

# Submission on the proposed Canterbury Air Regional Plan

Dear Commissioners

Please let me introduce myself Gerard Dobbs, I am employed by Nature's Flame as their Commercial Manager.

**Background:** Nature's Flame wood pellets are produced at our Taupo plant, the capacity of this plant is in excess of 90,000 tonnes of wood pellets per annum. The wood pellets are produced from a combination of untreated sawdust and wood shavings, by products from the timber industry. These raw materials are compressed into a clean burning, homogenous fuel which is 100% renewable and carbon neutral. We supply both the residential and commercial market in New Zealand as well as overseas exports of our product.

Nature's Flame is the only pellet producer in New Zealand and Australia that is certified to the much sought after DIN Plus standard. We adhere to a very rigorous testing and monitoring regime, internal hourly testing; wood pellets are also tested by an independent laboratory every two weeks. In addition, our whole production process is audited and recertified every year. No other pellet producer goes to these lengths to ensure pellet quality.

[Nature's Flame](#) fuel has been endorsed by [DIN CERTCO](#), Europe's leading product quality standards body for residential wood pellet fuel.

DIN CERTCO is an arm of Germany's Institute for Standardisation and its wood pellet certification criteria is being used as the basis of a proposed European Standard. Achieving certification required Nature's Flame to demonstrate quality assurance through its entire production chain.

“It's a difficult certification to get and to maintain because it certifies our processes as well as the quality of the final product, “It is the proxy European quality standard and having the DIN plus certification mark on our packaging is an important part of what customers look for in selecting wood pellet fuel.”

Nature's Flame fuel also carries [BioGro](#) international certification of its ash, meaning it can be confidently applied in organic gardening and does not need to be sent to landfill. Nature's Flame took part in the work which resulted in Australia-New Zealand standards determining the power output, efficiency, and emissions of wood pellet fires (AS/NZS 5078:2007 and AS/NZS 4886:2007).

Table 2.2 Space Heating Appliance Definitions 2-6. We propose an amendment and would like to include pellet fuel specification, using the international standard for all manufactures and importers of pellet fuel (DIN Plus DIN EN 14961.2)

The critical nature of pellet fires is that the fuel is of sufficient quality that the pellet fire operates in away that the fire always maintains optimum combustion through automation and password protected software, to maintain the emission target of (38 Mg/Mj 70% efficiency)

Pellet fire Manufacture manuals state that wood pellet fuel should be of sufficient quality that will eliminate problems associated with poor quality pellet fuel.

- Moisture: <8%
- Length: <38mm
- Diameter: 6mm
- Bulk density: 650Kg/m
- Ash:<0.5%
- Energy: 19GJ/tonne

By having a DIN plus certified fuel we no that the timber comes through the forest stewardship programme of sustainability, which includes no untreated timber or contaminates, additives used during the manufacturing process

Currently we have standards for testing pellet fires using (AS/NZS 4012/4013) and (AS/NZS 4014.6 test fuels wood pellets)

BANZ and other organisations have indicated that they have a wood fuel certification that is applicable for the industry; this standard doesn't have the authority to be administered as the standard hasn't been accredited so only voluntary.

With the risk of imported wood Pellet fuel that doesn't meet at least a DIN Plus standard there is also a risk of the imported fuel containing contaminates that will be harmful to our air shed

The main goal is to clean up Canterbury's air shed, we believe we need some form of wood fuel regulation which includes pellet fuel or we will struggle to achieve Canterbury's air quality target of 1 PM10 exceedance per year by 2020

Regards Gerard

## Camino insert Pellet Fire from Italy



## Cross Section of a Pellet Fire

