

MINUTES

TITLE: Commissioner Hearing
DATE: Monday 14 November 2011
TIME: 10.30 am
VENUE: Tasman Council Chamber, 189 Queen Street,
Richmond.

PRESENT: Commissioner Dr Jeff Jones

IN ATTENDANCE: Principal Resource Consents Advisor (J Butler)
Co-ordinator Natural Resources Consents (L Pigott)
Executive Assistant (V M Gribble)

1 APPLICATION NO RM080033V1 – J S EWERS LTD, BLACKBYRE ROAD, APPLEBY

The application seeks a Discharge to Air Permit to vary their existing consent RM080033 - Discharge of exhaust gases and particles to air from coal-fired boilers.

The applicant has applied to make the following changes:

1. Not to convert the fuel used in the boilers from coal to wood as required by Condition 4 of RM080033.
2. Extend the time for the decommissioning of boilers 1 - 3. Then subsequently varied after notification to not decommission boilers 1 - 3.

The application site is located at 37 Blackbyre Road, Appleby, being legally described as Lot 2 DP 350321, Lot 5 DP 307291, Lots 6 and 7 DP 11300, Lot 3 DP 6665.

The Commissioner proceeded to hear the application, presentation of submissions and staff reports as detailed in the following report and decision.

TASMAN DISTRICT COUNCIL

Report and Decision of the Tasman District Council through an Independent Commissioner

Meeting held in the Tasman Room, Richmond on 14 November 2011

Site visit undertaken on 14 November 2011

Hearing closed on 15 November 2011

An Independent Commissioner was appointed on behalf of the Tasman District Council ("the Council") to hear the application lodged by **J S Ewers Limited** ("the Applicant"), to delete conditions on its existing consent that require its greenhouse boilers to convert from coal-fired to wood-fired, and require the decommissioning of three smaller boilers. The application, made in accordance with the Resource Management Act 1991 ("the Act"), was lodged with the Council and referenced as RM080033V1.

HEARING COMMISSIONER: Dr Jeff Jones, Chairperson

APPLICANT: Mr Nigel McFadden (Counsel)
Mr Brian Gargiulo (Chairman, Market Gardeners Ltd)
Mr John Iseli (Air Quality Scientist)

CONSENT AUTHORITY: **Tasman District Council**
Mr Leif Pigott (Coordinator, Natural Resource Consents)

SUBMITTER: Mr Peter Wilks

IN ATTENDANCE: Mr Jeremy Butler (Principal Resource Consents Adviser) -
Assisting the Commissioner
Mrs Valerie Gribble (Secretary)

The Commissioner proceeded to hear the application, presentation of submissions and staff reports as detailed in the following report and decision.

1. SUMMARY

The Commissioner has **GRANTED** the deletion of conditions from resource consent RM080033. The conditions required that the applicant's greenhouse boilers convert from coal-fired to wood-fired, and required the decommissioning of three smaller boilers. Other consequential changes to conditions of the consent have also been made.

2. DESCRIPTION OF THE PROPOSED CHANGE OF CONDITIONS

Consent (RM080033) to discharge exhaust gases and particles to air from coal-fired boilers was issued by the Council on the 18 June 2008. Since the original consent was issued, the JS Ewers Ltd operation has entered a "strategic alliance" with MG Marketing (the trading name for Market Gardeners Ltd) which is now one of the largest fresh produce suppliers in Australasia and the Pacific region.

The applicant operates a large market gardening operation. Onsite there is a total of 23.4 megawatts of coal-fired boilers that heat several large glasshouses.

A change of conditions application (RM080033V1) was received to change two conditions in the current consent.

1. Remove the requirement to undertake a fuel conversion from coal to wood; and
2. Remove the requirement to phase out the three small boilers.

Coal to Wood Fuel Conversion

RM080033 states that the fuel for the boilers will be converted from coal to wood. Condition 4 requires this conversion, and is reproduced below:

4 This resource consent authorises the burning of coal and wood as follows:

- (a) *from 16 June 2008 until 31 December 2010, this consent authorises the burning of coal or wood;*

- (b) *from 1 January 2011 until 31 December 2013, this resource consent authorises the burning of coal subject to no less than 6 MW of heat at the site being produced from wood;*
- (c) *from 1 January 2014 this resource consent authorises the burning of wood only and no coal may be used to fuel any boiler on the site; and*
- (d) *from 16 June 2008 until 1 January 2011 this consent authorises the operation of boilers 1-7 as listed in Table 1. From 1 January 2011 until 31 December 2028 this consent authorises the operation of boilers 4-7, as listed in Table 1, only.*

No progress on the conversion of these boilers has been made on this site. However, the applicant is also associated with Blackbyre Horticulture Ltd that has a boiler and greenhouse on an adjacent property, capable of burning either wood or coal. Issues that have been experienced by the Applicant in sourcing suitable wood fuel for that operation have resulted in this application for a variation. This variation of consent is seeking to remove the fuel conversion condition that was originally volunteered by the applicant.

