

13 July 2009

The Emissions Trading Group  
Ministry for the Environment  
PO Box 10362  
**WELLINGTON 6143**

Dear Sir/Madam,

## **SUBMISSION ON THE DRAFT ETS REGULATIONS**

We have conducted a brief review of the ETS draft regulations, and have provided some observations and recommendations in Appendix A.

We recommend an approach to verification based on the model currently used by Australia in Appendix A, whereby emissions returns above a threshold are required to be verified (e.g. 125,000 tCO<sub>2</sub>e) and there is no mandatory verification is required for Unique Emissions Factors (UEFs). With this approach, most UEFs would end up being verified anyway, as UEFs would generally be only applied for by participants with large obligations. The use of an accurate emissions factor is just one part of coming to an accurate account of emissions obligations. We consider that the Australian approach suggested would ensure the overall integrity of the scheme, while not imposing overly onerous compliance costs on participants with smaller obligations. We recommend MfE and MED discuss verification issues with the Australian Department of Climate Change. We have also made several other observations and recommendations on specific regulations in Appendix A.

The purpose of this submission is to bring to the attention any potential issues that MfE, MoT and MED may be unaware of. All observations and recommendations should be fully checked by MfE, MED and MoT before any amendments to the draft regulations are made. We would be happy to meet with you and any of your colleagues to discuss our submission. Meanwhile, if you have any questions regarding the points made in this submission, please do not hesitate to contact Jackie Robertson on (04) 470 3561 and/or David Hodge on (04) 470 3661.



**Chartered Accountants  
Wellington, New Zealand**

**Enclosure:** Appendix A: Detailed Observations

### Verification

#### All Regulations

We recommend that the regulations should be amended to:

1. Add requirements in the SEIP and LFF regulations for mandatory verification of Emissions Returns for participants with large obligations above a threshold (e.g. 125,000 tCO<sub>2</sub>e)
2. Remove requirements in the UEF regulations for the specific UEF verification and application process (and associated verification process and recognition regulations) – instead these would just be verified in majority indirectly in Emissions Returns of participants with large obligations
3. Add requirements in the SEIP and LFF regulations prescribing the criteria for verification (i.e. ISO14064-3 or ISAE3000) and the process for recognising approved verifiers (whom are either experienced verifiers of GHG information or chartered accountants/engineers).

This approach is similar to that taken in Australia, where the CPRS White Paper suggests mandatory verification for all participants with obligations of over 125,000 tCO<sub>2</sub>e. The European Union ETS requires all entities to have their emissions reports verified prior to acceptance. A threshold provides a way to focus on ensuring the overall integrity of the scheme, while not imposing undue compliance costs on participants. Errors have large financial implications, as organisations that miscalculate their emissions will purchase and surrender incorrect volumes of carbon credits. The capacity of participants to report emissions obligations is less mature and the risk of error is high in the initial years of reporting. It is worth reflecting on the fact that a 125,000 tCO<sub>2</sub>e threshold amounts to the surrender of carbon credits currently worth NZ\$3.25 million.

We consider that this mandatory verification for emissions returns should be used instead of the mandatory verification currently required for Unique Emissions Factors – and the process for application for approval of a UEF removed (i.e. self-assessment likewise for the UEF unless the verification threshold reached, whereby it is implicitly verified along with everything else in the emissions return). A UEF provides only one factor in estimating emissions obligations. The Emissions Return provides numerous other figures, of which the accuracy and completeness the final emissions obligations depend upon. In majority, most organisations that use UEFs will be organisations with large obligations, of whose Emissions Returns would thus be implicitly verified in the verification of the Emissions Returns. The Australian CPRS White Paper provides a useful discussion of verification in an emissions trading scheme (see Section 7.5 of Volume 1).

We consider that a limitation for applying to be recognised verifier should include either chartered accountants/engineers or those with demonstrated experience in verifying GHG information. A limit to chartered accountants and chartered engineers will likely exclude too many, if not most, experienced verifiers of GHG information. Shailesh Tyagi, our most experienced verifier whom has worked both in advisory and verification for numerous CDM projects, would not be able to apply under this criterion – as would most of the rest of our Climate Change team (despite being experienced in the verification of GHG information).

Finally, we recommend MfE and MED discuss verification issues in greater detail with the Australian Department of Climate Change.

## Other

### Stationary Energy and Industrial Processes (SEIP) Regulations

#### Coal & Natural Gas

*SEIP Regulation 9, 10, 12, 13, 15 & 16*

Could these regulations be amended to allow participants to calculate emissions on the basis of coal and natural gas energy content where GJ data is known, rather than collecting average calorific values and mass/volume of each class of fuel?

