

**Subject :** **Climate Change (Stationary Energy and Industrial Processes) Regulations 2008: draft for consultation**

**Submission To:** **Ministry for the Environment**  
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# 1 Introduction

Holcim (New Zealand) Limited (Holcim) welcomes the opportunity to make a formal submission on the draft regulations underpinning the Climate Change Response Act 2002.

By way of a preliminary comment, we note that this is the *only* occasion made available for Holcim to submit formally to officials on national climate change policy since the publication of the draft *Climate Change (Emissions Trading and Renewable Preference) Bill* of December 2007.

The single opportunity afforded to Holcim to participate in a consultative process on this most important piece of legislation was a direct submission to the Finance and Expenditure Select Committee in April 2008. Whilst our submission to the Committee was courteously received, we were dismayed that not one of our concerns was ultimately reflected in the final form of the *Climate Change Response (Emissions Trading) Amendment Act 2008*.

The subsequent invitation to participate in a private expert capacity in the Technical Advisory Group (TAG) tasked with drafting regulations covering stationary energy and industrial processes is gratefully acknowledged. However, we note that the extent of this participation was strictly circumscribed by a formal scope that frustrated any attempt at improving the operability of the Act.

Holcim remains acutely dissatisfied with both the process that culminated in the Act, and in the actual content of the Act itself. It is a matter of deep regret that the rushed process of crafting the Act ultimately, and inevitably, contributed to a deeply flawed legislative outcome.

In the matter of the draft Regulations with which this submission is concerned, we are of the view that the draft is both untimely and inadequate.

Untimely, because we had hoped that the publication of emissions factors covering substantially New Zealand's entire industrial base would have been covered off much earlier in the process (allowing an appropriate period of discussion and agreement) – and because it is clear to us that there are many inconsistencies and omissions in these published emissions factors that require correction.

Inadequate, because we are disappointed that the issue of emissions factors seems substantially to be the *sole* focus of these draft regulations. Yet, the equally important issue of emissions inventory standards remains in limbo. Every participant in the NZ ETS remains at risk of severe penalties for even inadvertent breaches of inventory reporting standards – but, no such standards exist. Moreover, without such standards in place, no single participant in the NZ ETS can be assured that every other participant is reporting fairly or accurately – a particular concern for those businesses that are trade-exposed, where the fixed size (currently undefined) of the allocation “pot” means that we must hope that every other participant is not taking more than their fair share of that pot.

Holcim's interest in these draft regulations arises chiefly from its conduct of business activities that are energy intensive and that release carbon dioxide as an industrial process emission. These are:

- Cement manufacture (Westport Works);

- Lime manufacture (McDonald's Lime and Taylor's Lime in the Otorohanga/Te Kuiti and Dunedin areas respectively).

In view of the complex nature of some the points raised we would welcome the opportunity for further dialogue.

## 2 Specific Submission Points

Holcim's specific submission points are presented in this section. Frilled brackets { } are used to identify relevant clause or paragraphs of the draft regulations. Square brackets [ ] are used to identify the relevant paragraph number of the Act.

### **{Page 1, Prologue} Consultation**

#### **See also [166]**

*“Pursuant to sections 163 and 167 of the Climate Change Response Act 2002, His Excellency the Governor-General, acting on the advice and with the consent of the Executive Council, makes the following regulations...”*

We note that, in keeping with this prologue to the Draft, [166] sets out a clear, appropriate and desirable consultation process.

Unfortunately, having described such a process, clause [166(4)] promptly circumvents any need for consultation by permitting regulations to be made under sections [163, 164, and 165] *without consultation*.

[166(4)] undermines the credibility of the draft regulations and permits material changes to any or all regulations at the sole discretion of the regulator. We note that various other regulations remain undefined in this draft (such as the estimation of unique emission factors), and the [166(4)] has the effect of permitting unilateral introduction of such regulations without the necessity to consult with affected parties.

We are uncertain how this serious discrepancy can be corrected, short of amending the Act. Until such an amendment can be considered, it is misleading to assert in the draft regulations that there is a requirement to consult.

*As [166(4)] of the Act extinguishes the requirement to consult, it would be more accurate for the draft regulations simply to state that there is no requirement to consult.*

### **{4} Fees and Charges**

Various fees and charges are applicable, per Schedule 1.

But Schedule 1 does not itemise these. They are described as “pending”.

*This omission needs to be addressed.*

### **{21, 21, 22} Combusting used oil, waste oil, used tyres, or waste**

The method of calculation of the total emissions (for the purposes of submitting an emissions return) from combustion of these materials is incomplete.

We note the laudable and correct attempt to capture the presence of biomass (natural rubber) in the calculation of emissions from used tyres. We suggest that many other wastes also contain biomass to greater or lesser degrees. As an example, at the extreme

end, it is possible to argue that waste paper is substantially *all* biomass. Other waste materials will contain negligible or no biomass content (many plastics).

*The method adopted to calculate emissions from combustion of used tyres is correct, and this method should be generalised for all the defined waste materials.*

*We recommend that the regulations make provision for an approved analytical method or methods to measure biomass content.*

Such a provision need not be overly definitive. There already exist various internationally recognised standards or draft standards that define appropriate analytical methods and technical quality indicators.