Decommissioning of Three Small Boilers

Condition 4(d) of RM080033 requires the decommissioning of the three small boilers by the first of January 2011:

4(d) from 16 June 2008 until 1 January 2011 this consent authorises the operation of boilers 1-7 as listed in Table 1. From 1 January 2011 until 31 December 2028 this consent authorises the operation of boilers 4-7, as listed in Table 1, only.

The applicant seeks that the requirement for the decommissioning be removed entirely.

3. TASMAN RESOURCE MANAGEMENT PLAN (“TRMP”) ZONING, AREAS AND RULE(S) AFFECTED

According to the TRMP the subject property is zoned Rural 1. There are no specific Area overlays that affect the site

The application is to cancel conditions pursuant to Section 127 of the Act. Such an application is a Discretionary Activity pursuant to clause (3) of that Section.

4. NOTIFICATION AND SUBMISSIONS RECEIVED

The application was limited notified on 20 August 2010, pursuant to Section 95 of the Act. The application was limited notified to the parties who had made a submission on the original application as Section 127(4) of the Act requires particular consideration of these persons. A total of 2 submissions were received. The following is a summary of the written submissions received and the main issues raised:

Timothy Kelvin Robinson

Mr Roberson is concerned about the emission of sulphur dioxide from the burning of coal and the potential adverse effects on the land and people in this area.

Peter Wilks

Mr Wilks stated that the existing conditions had been agreed between the parties following pre-hearing consultation discussions.

Mr Wilks objected to the deletion of conditions principally because:

- *For some harmful emissions coal performs worse than wood;*
- *The continued use of coal is contrary to the principles of the RMA;*
- *Use of wood will generate local employment in procurement of logging and sawmill waste, and processing to material for use in boilers;*
- *Wood is available locally;*
- *Use of wood will be a positive marketing benefit for the grower;*
- *Wood-fired boiler technology has been successfully implemented in a commercial tomato growing operation in Blenheim;*
- *Use of wood will mean the grower does not have to pay for “carbon taxes” that are built into the price of coal;*
- *Burning coal is recognised as a principal contributor to greenhouse gas emissions and global warming. Wood is a sustainable energy source; and*
- *The Council should be encouraging large scale polluters in the Tasman District to convert to more environmentally friendly energy sources.*

5. PROCEDURAL MATTERS

There were two procedural matters that required consideration:

Is it appropriate that the application to change and cancel conditions in discharge permit RM080033 is made by JS Ewers Ltd when the operation appears to have been bought by MG Marketing?

I held some concerns about this issue but during the latter part of the hearing I was provided with a signed letter from Mr JS Ewers stating that he was the Principal and Director of J S Ewers Limited, that that company is the applicant for the variation application that is at issue, that Mr Nigel McFadden is authorised to appear and speak for the company, and that the company manages all boiler operations on the site.

Mr Gargiulo told us that the nature of the “strategic alliance” between his company and J S Ewers Ltd, is that the latter runs all of the operations outside of the greenhouses, while his MG Marketing is responsible for all of the in-glasshouse operations. As I understand it the boilers are considered to be outside of the glasshouse operations and therefore are the responsibility of J S Ewers Ltd.

Of course I have little control over who makes an application and I admit that I still do not fully understand the exact nature of the relationship between the two entities. However I am satisfied that it is appropriate for J S Ewers Limited to be the holder of RM080033 and be the applicant for the current application.

Is Mr Peter Wilks a trade competitor?

Mr Wilks works for a forestry consultancy company and described himself as an advocate for renewable energy and the forestry sector. In the applicant's right of reply Mr McFadden contended that Mr Wilks could be considered a trade competitor.

I have considered this and I do not find that Mr Wilks could be considered a trade competitor. In the role that Mr Wilks is employed I consider it very unlikely that he would realise any particular gain from a decision in his favour (a refusal to delete the conditions). While it would be good for a forestry related industry there is no evidence that it would benefit Mr Wilks personally. A supply of wood fuel would come from a contractor who had particular expertise and investment in such activities. The most that could be said would be that a refusal to delete the conditions would strengthen the forestry sector which **may indirectly** have some positive spin-offs for Mr Wilks' business. Therefore I do not consider that there is any direct competitive link that would provide a demonstrable tangible benefit to Mr Wilks.

