



Australian Plantation Products and Paper Industry Council

National Association of Forest Industries

Timber Development Association of NSW

Submission on the National Greenhouse and Energy Reporting (Measurement) Determination 2008

The Australian Plantation Products and Paper Industry Council (A3P), the National Association of Forest Industries (NAFI) and the Timber Development Association of NSW (TDA NSW) welcome the opportunity to comment on the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*.

We wish to make three points about the Determination:

1. DOCf values for wood significantly overestimate decomposition of wood in Australian landfills
2. Correction to previous submission on Technical Guidelines by A3P and TDA NSW
3. Replace “wood and wood waste” with “wood”

Point 1

The Dissimilated Degradable Organic Carbon (DOCf) values for wood in landfill in **Section 5.10** are significantly overestimated. Recent published, peer reviewed Australian research (Ximenes *et al* 2008) based on excavation at actual landfills has found:

‘No significant loss of dry mass was measured in wood products buried for 19 and 29 years, but where refuse had been buried for 46 years, the measured loss of carbon (as a percentage of dry biomass) was 8.7% for hardwoods and 9.1% for softwoods, equating to 18% and 17% of their original carbon content, respectively. The results indicate that published decomposition factors based on laboratory research significantly overestimate the decomposition of wood products in landfill.’

Furthermore, there is no reason to suggest that conditions would change radically from that found during the research and hence, no further deterioration or degradation should be expected. The researchers thus conservatively conclude that the most extreme deterioration

found should be adopted as the DOCf value for wood contained in landfills. That is, the DOCf value for wood in **Section 5.10** should be 0.18 instead of the current value of 0.43.

Point 2

In a previous submission by A3P and TDA NSW on the *Discussion Paper - Technical Guidelines for the Estimation of Greenhouse Emissions and Energy at the Facility-Level* the following sentence was included:

“The researchers found that the mean moisture content of the wood samples ranged from 41.6% to 66.8% - conditions not conducive to further deterioration.”

Our paraphrasing of this aspect of the researchers’ findings was incorrect. What we should have said is that:

“The researchers found that the mean moisture content of the wood samples ranged from 41.6% to 66.8%. These high moisture values are further proof that the condition in the sites selected were indeed conducive for decay to occur, and therefore moisture should not have been a decay limiting factor.”

Point 3:

Section 5.11 Waste Mix Types of the Determination uses the term “wood and wood waste”. No other waste material in this section has the word “waste” attached to it. We submit that the term “wood” alone is sufficient to describe this material in the context of this section.

As we realize that these is quite specialised research areas, A3P, NAFI and TDA NSW offer to arrange a meeting between the Australian researchers and the Department of Climate Change to facilitate changes to the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*.

For more information about this submission, please contact A3P on 02 6273 811, James Gray of NAFI on 02 6285 3833 or Stephen Mitchell of TDA NSW on 02 9279 2377.

Reference

F.A. Ximenes, W.D. Gardner and A.L. Cowie (2008) *The decomposition of wood products in landfills in Sydney, Australia*, Waste Management.