#### Natural Gas

1. *SEIP Regulation 13*

The equation currently appears to equate for imported and exported gas in MJ (assuming the calorific value is MJ/m<sup>3</sup>), before applying a tCO<sub>2</sub>e/GJ emissions factor. Consequently, it may estimate these emissions 1000 times too much. The equation could be amended to as follows:

$$E = [(A \times CV)/1000 - (C \times CV)/1000 - B] \times EF$$

2. *SEIP Regulation 16*

The default emissions factor for CH<sub>4</sub> may be too low. The MED 2008 Energy GHG emissions 1990-2007 document lists a natural gas (electricity – large turbine) CH<sub>4</sub> emissions factor as 5.4 t CH<sub>4</sub>/PJ, which can be converted to 0.113 tCO<sub>2</sub>e/TJ.

3. *SEIP Regulations 15 & 16*

These regulations could be amended to take account the following:

- (a) Emissions from gifted mined natural gas are currently excluded, which could create a potential loophole; and
- (b) Losses are currently double-counted, as they are included under both ES (downstream emissions from gas sold) and L (fugitive emissions from gas lost in distribution).

The equation in regulation 16(4) could be as follows:

$$TE = \Sigma(ES) + \Sigma(EU) + \Sigma(EF) + \Sigma(V) + \Sigma(G) - \Sigma(EE) - \Sigma(EO)$$

...Where 'G' refers to emissions derived from mined gas that is gifted

...and there is no 'L'

#### Geothermal

4. *SEIP Regulations 18 & 19*

Do all participants that use geothermal steam to generate *electricity* currently obtain data sufficient to calculate a UEF? If so, should it be a mandatory requirement to use a UEF?

#### Combusted Waste

5. *SEIP Regulations 20-22, 3A, Table 6 of Schedule 2 (& UEF Regulations as appropriate)*

The class 'waste' could in all instances be referred to as 'other waste', such that it is explicit that waste/used oil and used tyres are not included in calculations of the class 'waste'. In addition, 'other waste' should be defined in either Regulation 3A and/or the Schedule 2 interpretation to exclude waste from the other classes

(e.g. burned tyres, waste oil etc). A literal interpretation of the regulations as they stand may suggest that one should double-count the used tyres & waste/used oil emissions in both the applicable class, as well as the 'waste' class.

## Refining Petroleum

6. *SEIP Regulation 25 & Schedule 2, Table 7*

The emissions factors in Table 7 of Schedule 2 may be a factor of 1000 too high. Each value should be as tCO<sub>2</sub>e/t, rather than ktCO<sub>2</sub>e/t.

7. *SEIP Regulation 25 & Schedule 2, Table 7*

Why is the adjusted refinery gas emissions factor (5.53 tCO<sub>2</sub>e/tflared) almost twice as high as that listed in the Australian National Greenhouse Account Factors (2.83 tCO<sub>2</sub>e/tflared)?

## Calorific Value

8. *SEIP Regulations 3, 10, 13, 22 & 46*

The definition of calorific value in regulation 3 could be amended, to remove reference to the MJ/kg units expressed. Furthermore, regulations 10, 13, 22 & 46 could be amended to refer to the unit for calorific value referred to in the equation.

## Unique Emission Factors (UEF) Regulations

### Obligation Fuel

9. *UEF Regulation 8(c)*

The equation may estimate a CO<sub>2</sub> emissions factor that is a factor of ten too high. It could be amended to as follows:

$$EFC = C \times D \times 3.67$$

### Coal

10. *UEF Regulation 10(c)*

The equation may estimate a CO<sub>2</sub> emissions factor that is a factor of one thousand too low. It could be amended to as follows:

$$EFC = C \times 3.67 / CV \times 1000$$

### Geothermal

11. *SEIP Regulations 18 & 19*

Is the mass of steam/fluid input always essentially equivalent to the mass of condensate output regardless of the power station type (such that a UEF can be calculated by inferred the difference in GHG% between input and output)?

## Liquid Fossil Fuels (LFF) Regulations

### Obligation Jet Fuel

12. *LFF Regulations 7 & 8*

This regulation could be amended to exclude:

- a) Obligation jet fuel that is used on an international aviation/maritime for; and
- b) Obligation jet fuel that is exported.

This is for the same reasons as it is excluded under regulations 5 & 6 for obligation fuel, namely that international aviation/maritime is not currently accounted for

under Kyoto and that exported obligation jet fuel is combusted elsewhere. It is noted that pending on the outcome of Copenhagen, this treatment of international aviation/maritime may need to be amended.

The correct equation in regulation 8(1) could be as follows:

$$T = (L - F - G) \times E$$

...Where 'F' refers to international obligation jet fuel (less the biofuel component); and

...and 'G' refers to exported international obligation jet fuel (less the biofuel component).

## Flaring and Venting

### *13. LFF Regulations*

How do these regulations take into account flaring and venting emissions from domestic mined oil? If they are excluded, on what basis is this done?

## All Regulations

### Symbols

#### *14. SEIP, LFF & UEF Regulations*

It is recommended that consistent symbols are used in emissions equations across the regulations wherever possible for clarity. For example, it is noted that the symbols T and E are used to represent emissions and the emissions factors respectively in the LFF regulations. However, in the SEIP regulations E and EF generally (but not always) refer to emissions and the emissions factor respectively. A further example is that B and S used respectively in regulations 13 and 49 to refer to the same thing.