6. EVIDENCE HEARD

I heard evidence from the applicant, his expert witness, a submitter, and the Council's reporting officer. The following is a summary of the evidence heard at the hearing.

6.1 Applicant's Evidence

Mr Nigel McFadden (Counsel)

Mr McFadden presented the application and said that there is no change to the underlying activity and therefore it is appropriate that it be considered as a Section 127 change or cancellation of conditions.

Mr McFadden submitted that the evidence will show that the effects on the environment are minor.

In addressing Section 104E, he said that the Court had shown that the exception in that section only applied to applications where renewable energy was proposed.

Turning to Part 2 of the Act, Mr McFadden said that Section 7(i) is not relevant as it is restricted to the effects of climate change on the application. He submitted that while Section 7(j) does promote the preference for renewable energy, it does not require it.

Mr Brian Gargiulo (Chairman, Market Gardeners Ltd)

Mr Gargiulo said that the Blackbyre facility consists of 20 hectares of land, of which approximately 11 hectares is under glass. He said that it is the largest glasshouse operation south of Auckland. He said that while it is a good location it could be moved closer to its markets, and that the requirements to convert/close down boilers would affect the viability of the operation, forcing its closure with the loss of 110 jobs.

Mr Gargiulo said that the problems with the current consent are that wood is not an easy fuel to obtain and it is expensive, that supply is not certain and that they need all seven boilers. He said that a loss of the right to use coal and the loss of the three boilers would crudely mean an operational reduction of 30% or about \$7 million.

Mr John Iseli (Air Quality Scientist)

Mr Iseli said that the seven boilers have a combined rated output of 23.4MW but that most of the time they run at 50% or less. They will increase output to over 75% during rare times when the extraordinary heat is needed. Mr Iseli said that any effect from the lower efficiency of the smaller boilers would be negligible in scale as they are not old (up to 10 years old). Decommissioning these boilers would just require the remaining boilers to be run harder and there would be no net change in emissions.

He noted that the only significant difference between the discharges to air resulting from combustion of coal versus wood would be for sulphur dioxide (SO₂). Coal showed a considerably higher rate of discharge of SO₂. However, Mr Iseli said that the rates are well within the relevant air quality guideline, particularly since all calculations of discharges were for the worst case scenarios and the guideline levels were very conservative.

Overall he predicted that the effect of the discharges on PM₁₀, NO_x and SO₂ concentrations would be no more than minor whether wood or coal is burnt as fuel.

I asked him about the relationship between sulphur content of coal and SO₂ emissions. Mr Iseli said that it is a linear relationship and if coal containing 1% sulphur was used then the SO₂ emissions would be double what they would be if the content was 0.5%.

6.2 Submitter's Evidence

Mr Peter Wilks

Mr Wilks said he wanted to see wood being used instead of coal for the burners.

Mr Wilks said the resolution arrived at with Mr Ewers during original discussions was amicable. He said that Mr Ewers was happy to compromise and come to what they considered to be a mutually-acceptable decision to convert his boilers from coal to wood. He said that Mr Ewers thought it would be good for his business through marketing and operational benefits and he was confident that given the timeframe to convert entirely to wood he would have more than enough time to sort out technical matters and source a wood supply.

Mr Wilks said coal produced significantly higher contaminant discharges, with the exception of PM₁₀.

Mr Wilks referred to Mr Iseli's evidence and said that burning wood is a carbon neutral process whereas coal clearly is not. He disagreed with the use of coal in an abundant wood supply region.

Mr Wilks agreed with Mr McFadden that Section 104E disallows consideration of greenhouse gas emissions for new applications, but he said that in this case the application is for a variation allowing a move away from a sustainable and renewable product and therefore Section 104E would apply.

Mr Wilks said that information supplied by the Energy Efficiency and Conservation Authority (EECA) was that 50 jobs could be created in the wood supply chain. He said that there is a surplus of low grade wood in the region and suppliers would be capable of providing the resource. He said that a peak of 63 tonnes per day, or about two truck loads, is a minimal daily quantity. Mr Wilks said that a successful operation in Blenheim on smaller scale has worked in harmony with a wood supplier to get ongoing supply of wood chips.

Mr Wilks expressed surprise that MG Marketing had no idea of the terms and conditions of the resource consent, at the time they bought into the operation. He said that any astute business would carry out due diligence which would include examination of markets, labour, fuel supply and any consents and obligations under those consents.

Mr Wilks said that he would like to see a phased-in period to convert from coal to wood remain as a condition of the original consents.

Mr Wilks said that the increases in contaminant concentrations as a result of the discharge would not be minor and in the case of PM₁₀ would be a 50% increase above background levels.

