07 July 2006

Inquiry into Waste Generation and Resource Efficiency,
Productivity Commission
Locked Bag 2, Collins Street East
**MELBOURNE VIC 8003**

**Productivity Commission – Waste Generation and Resource Efficiency in Australia**
**Cement Industry Federation Submission on the Draft Report**

The Cement Industry Federation ("the CIF") welcomes the opportunity to submit comments to the Productivity Commission in relation to their draft report ("the report") entitled "Waste Management", additional to our original submission to the Productivity Commission.

The Cement Industry Federation is the national body representing the Australian cement industry, and comprises the three major Australian cement producers - Adelaide Brighton Ltd, Blue Circle Southern Cement Ltd and Cement Australia Pty Ltd. Together these companies account for 100 per cent of integrated clinker and cement supplies in Australia.

The CIF aims to help promote and sustain a competitive Australian cement industry, committed to best practice in its activities.

## Introduction: The Australian Cement Industry and Resource Efficiency

As per our earlier submission, the cement industry is at the forefront of resource efficiency initiatives, which have been achieved through research and development programs and innovation. The versatility of the cement manufacturing process enables the safe use of certain secondary materials from other manufacturing processes, and has resulted in the progressive uptake of supplementary cementitious materials or SCMs (materials which exhibit cementitious properties in the presence of lime released during the hydration of cement), non-traditional or alternative raw materials (materials containing calcium, silica, alumina or iron), and non-traditional or alternative fuels (having calorific value and in some cases recyclable raw material components). For the year 2004/2005, approximately 54,000 tonnes of solid and liquid alternative fuels (or 6% of our total thermal energy requirements) were safely converted to energy and product materials, and nearly 1.5 Mt of SCMs (in a total market of about 10Mt of cement and cement materials) were introduced to the market. These figures make the cement industry one of the largest recyclers in Australia.

## Comments in Relation to the Draft Report

The CIF congratulates the Commission on its draft report and considers that many of the findings and recommendations significantly progress the important issue of waste management and resource efficiency in Australia.

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The Cement Industry, in cooperation with the Australian Government, has just recently launched the Cement Industry Action Agenda which is focused on providing a roadmap for maintaining a sustainable Australian cement industry. It is worth noting that specific recommendations from the Action Agenda are targeted at addressing the regulatory barriers to increased uptake of substitutes for traditional fuels, raw materials and supplementary cementitious materials that we believe will address a number of negative environmental externalities including greenhouse gas emissions and waste management.

We particularly support the Commission's draft recommendations 7.1, 8.3, 10.2, 12.1, 12.3 and 12.4 as being key for addressing a number of the issues and impediments that our industry has experienced in the waste management area and we would strongly encourage their retention within the final report.

We would also however, like to make the following observations:

There are a number of references within the report highlighting the low level of negative environmental externalities associated with "modern, fully complying landfills" (p. XXII). While we agree with these findings, we would contend that many currently operating landfills fall far short of "modern, best-practice", and, as pointed out on p. XXXI, operational practices and regulatory compliance are still significant outstanding issues. In some instances, we note highlighted on page XXXI, "not even fully recovering the financial, let alone the environmental and social costs of waste disposal". Such scenarios reinforce our contention that where externalities are not being adequately accounted for, landfill will be competing on an unfair basis with higher resource-value uses.

We note within some sections of the report a strong focus on waste collection and disposal, but little focus on waste management options targeted at resource efficiency. This is particularly evident in Chapter 4 where the costs and benefits of waste recovery, particularly from energy-from-waste operations are not addressed. As indicated above, the cement industry currently utilises over 50,000 tonnes per annum of secondary materials as viable alternatives to virgin fuels, but has the capacity to utilise significantly more. One Australian cement kiln commonly operates at over 50% thermal energy replacement. More significantly, the industry recycles nearly 1.5 Mt of secondary materials such as fly ash and slag as supplementary cementitious materials. While we concur with the, albeit brief, Chapter 2 description relating to "energy recovered from waste" (p 27), the cement industry clearly differentiates itself from the description and analysis provided within the "Energy-from-waste" subsection of Section 4.3. We believe that there is a case for analysis of cement kilns as a valid waste recovery option for both energy and material value within Chapter 4.

We would then proffer that any comparative analysis of cement kilns co-processing for energy-from-waste purposes should note that the capital cost of a cement plant is expended for the purposes of cement manufacture and not for other environmental or social benefits. The capital cost associated with developing landfills is expended solely for the purpose of waste disposal. Any cost differential only exists where additional capital may be required for ancillary equipment such as material collection and handling equipment. On an operational basis, cement kilns co-processing waste to energy can compete where other factors such as transport costs are equal. The most significant impediments to the cement industry committing to capital to extend co-processing capacity are related to surety of supply to recover capital costs, and the cost and time required in addressing regulatory requirements.

We agree with the Commission's assessment of market failures in relation to barriers to the development of markets for recovered resources as espoused on page 110. For our industry we see this most clearly where on the one hand we use virgin natural energy

sources, while on the other hand society is landfilling secondary materials, in many cases more suited than virgin materials (for example used tyres) to providing thermal energy, and all within a process that lends itself to very few environmental externalities. For our industry this is the clearest example of what we believe to be market failure in the recovered materials sector. We believe that a direct regulatory approach is more efficient than indirect economic measures such as product stewardship schemes and would support the Commission's draft recommendation (10.2) requiring robust evidence of net benefit from such schemes.

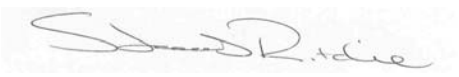
We consider that the issue our industry has with the Product Stewardship for Oil Program and which was presented by way of case study in our initial submission, has not been sufficiently clearly stated within the body of the report. We note that Table 10.2 provides a number of examples of EPR and PS schemes reported by supporters as targeting certain sources of market failure or actual or potential environmental/social externalities. We believe that it is worth the Commission noting that the majority of the chemicals collected through the ChemClear program end up in cement kilns as a blend component of a liquid kiln fuel, thereby providing an eminently suitable recovery method. The ChemClear program owes its success to the viability of this downstream energy-from-waste recovery operation. Quite perversely, the Product Stewardship for Oil Program, another PS scheme, through its differentiation of subsidy rates is impacting another critical blend component of the same kiln fuel – waste oil, effectively threatening the ongoing viability of the ChemClear program. We would be keen to see these examples of scheme failures further highlighted.

We note the Commission's call for further information in relation to the costs and benefits of harmonising waste classification systems, and are surprised at the reluctance to draw a conclusion in this area. We also note that that the final paragraph of this section (page 274) refers to "waste management requirements" as requiring considerable effort. However, we would consider that the waste management requirements are separate from the material classification system, and understand that, for example, the existence of different risk pathways within different jurisdictions may provide grounds for differential management approaches. We believe that a uniform classification system is a low cost, and sensible first step towards harmonisation, and one that does not necessarily deter different regulatory approaches and the associated costs – although we would hope that over time, regulatory approaches might also converge.

The existence of a number of classification systems within the areas of both virgin materials and wastes, and within government regulatory circles and standards organisations would to us suggest that development of a classification system might not be costly. For industry, the current variation in classification systems often means that different laboratory test procedures are required, often significantly multiplying the costs of analysis, interpretation and reporting, as well as industry management time.

Again, we congratulate the Commission on its efforts and we remain willing to discuss any aspects of this submission. Please note that this submission has been authorized at the level of the Chief Executive Officer of the CIF and any inquiries should be directed to the undersigned. Thank-you for the opportunity to provide this submission.

Yours faithfully,



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