

15th December 2008

Emissions Trading Team  
Ministry for the Environment  
P O Box 10362  
Wellington 6143

By email to [emissionstrading@climatechange.govt.nz](mailto:emissionstrading@climatechange.govt.nz)

Dear Sir/Madam

Climate Change (Stationary Energy and Industrial Processes)  
Regulations 2008

Norske Skog Tasman is a large industrial paper mill located at Kawerau in the Bay of Plenty. Norske Skog bought the original integrated kraft pulp and paper mill from Fletcher Challenge Paper in 2000, and sold the kraft pulp mill to Carter Holt Harvey in 2001 – retaining mechanical pulping and paper making assets.

The original Tasman Pulp and Paper mill was built in the early 1950's and has utilised geothermal steam for process heat and electricity generation for most of the mill's history. Around 2 million tonnes of geothermal steam is used each year.

NST purchases geothermal steam from Ngati Tuwharetoa Geothermal Assets (NTGA). We understand that NTGA will be providing their own submission with results of steam chemistry testing. However we wish to point out that the numbers provided by NTGA will represent the CO<sub>2</sub>\_e of steam from the borefield but will not take into account any CO<sub>2</sub>\_e that is retained in the condensate after it is used in our mill processes. We have no measurements of condensate with respect to CO<sub>2</sub>\_e and before we establish a testing schedule we feel it would be useful to ensure that the Ministry for the Environment is comfortable with any procedures and schedules we establish.

Similarly NST has commercial contracts in place with Mighty River Power in relation to the 100 MW facility MRP has recently built on NST land. We understand that MRP will be providing their own submission with results of well chemistry tests. We also understand that MRP advocate an ongoing routine testing regime to reflect changes in well chemistry over time, and to provide incentives for the geothermal steam field operators to reduce emissions by making choices about which wells to use to produce steam. We are not experts in geothermal steam but our limited

understanding suggests to us that MRP's proposal is sensible and should be seriously considered by the MFE.

Notwithstanding any of the above we wish to point out that the emission factors published for consultation by MFE are far too high for the Kawerau field – about 5 times higher than the CO<sub>2</sub>\_e emission numbers that we have seen.

Whilst the imposition of a carbon tax on geothermal steam for direct process heat or co-generation would be a significant cost to NST, it is insignificant in the scheme of NZ's total emissions and may not achieve any significant purpose. We would therefore like to suggest to the MFE that geothermal steam for industrial process heat and co-generation should be exempt of carbon tax altogether.

If an ETS scheme does apply to direct use of geothermal steam and co-generation then we would like the option to opt-in to the scheme – in the same manner and for the same reasons as gas and coal users have the option.

If you require any further information about anything in this submission please contact the undersigned.

Yours sincerely,

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