I queried Mr Wilks on the availability of the wood resource, given the significant contrast with Mr Gargiulo's evidence. He said a total of 1.5 million tonnes is harvested from Nelson forests each year and that 20% of the total harvest is low quality residues which go to Nelson Pine Industries (NPI) for medium density fibre board. He said there is still a pulp log export trade of probably 100,000 tonnes per year that could be partially used locally. As to whether it can be sourced reliably and at the necessary quality, he said would depend on the price. If there is a suitable supply contract then it can be provided.

I asked Mr Wilks if market forces rather than regulatory forces would best drive this change. He considered that both are necessary. He said that society is realising that burning non-renewable energy to grow vegetables does not sound right and that our reliance on fossil fuels needs to be reduced.

6.3 Council's Reporting Officer's Report and Evidence

Mr Leif Pigott (Co-ordinator, Natural Resource Consents)

Mr Pigott said that modelling work has suggested that air contaminant concentrations emitted from the applicant's property are low and that the analyses are conservative. Modelling has also shown that background contaminant concentrations out on the Waimea Plains are low given the wind environment.

Regarding health guideline limits for sulphur dioxide and possible changes from the World Health Organisation, he noted that there is always the ability to review the appropriate limits using Section 128 of the Act.

I questioned the appropriateness of yearly certification of the sulphur content of the coal given that it is delivered daily. Mr Pigott agreed that it would be good to have more regular certification from mines.

Mr Pigott tabled a letter from the Energy Efficiency and Conservation Authority (EECA) which came to the conclusion that “*there is sufficient wood fuel in Tasman and Nelson regions to adequately and economically supply over 25 MW of heat plant.*” The letter also states that “*greater demand is required to encourage investment in supply*”.

6.4 Applicant’s Right of Reply

Mr McFadden addressed a reasonable industry standard for sulphur testing. He said that Mr Iseli advised that yearly is fine for small emitters, whereas for large plants (such as Fonterra) monthly is appropriate. He considered that six monthly might be appropriate for this particular plant. Any monitoring regime would also have to take the local conditions and risks into account.

Mr McFadden said that whilst Mr Ewers may have been confident he could move to a wood fuel, at the time the original consents were dealt with, it had been found that they had not been able to sort out the technical matters nor source an appropriate supply. He said that the evidence from Mr Gargiulo is that they have not been able to find an appropriate wood supply with consistent quality.

Mr McFadden said that the door is still open to use wood as supply and technical matters are resolved.

7. PRINCIPAL ISSUES AND OUR MAIN FINDINGS

The principal issues that were in contention and our main findings on these issues are:

- a) **To what extent is Section 104E, and the exemption contained therein, applicable to this application? Is an assessment of the relative greenhouse gas emissions of coal and wood permissible in making a decision?**

Section 104E of the Act disallows a consent authority from considering greenhouse gas emissions or having regard to the effects of a discharge on climate change. However, there is an exception which allows such matters to be considered “*to the extent that the use and development of renewable energy enables a reduction in the discharge into air of greenhouse gases, either in absolute terms; or relative to the use and development of non-renewable energy.*”

Mr McFadden considered that the exception in Section 104E did not apply. He said that the Court of Appeal has said that the exception in Section 104E only applies to resource consent applications involving the use of renewable resources for energy production, and beyond that the prohibition applies.

The complication that arises in this particular case, and that was highlighted by Mr Wilks, is that the status quo position is that energy was ultimately to be produced from renewable resources (wood) and that the applicant is seeking to move from that position to producing energy from non-renewable resources (coal). Mr Pigott considered that this circumstance means that the exception is likely to apply and means that I can and should take greenhouse gas emissions into account.

Having carefully considered this Section of the Act I find that I agree with Mr McFadden. I am satisfied that the underlying intention and function of Section 104E is that applications for resource consent for renewable energy generation should take credit for lesser greenhouse gas emissions whereas, conversely, applications for resource consent for non-renewable energy generation should not be penalised by their greenhouse gas emissions. While the very unusual circumstances of this application muddy its interpretation and may suggest that some form of comparison between renewable and non-renewable energy generation should occur, I do not believe that this is the case. At the end of the day if the applicant was to surrender this consent and apply for a new one under exactly the same circumstances it would be clear that the prohibition in Section 104E would apply.

b) What are the differences in actual and potential effects on the environment from the burning of wood and coal?

I accept the evidence of both Mr Iseli and Mr Pigott that the effects on air quality from the change from wood to coal will be minor. The analyses used are clearly conservative and based on an occasional worst case scenario.

The guideline levels used for sulphur dioxide concentrations are also conservative and I am satisfied that there is scope to revise limits in the future, if or when guideline health limits are reduced. Until that happens there is no evidence that the discharge will be harmful to humans or the environment. It is not appropriate that the applicant be burdened now on the basis of a possible future change.

c) What are the positive effects from a social and economic wellbeing point of view?