As an added complication, we note that used tyres generally contain approximately 15% by weight of steel reinforcement. There is a need in the regulations to modify the various emissions equations to take account of non-volatile, metallic components that are common in many waste streams. It should be pointed out that steel reinforced tyres are common but not universal throughout the world, and we are unclear if IPCC default values for these sort of wastes properly represent the New Zealand situation.

#### **{9, 10} Mining Coal**

Whilst Holcim New Zealand is not a coal miner, we do purchase substantial quantities of coal annually – though not enough to qualify for opt-in (per Part 4, {44 etc}).

However, we are concerned that {10} presumes an ability to accurately measure emissions of coal-seam methane associated with mining coal.

We are unaware that any such capability currently exists in the New Zealand coal mining industry.

We understand that the quoted emission factors for coal seam methane, quoted in Schedule 2, originate from IPCC. And, we suspect these will be justifiably contested by the coal mining industry.

*We acknowledge and endorse the intent stated in Emissions Trading Bulletin No.8 to re-evaluate these numbers in co-operation with coal miners.*

However, as a price-taker in the coal market, we will pay for the estimated coal seam methane cost, as part of the purchase cost of coal. Until reliable data exists to underpin such costs, we have absolutely no cost certainty for a major component of our business – other than that we will probably pay too much.

*We strongly suggest that the regulations do not attempt to ‘capture’ coal seam methane emissions as part of coal mining until such time as there is absolute clarity on the accuracy of measure for each domestic coal type available.*

We note also a lack of clarity in the opt-in regulations [44] covering coal purchasing, where it is unclear where liability for coal-seam methane will reside.

## **{Schedule 2}**

### **See also *Emissions Trading Bulletin No.8***

We acknowledge and endorse the statement in Bulletin No.8 that many of the emissions factors are “*intended to be reviewed by external parties and are therefore subject to further analysis and confirmation. The views of submitters are also sought on these emissions factors.*”

We suggest such an analysis is critical. However, we also note that, whilst there may well be such praiseworthy intent in Bulletin No.8, neither the Act nor the draft regulations make any such explicit provision for consultation – rather, as noted previously, the Act explicitly provides that such consultation need *not* occur.

In any event, there are a number of features of the factors presented both in {Schedule 2} and in the *Bulletin* which are disquieting.

- Precision – It is difficult to justify the stated precision of eight decimal places of the factors quoted. No evidence is adduced to support this level of precision in the values published.
- Accuracy – In the absence of appropriate technical endorsement, reflecting New Zealand practice and experience, we are dubious of the validity of many of the numbers quoted.

In support of our contentions above, we note that the MED’s annual *Energy Greenhouse Gas Emissions Report* always carefully acknowledges the uncertainty of emissions factors estimation, most particularly for non-CO<sub>2</sub> emissions.<sup>1</sup>

Given the financial burden of liability to be borne by participants in the NZ ETS, this is a non-trivial matter.

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<sup>1</sup> *New Zealand Energy Greenhouse Gas Emissions 1990-2007*, Ministry for Economic Development, August 2008, p.23 and p.35.

On the issue of accuracy, we note that for a material proportion of the emissions factors quoted in Bulletin No.8, there appears to be a mathematical inconsistency relating to the Oxidation Factor.

In our view, if the Oxidation Factor equals 1.000 then, by definition, it is illogical that the partial emissions factors for CH<sub>4</sub> and N<sub>2</sub>O be anything *other than* zero. Yet, for example, Part C of Bulletin No.8 assigns a non-zero value to the CH<sub>4</sub> emissions factor for “Venting Natural Gas”, when the Oxidation factor is quoted to be 1.000. We note similar problems in the values presented for used oil and waste oil, used tyres, and non-organic waste.

As acknowledged by the MED report, we note also that actual value assigned to many of the emissions factors is critically *process-dependant*. Thus, we would contend that high temperature combustion (energy recovery at > 1,500deg C) of used oil in a cement kiln produces zero CH<sub>4</sub> at all times. The temperatures involved make the emission of methane effectively impossible.

On the other hand, we would agree that low temperature combustion (<1,000deg C) may very well lead to such emissions.

Such considerations need to be applied to partial and full emissions factors for all other types of wastes.

## **A General Comment**

### ***Unique emissions factors***

The issue of emissions factors calculated for specific processes and point sources is not discussed in the draft regulations. This is a serious oversight.

The matter is dealt with in Bulletin No.8, but this has no force in law.

*We strongly urge that explicit provision for the calculation of unique emissions factors be included in the regulations. This will ensure accuracy, cost-effective outcomes for NZ ETS participants, fairness of treatment, and minimise potential conflict between the regulator and participants.*

Apart from the adverse outcomes already noted above, unique emissions factors are critical to ensuring accurate and timely draft and final determinations in the Allocation process.

Unfortunately, neither the Act nor the schedule for commencement of the NZ ETS appears to properly accommodate unique emissions factors. This is unacceptable in our view.

*We strongly urge that sufficient time be allocated, prior to entry into the NZ ETS of stationary energy and industrial process sectors, to ensure the co-operative development of unique emissions factors for these sectors.*

We assert that proper allowance for the development of unique emissions factors is a foundation stone for a successful and durable NZ ETS.

In this first formal submission to officials, and in view of the complex nature of some the points raised, we would welcome the opportunity for direct discussions.