



PAN PAC
FOREST PRODUCTS LIMITED

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Pan Pac Forest Products Limited Submission on Climate Change (Stationary Energy and Industrial Processes) Regulations 2008 (Draft for consultation)

December 2008.

Contact for Communication:

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1: Pan Pac's Interest in the Regulations

1.1 Pan Pac Forest Products Limited is an integrated Forestry and Forest Products manufacturer based near Napier.

1.2 Pan Pac's operations at the Whirinaki site are energy intensive. Operations include:

- Thermomechanical pulping of wood, with consequential high usage of electrical energy.
- Kiln drying of sawn lumber, with consequential use of heat energy.
- Flash Drying of Thermomechanical wood pulp, with consequential use of heat energy.

1.3 Pan Pac manages much of the site's energy requirements through combustion of waste from the sawmilling and pulping operations, in particular combustion of wood waste (Bark and sawdust). This provides most of Pan Pac's process heat requirements, and is also utilised to supplement the sites electricity requirements.

1.4 Provisions in Schedule 3 of the Climate Change Response Act 2002 as amended by the Climate Change Response (Emissions Trading) Amendment Act 2008 define Activities with respect to which persons must be participants in the Emissions Trading Scheme. Specifically Schedule 3, Part 3 requires persons combusting used oil, waste oil, used tyres, or **waste** for the purpose of generating electricity or industrial heat to participate. Pan Pac's activities,

specifically the combustion of wood waste to generate heat energy and electricity, meet the criteria in this clause.

2: Concerns with the Draft Regulations

2.1 Pan Pac believes it is premature to consider the Draft Regulations prior to completion of the current review of the Climate Change Response Act.

2.2 In addition the Draft Regulations appear incomplete. Specifically, Emissions Trading Bulletin No.8, October 2008, refers to a process to be added to the Regulations to permit participants to obtain and calculate emissions by reference to a unique emissions factor. Pan Pac contends the ability to use a unique emissions factor is critical to determining emissions from the combustion of wood waste. However there is no reference to this in the Draft Regulations.

2.3 Clause 21 (h) in the Draft Regulations refers to collection of information for the purpose of calculating emissions from organic waste. The clause requires clarity to define if the tonnes of waste are green tonnes, or dry matter.

2.4 The use of standardised emissions factors for Nitrous oxide and Methane from the combustion of wood waste is flawed. Our understanding is that for Nitrous Oxide in particular the amount of emissions is dependent on the type of combustion equipment used, combustion temperature, and amount of excess air available during combustion. In other words, each process will have its own unique emissions factor. A small error in the amount of Nitrous Oxide emissions, because of the GWP multiplier used (310) to convert to Carbon Dioxide equivalent emissions, can have a significant impact on the costs imposed by the regulations.

2.5 Further to 2.4 above, we estimate for the larger of our 2 boilers the concentration of Nitrous Oxide in our boiler exhaust gases is less than 1mg / cubic meter of gas, that is less than 1 part per billion. We contend that analysis procedures available to industry are not sufficiently precise to accurately measure Nitrous Oxide at these concentrations.

2.6 Emissions of methane from a well managed and efficient combustion process are minimal. In a high temperature boiler with sufficient combustion air available, methane could be expected to be fully combusted to Carbon Dioxide and water.

2.7 Pan Pac therefore considers that the use of emission factors for Nitrous Oxide and Methane are not appropriate for estimating emissions from the combustion of wood waste.