My assessment of this matter comes down to assessing the value of fostering a local wood fuel supply industry (Mr Wilks' evidence) compared to the risk or threat of downscaling or relocation of the applicant's operation. I accept Mr Wilks' comments and evidence that there will be considerable value in supporting such an industry to enable the best value to be extracted from the wood waste that currently appears to exist. However, what is also relevant is Mr McFadden's comment that there is also employment and economic value from the coal mining and supply industry.

Having seen the facility I believe that the risk of the applicant walking away or relocating its investment is very remote, however I give considerable weight to the substantial contribution that the operation makes to the local economy. Any downscaling or threat to such an industry must be considered very seriously.

Another relevant matter that Mr Pigott raised is that there are strong economic drivers at play for the applicant. Any change or deletion of conditions of consent granted would still allow for the option for wood-firing to continue. I consider that the financial imperative of minimising the applicant's energy expenditure will be a very strong driver for adopting the most cost-effective solution.

8. RELEVANT STATUTORY PROVISIONS

8.1 Policy Statements and Plan Provisions

In considering this application, I have had regard to the matters outlined in Section 104 of the Act. In particular, I have had regard to the relevant provisions of the following planning documents:

- a) Tasman Regional Policy Statement (TRPS); and
- b) the Tasman Resource Management Plan (TRMP).

The proposed activity contravenes Section 15 of the Act, and therefore I have also had regard to the matters outlined in Sections 105 and 107 of the Act. As the proposed activity also relates to the discharge into air of greenhouse gases the prohibition in Section 104E is also applicable. I have discussed the relevance of that section above.

8.2 Part 2 Matters

In considering this application, I have taken into account the relevant principles outlined in Sections 6, 7 and 8 of the Act, as well as the overall purpose of the Act as presented in Section 5.

9. DECISION

Pursuant to Section 104B of the Act, I hereby **GRANT** the sought deletions of conditions from resource consent RM080033, subject to other consequential amendments to conditions.

10. REASONS FOR THE DECISION

Effects on the Environment

I am satisfied that the effects on the environment will be at most minor, if not less than minor. However, I note that this conclusion depends upon the concentration of sulphur that is in the coal being supplied to the applicant's boilers. Therefore, I have strengthened the sulphur testing and reporting requirements.

I agree with many of Mr Wilks' sentiments about the potential for the creation of a local wood fuel supply industry. However, I find that there was just not enough hard evidence of the availability of a wood fuel supply that could be depended upon. The industry in question clearly demands a continuous high energy throughput and the reliability of supply is an imperative. I acknowledge the "chicken and egg" situation that exists with the wood supply situation but also note that the economic risks outlined by Mr Gargiulo are significant. Neither Mr Wilks nor EECA (through the letter tabled) could convince me that a reliable supply can and will be developed at pace necessary to service a transition to wood. Therefore, at this time I believe it is preferable to allow market forces, rather than regulatory forces, to stimulate the (probably inevitable) transition from coal to wood.

Objectives and Policies of the TRMP

In Section 5.3 of his report, Mr Pigott identified the objective and policies that he considers to be relevant. I agree with his assessment of the relevant provisions of the TRMP and, as they are predominantly effects-based, I find that nothing in this application is inconsistent with them.

Other Matters

I have already stated that I do not believe that I can consider greenhouse gas emissions under Section 104E of the Act for the reasons previously stated.

The EECA letter was interesting but I was not satisfied that it gave any certainty that a supply would be forthcoming and would be secure enough. In this sense I agree with Mr McFadden that the statements made are suggestive but not definitive.

Purpose and Principles of the Act

There are no Section 6 matters of national importance relevant to this application.

I have had particular regard to the Section 7 “other matters” listed below:

- S.7(b) the efficient use and development of natural and physical resources.
- S.7(ba) the efficiency of the end use of energy.
- S.7(c) the maintenance and enhancement of amenity values.
- S.7(f) maintenance and enhancement of the quality of the environment.
- S.7(g) any finite characteristics of natural and physical resources.
- S.7(j) the benefits to be derived from the use and development of renewable energy.

Utilisation of wood as a renewable energy source is certainly supported by Section 7 (b), (g) and (j). However, I return to my finding that I do not believe that this is a transition that can be “forced”. Renewable energy is certainly preferable but must be seen in the light of the circumstances, this being the considerable investment and physical infrastructure that was established on coal.

Section 7 (ba), which relates to the efficient end use of energy, is relevant to the decision about the three smaller boilers. Given the evidence of Mr Iseli that they are not particularly inefficient and that the efficiency gains of just running the bigger boilers hotter would be negligible I am satisfied that the energy production and use is efficient.

