



Australian Network of Environmental
Defender's Offices Inc

Submission on the National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2013 (No. 1) (consultation draft) and Departmental Commentary

6 June 2013

The Australian Network of Environmental Defender's Offices (ANEDO) consists of nine independently constituted and managed community environmental law centres located in each State and Territory of Australia.

Each EDO is dedicated to protecting the environment in the public interest. EDOs provide legal representation and advice, take an active role in environmental law reform and policy formulation, and offer a significant education program designed to facilitate public participation in environmental decision making.

EDOs' clients include those concerned with the impacts of climate change and coal seam gas mining.

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Introduction

The Australian Network of Environmental Defender's Offices Inc (**ANEDO**) is a network of nine community legal centres in each State and Territory, specialising in public interest environmental law and policy. ANEDO welcomes the opportunity to comment on the *National Greenhouse and Energy Reporting (Measurement) Amendment Determination 2013 (No. 1) (Exposure Draft) (the Consultation Draft)* and the Departmental Commentary.

The EDOs have worked extensively for clients on climate change issues generally and the climate change impacts of coal seam gas (**CSG**) mining in particular - including through advice work, litigation, education and law reform submissions.

Executive Summary

ANEDO welcomes the amendments proposed in the Consultation Draft to introduce direct monitoring methods.

ANEDO further recommends:

- the Determination include the 1 July 2015 start date for the mandatory use of Method 4 for vented fugitive emissions from CSG well completions and workovers where fracking has occurred.
- the use of Method 4 be mandatory for vented fugitive emissions from all CSG well completions and well workovers.
- the use of Method 4 be mandatory for all flared fugitive emissions.
- Method 4 be mandated from 1 July 2014 for larger CSG producers.
- until the Australia-specific emission factors are adopted on 1 July 2015, a precautionary approach be adopted and the Determination amended, as soon as possible, to reflect the higher emissions factors flowing from more current and better-researched US EPA analysis.

Direct measurement of fugitive emissions

ANEDO welcomes the changes proposed in Item 47, Schedule 1 of the Consultation Draft which revise the methodology for direct measurement (Method 4 under the Determination) for vented fugitive emissions associated with well completions and well workovers. The Consultation Draft will amend the *National Greenhouse and Energy Reporting (Measurement) Determination 2008 (the Determination)*. Amendments to the Determination should go further than proposed in the Consultation Draft.

In our previous submission of 10 May 2013¹ we also welcomed the proposal in the *Technical Discussion Paper, April 2013 – Coal Seam Gas: Enhanced Estimation and Reporting of Fugitive Greenhouse Gas Emissions under the National Greenhouse Gas and Energy Reporting (Measurement) Determination*² (**the Technical Discussion**

¹ The submission is available online here:

<http://www.climatechange.gov.au/sites/climatechange/files/submissions/2013/05/ANEDO.pdf>

² *Technical Discussion Paper, April 2013 – Coal Seam Gas: Enhanced Estimation and Reporting of Fugitive Greenhouse Gas Emissions under the National Greenhouse Gas and Energy Reporting (Measurement) Determination (the Technical Discussion Paper)*. The Technical Discussion Paper is available online here: <http://www.climatechange.gov.au/sites/climatechange/files/files/consultations/2013-16-04-CSG-Discussion-Paper-PDF.pdf>

Paper) to mandate the use of direct measurement for vented fugitive emissions from CSG well completions and workovers where fracking has occurred from 1 July 2015.

The Departmental Commentary refers to the intention to make Method 4 mandatory from 1 July 2015, but the Consultation Draft itself contains no reference to mandatory direct measurement, leaving Method 4 as one of two options.

ANEDO believes that including a timeframe in the Determination would provide greater certainty for industry and other stakeholders alike. This could be achieved by amending subsection 3.46A(2)(a) to read “(a) *method 1 under:*

- (i) *for emissions of methane and carbon dioxide **prior to 1 July 2015** from coal seam gas well completions or well workover activities where well stimulation techniques have been used —section 3.84; or*
- (ii) *for emissions and activities not mentioned in subparagraph (i)— section 3.84”*

ANEDO recommends that the Determination include the 1 July 2015 start date for the mandatory use of Method 4 for vented fugitive emissions from CSG well completions and workovers where fracking has occurred.

ANEDO notes that mandatory direct measurement will only apply to vented fugitive emissions from CSG well completions and well workovers where fracking has been used. We reiterate our position highlighted in our previous submission of 10 May 2013 that mandatory direct measurement should apply to all vented fugitive emissions from CSG wells, regardless of whether fracking has been used.

