrifugal Compressors</i>).</p> <p>Method 2 is based on section 6.1.2 of the API Compendium.</p> <p>Method 3 subsection (2) factors are based on API (2015) <i>Liquefied Natural Gas (LNG) Operations Consistent Methodology for Estimating Greenhouse Gas Emissions</i> section 4.3.1 (Table 13).</p> <p>Method 3 subsection (3) factors are based on Lev-On et al (2007): Derivation of New Emission Factors for Quantification of Mass Emissions When Using Optical Gas Imaging for Detecting Leaks.</p>
Division 3.3.8—Natural gas distribution (other than emissions that are flared)	Provides estimation methods for leakages in natural gas distribution and remains substantively unchanged.
Division 3.3.9A—Natural gas production (emissions that are vented or flared)	Provides estimation methods for emissions that are vented or flared in natural gas supply chain and remains substantively unchanged.
Subdivision 3.3.9A.1—Natural gas production—emissions that are vented—gas treatment processes	<p>Provides estimation methods for emissions that are vented in gas treatment processes in natural gas production.</p> <p>Method 1 is based on section 5.1 of the API Compendium.</p>
Subdivision 3.3.9A.2—Natural gas production—emissions that are vented—cold process vents	<p>Provides estimation methods for emissions from cold process vents in natural gas production.</p> <p>Method 1 is based on section 5.3 of the API Compendium.</p>
Subdivision 3.3.9A.3—Natural gas production—emissions that are vented—natural gas blanketed tanks and condensate storage tanks	<p>Provides estimation methods for emissions from natural gas blanketed tanks and condensate storage tanks in natural gas production.</p> <p>Method 1 is based on section 5.4 of the API Compendium.</p>
Subdivision 3.3.9A.4—Natural gas production—emissions that are vented—gas driven pneumatic devices	<p>Provides estimation methods for emissions from gas driven pneumatic devices in natural gas production.</p> <p>Method 1 is based on section 5.6.1 of the API Compendium.</p>

Reference	Detailed commentary
Subdivision 3.3.9A.5—Natural gas production—emissions that are vented—gas driven chemical injection pumps	Provides estimation methods for emissions from chemical injection pumps in natural gas production. Method 1 is based on section 5.6.2 of the API Compendium.
Subdivision 3.3.9A.6—Natural gas production—emissions that are vented—well blowouts	Provides estimation methods for emissions from well blowouts in natural gas production. Method 1 is based on section 5.7.1 of the API Compendium.
Subdivision 3.3.9A.7—Natural gas production—emissions that are vented—CO2 stimulation	Provides estimation methods for emissions from CO2 stimulation in natural gas production. Method 1 is based on section 5.7.1 of the API Compendium.
Subdivision 3.3.9A.8—Natural gas production—emissions that are vented—well workovers	Provides estimation methods for emissions from well workovers in natural gas production. Method 1 is based on the same sources as subdivision 3.3.2.3.1 under oil or gas exploration and development activities. Method 4 is based on section 5.7.1 of the API Compendium.
Subdivision 3.3.9A.9—Natural gas production—emissions that are vented—vessel blowdowns, compressor starts and compressor blowdowns	Provides estimation methods for emissions from vessel blowdowns, compressor starts and compressor blowdowns in natural gas production. Method 1 is based on sections 5.7.1 and 5.7.2 of the API Compendium.
Subdivision 3.3.9A.10—Natural gas production (emissions that are flared)	Provides estimation methods for emissions that are flared in natural gas production. A new table item 2 is added to allow reporting of emissions from flaring of crude oil and liquids
Division 3.3.9B—Natural gas gathering and boosting (emissions that are vented or flared)	Provides estimation for vented and flared emissions in natural gas gathering and boosting. Incorporates changes made to flaring provisions for gas production (3.3.9A.10 above).
Division 3.3.9C—Natural gas processing (emissions that are vented or flared)	Provides estimation for vented and flared emissions in natural gas processing. Incorporates changes made to flaring provisions for gas production (3.3.9A.10 above).
Division 3.3.9D—Natural gas transmission (emissions that are flared)	Provides estimation for flared emissions in natural gas transmission. Incorporates changes made to flaring provisions for gas production (3.3.9A.10 above).

Reference	Detailed commentary
Division 3.3.9E—Natural gas storage (emissions that are vented or flared)	Provides estimation for vented and flared emissions in natural gas storage. Incorporates changes made to flaring provisions for gas production (3.3.9A.10 above).
Division 3.3.9F— Natural gas liquefaction, storage and transfer (emissions that are vented or flared)	Provides estimation for vented and flared emissions in natural gas liquefaction, storage and transfer. Incorporates changes made to flaring provisions for gas production (3.3.9A.10 above).
Division 3.3.9G—Natural gas distribution (emissions that are flared)	Provides estimation for flared emissions in natural gas distribution. Incorporates changes made to flaring provisions for gas production (3.3.9A.10 above).