I am satisfied that amenity values and the quality of the environment will not be compromised by the retention of coal as a fuel source.

Adopting a broad overall judgement approach to the purpose of the Act, I am satisfied that the proposal is consistent with Part 2 and achieves sustainable management of natural and physical resources as set out in Section 5 of the Act.

11. COMMENTARY ON CHANGES TO CONDITIONS OF CONSENT

I have made one significant consequential change to the conditions that was not applied for by the applicant but which was necessary to ensure that the effects of

continuing the use of coal are minor. I have made the requirement to test and report the sulphur content of coal more regularly (quarterly instead of annually). I do not consider that annual testing is sufficient to give confidence that sulphur content will consistently meet the 0.5% limit.

In coming to a decision on this matter I considered the relevant comments of all parties at the hearing. I also investigated the relevant requirements for Fonterra factories in Brightwater and Takaka. The relevant parameters are in Table 1 below. From these figures I am satisfied that the requirements imposed are not unreasonable and, indeed, are on the low side for what is required for other resource consents in this District/Region.

Table 1: Comparison of boiler parameters and sulphur reporting periods

<i>Boiler</i>	<i>Coal volume (kg/hr)</i>	<i>Sulphur limit (%)</i>	<i>Stack height (m)</i>	<i>Reporting period</i>
Fonterra Takaka	1000	1.0	33	Monthly
Fonterra Brightwater	1100	1.0	32	3-monthly
JS Ewers	1800*	0.5	17-18	3-monthly

* From Mr Iseli's evidence para 5.12 based on actual coal consumption under present usage.

During the hearing it was suggested that a review of conditions (pursuant to Section 128 of the Act) may be appropriate if the National Environmental Standard for air quality is changed to reflect a change in health guideline concentrations for SO₂. I have done so and note that Condition 19 provides for reviews of the conditions of consent already exists as a process for any such changes, and in any case a statutory process can also be triggered under Section 128(1)(ba) of the Act.

Issued this 2nd day of December 2011



Dr Jeff Jones
Hearing Commissioner



RESOURCE CONSENT

Resource Consent Number: RM080033V1

Pursuant to Section 104B of the Resource Management Act 1991 (“the Act”), the Tasman District Council (“the Council”) hereby grants resource consent to:

J S Ewers Ltd
(hereinafter referred to as “the Consent Holder”)

Activity Authorised by this Consent: Discharge of exhaust gases and particles to air from coal-fired boilers.

Location Details:

Address of property: 37 Blackbyre Road, Appleby
Legal descriptions: Lot 2 DP350321, Lot 5 DP307291, Lots 6 & 7 DP11300, Lot 3 DP6665
Certificates of title: 205859 and NL6D/554
Valuation number: 1939011900
Location co-ordinates*: 2521361E, 5987272N (New Zealand Map Grid)

* Seven point source discharges within ~100 m radius of these co-ordinates

Notation:

TSP: Total suspended particulate
SO₂: Sulphur dioxide
PM₁₀: Particulate matter of aerodynamic diameter no greater than 10 microns
H₂SO₄: Sulphuric acid
SO₃: Sulphur trioxide
CO₂: Carbon dioxide
NO₂: Nitrogen dioxide
NO_x: Nitrogen oxides
kg/hr: Kilograms per hour
µg/m³: Micrograms per cubic metre
MW: Megawatts

Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:

CONDITIONS

General Conditions

1. Notwithstanding Condition 4, no alterations shall be made to the plant or processes which may substantially change the nature or increase the quantity of contaminants discharged into air without prior consultation with the Council.
2. The discharge into air from each of the boilers shall be only via a stack with its outlet not lower than the distance above ground listed in Table 1. The discharges shall be directed vertically into the air and shall not be impeded by any obstruction above the stacks that decreases the vertical velocity below that which would occur in the absence of such obstruction.
3. The Consent Holder shall at all times adopt the best practicable option to prevent or minimise actual or likely adverse effects on the environment arising from the discharges into air from the process. This includes ensuring that all equipment is maintained at a level which, as a minimum, meets the design specifications for the operation.

Decommissioning and Fuel Conversion from Coal to Wood

4. This resource consent authorises the burning of coal and/or wood.

Fuel

5. The coal used for firing the boilers shall have a maximum sulphur content of 0.5% by weight as certified by Coal Research Ltd or another laboratory which is Telarc registered for coal analysis. The sulphur content of the coal shall be determined by the analytical method prescribed in ASTM D4239-94 (Sulphur in the Analysis Sample of Coal and Coke) or an alternative method approved by Council.