ANEDO recommends that Method 4 be mandatory for vented fugitive emissions from all CSG well completions and well workovers.

The Consultation Draft restricts Method 4 to vented fugitive emissions. The extension of mandatory Method 4 to flared emissions would enable public confidence in the calculation methodology that is relevant to environmental impacts and carbon tax liability. Since but since flaring is largely under the control of CSG industry operators, the costs to industry would be minimal. While we understand the technical concerns with implementing this proposal³ we have considerable faith ability of industry to engineer an innovative solution.

ANEDO recommends that the use of Method 4 be mandatory for all flared fugitive emissions.

The Consultation Draft and Departmental Commentary contain no reference to whether or not data collected under Method 4 monitoring will be publically available. This would allow the data to be subject to peer review and to allow affected communities and individuals to develop confidence in the regulatory programme.

ANEDO recommends that all monitoring data collected and reported by CSG producers must be made publicly available.

Finally, in light of the very rapid expansion of the industry, we consider that mandatory direct measurement should be phased in faster sooner than 1 July 2015. Larger CSG producers have greater capacity to adapt to regulatory changes.

³ Detailed at page three of the submission by APPEA dated 10 May 2013.

ANEDO recommends that Method 4 be mandated from 1 July 2014 for larger CSG producers.

Emissions factors and the precautionary principle

As we emphasised in our previous submission of 10 May 2013 ANEDO welcomes the joint project between CSIRO and the DIICSRTE, which aims to develop Australia-specific emissions factors. The Technical Discussion Paper proposed that those emissions factors be implemented by 1 July 2015.⁴

As noted in our previous submissions of 19 October 2012 and 10 May 2013, the Determination relies heavily on out-dated emissions factors from the 2009 American Petroleum Institute Compendium.⁵ The US EPA has since revised the relevant emissions factors upwards.⁶ The US EPA's most recent *Inventory of US Greenhouse Gas Emissions and Sinks 1990-2011* published in April 2013 refers to revised emissions factors published for the first time in 2011.⁷

As noted in our previous submission of 10 May 2013, Australia is obliged under the United Nations Framework Convention on Climate Change (**UNFCCC**) to observe the precautionary principle,⁸ and that principle is incorporated into the legislative regime of the *NGER Act 2007* (Cth).⁹

The Consultation Draft does not include any change to the applicable emissions factors to be used in Method 1 estimations. Continued reliance on out-dated emissions factors as proposed is contrary to the application of the precautionary principle.

Until the Australia-specific emission factors are adopted on 1 July 2015, ANEDO recommends that a precautionary approach be adopted and the Determination amended, as soon as possible, to reflect the higher emissions factors flowing from more current and better-researched US EPA analysis.

⁴ The Discussion Paper, page 13.

⁵ *The Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry*, published in August 2009 by the American Petroleum Institute (**the API Compendium**) The API Compendium relies on research conducted in the 1990s: *Review of literature on international best practice for estimating greenhouse gas emissions from coal seam gas production*, dated 19 September 2012 and prepared by Pitt&Sherry for the Department of Climate Change and Energy Efficiency.

⁶ US EPA (2011): *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2009*, Report EPA R11 005, 15 April.

http://www.epa.gov/climatechange/Downloads/ghgemissions/USGHGInventory2011Complete_Report.pdf and US EPA (2013) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2011*, Report EPA 430-R-13-001, 12 April. <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2013-Main-Text.pdf>. See also Petron et al (2012) "Hydrocarbon emission characterisation in the Colorado Front Range: A pilot study", *Journal of Geophysical Research* 117; Tollefson, J. (2012) "Air Sampling reveals high emissions from gas field", *Nature* 482:139; Cf: Levi, M. A. (2012), Comment on "Hydrocarbon emissions characterization in the Colorado Front Range -- A Pilot Study", *J. Geophys. Res.*, doi:10.1029/2012JD017686, in press

⁷ US EPA (2013) *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2011*, Report EPA 430-R-13-001, 12 April. <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2013-Main-Text.pdf>, pages 1-2; 3-63,64; and 3-69.

⁸ The principle is in UNFCCC Article 3.3.

⁹ One of the objects of the *NGER Act 2007* (Cth) (s3(2)) is to underpin the *Clean Energy Act 2011* (Cth) (s3(a)(i)).