To demonstrate compliance with the above standard, the coal used shall be tested quarterly each year during the first week of each of July, October, January and April for sulphur content.

The results of each test accompanied by a statutory declaration from the supplier certifying that all coal supplied over the preceding three months has been an identical blend from the same coal sources shall be provided to the Council's Co-ordinator Compliance Monitoring within 5 working days of the results being obtained by the consent holder. Certification of the coal sulphur content and calorific value shall also be included in the Annual Report required by Condition 18.

Advice Note:

Some flexibility in the testing of the January sample is allowed in recognition of the delays that may occur due to the holiday period.

6. Fuel consumption of each boiler shall be monitored and recorded weekly. The maximum coal burning rate for each boiler shall not exceed the rates listed in Table 1, and the maximum 24 hour total coal consumption shall not exceed 44 tonnes per day.

Emission Factors

7. Emissions factors for TSP, PM₁₀ and SO₂ for each boiler shall be established using the United States Environmental Protection Agency document “AP 42, Fifth Edition, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources” or an equivalent document that has been approved in writing by the Council.

These emission factors shall be reported in the first Annual Report required to be compiled and submitted to the Council as per Condition 18.

Emission Thresholds

8. Emission rates of TSP and SO₂ from the coal-fired boiler stacks shall not exceed those listed in Table 1, columns 5 and 6.

All concentrations shall be expressed as with gas volumes corrected to dry gas basis, 0°C, 12% CO₂ by volume (or equivalent oxygen concentration) and one atmospheric pressure.

9. To demonstrate compliance with Condition 8 the Consent Holder shall calculate TSP and SO₂ emissions using the coal supply and use data referred to in Conditions 5 and 6 and the emissions factors referred to in Condition 8.

Emission rates for TSP and SO₂ shall be calculated and expressed in kg/hr as 7-day averages. These rates shall be collated and reported annually in the Annual Report referred to in Condition 18.

Advice Note:

This condition requires the Consent Holder to report annually on the emission rates from each boiler. The emission rate in each case is to be calculated from the coal specifications and usage data and emissions factors for each boiler, and should be expressed as the rate of emission in kg/hr as an average for each week of the year.

10. The discharge of smoke from the exit of any boiler stack shall not exceed an opacity to:
 - (a) obscure a Council approved observer’s view to a degree equal to smoke as dark as, or darker than Ringelmann Shade No. 2; or
 - (b) when determined by photo electric means in the stack or ducts leading to the stack, and when corrected for path length and temperature as set in Addendum No.1 (1972) 2BS2742:1969, 52% obscuration of transmitted light.

Discharge in excess of these limits is permitted for:

- (c) intermittent emission not exceeding an aggregate of two minutes in any period of one hour; and
- (d) a period not exceeding 20 minutes when lighting up a boiler from cold.

Advice Note:

Boiler start up from cold typically occurs once per year but may occur more frequently if the boiler is required to be shut down for urgent maintenance.

Emissions Monitoring

11. To demonstrate compliance with Condition 8, discharge testing shall be undertaken as follows:
 - (a) the concentrations of PM₁₀, TSP and SO₂ in the stack exhaust stream of Boilers 4, 5, 6 and 7 shall be measured at least once in the year 2009;
 - (b) the concentrations of PM₁₀, TSP and SO₂ in the stack exhaust stream of Boiler 7 shall be measured at least once in the year 2011, following conversion to wood fuel use;
 - (c) the concentrations of TSP and SO₂ in the stack exhaust stream of Boilers 4, 5, 6 and 7 shall be measured at least once in the years 2012, 2015, 2018, 2021, 2024 and 2027;
 - (d) each test sampling of the boiler stacks shall occur when the boiler in question is operating at greater than 75% of its maximum operating capacity;
 - (e) the method of TSP and PM₁₀ sampling shall be ISO 9096:2003, ASTM D3685-98, USEPA Method 5 or an equivalent method as agreed by the Council's Co-ordinator Compliance Monitoring;
 - (f) the method of SO₂ sampling shall be AS3580.4.1—1990 or other method as agreed by the Council's Co-ordinator Compliance Monitoring; and
 - (g) the organisation performing the testing must either be currently accredited under ISO 17025, to undertake the method used to perform the testing, or otherwise be approved in writing by the Council's Co-ordinator Compliance Monitoring.

Contingency Measures

12. Where discharges of contaminants to air from the site are inconsistent with the conditions of this resource consent, or where any significant increase in the discharge of any contaminant(s) to air may result in adverse effects on the environment, the Consent Holder shall:
 - (a) immediately execute works as may be necessary to stop such escape;
 - (b) as soon as practicable, notify the Council's Co-ordinator Compliance Monitoring of the discharge of the contaminant(s); and follow this up within 24 hours by written notification;
 - (c) within two weeks report to the Council's Co-ordinator Compliance Monitoring in writing the cause of the discharge of the contaminant and the steps taken, or being taken, to effectively control or prevent such escape; and

- (d) take all reasonable steps to avoid, remedy or mitigate any adverse effects results from the discharge.

Ambient Air Pollution

13. There shall be no odour, dust, particulate, smoke, ash or fume caused by the discharges at or beyond the boundary of the site, which in the opinion of the Council's Co-ordinator Compliance Monitoring, is noxious, dangerous, offensive or objectionable.

Ambient Air Pollution Limits

14. The operation authorised by this consent shall not cause the ambient concentrations of PM₁₀ to exceed 50 µg/m³ expressed as a 24 hour mean at or beyond the boundary of the site.
15. The operation authorised by this consent shall not cause the ambient concentrations of SO₂ to exceed 120 µg/m³ expressed as a 24 hour mean at or beyond the boundary of the site.

Ambient Air Quality Monitoring

16. If satisfied that reasonable grounds exist the Council's Co-ordinator Compliance Monitoring may direct the Consent Holder to, at their expense, undertake ambient air pollution monitoring as follows. Ambient concentrations of PM₁₀ and SO₂ shall be monitored at two points determined by the Council's Co-ordinator Compliance Monitoring along the boundary of the site for a period of one month during at each location during the plant's production season (defined as between the months of August to May inclusive). This testing shall be completed with a continuous high volume (High Vol) sampler in accordance with AS 3580.9.6 "*Methods for sampling and analysis of ambient air: Determination of suspended particulate matter PM₁₀ high volume sampler with size selective inlet, gravimetric method*". Monitoring results shall be forwarded to Council's Co-ordinator Compliance Monitoring within 10 working days of receipt of the results from the laboratory. The method of SO₂ monitoring shall be an instrumental method or other method as agreed by the Council's Co-ordinator Compliance Monitoring.

The organisation performing the monitoring must either be currently accredited under ISO 17025, to undertake the method used to perform the testing, or otherwise be approved in writing by the Council's Co-ordinator Compliance Monitoring.

Incidents and Complaints Register

17. The Consent Holder shall keep an Incidents and Complaints Register in which is recorded any incident having an adverse environmental effect, or being alleged to have and adverse environmental effect, and any complaints from members of the public. These records shall include:
 - (a) the nature of the incident and any adverse impacts identified or alleged;
 - (b) the date and time of the incident and the complaint;

- (c) the name(s) of the complainant(s) (if given) and where possible any other member(s) of the public identified or alleged to be adversely affected;
- (d) the weather conditions at the time of the incident;
- (e) comments as to the likely cause of the incident; and
- (f) a record of the action taken to remedy or mitigate the situation.

All incidents and complaints shall be notified to the Council as soon as possible and not later than 24 hours following the incident or the receipt of the complaint.

Reporting

18. The Consent Holder shall compile an Annual Report for this site and supply this to the Council's Co-ordinator Compliance Monitoring on or before 1 June each year. As a minimum, the report shall for the preceding 12 months:
- (a) analyse the results obtained from analyses required to be completed by Condition 5, 6, 7, 8, 9 and 11, and compare these with (where available) the last five years of results;
 - (b) analyse any complaints received;
 - (c) determine compliance with the conditions of this consent; and
 - (d) where there is any non-compliance with any condition of this consent identified by the testing results, identify the problem, its cause, remedial action taken, and provide a timescale for this remedial action.

Review Conditions

19. The Council may, during the period of 1 August to 1 October each year, review any or all of the conditions of this consent pursuant to Section 128 of the Act for all or any of the following purposes:
- (a) to deal with any adverse effect on the environment which may arise from the exercise of the consent that was not foreseen at the time of granting of this consent, and which is therefore appropriate to deal with at a later stage; and/or
 - (b) to require the Consent Holder to adopt the best practicable option to remove or reduce any adverse effects on the environment result from the discharge; and/or
 - (c) to review the contaminant limits if it is appropriate to do so; and/or
 - (d) to review the frequency of sampling and/or number of determinands analysed if the results indicate that this is required and/or appropriate.

Expiry

20. This resource consent expires on 31 December 2028.

Table 1 - Process description

1 Boiler	2 Description	3 Stack height (metres)	4 Maximum coal burning rate (kg/hr)	5 Maximum TSP emission rate (kg/hr)	6 Maximum SO ₂ emission rate (kg/hr)	7 Monitoring required?	8 Notes
1.	Trevett 400 kW vertical boiler with bunkerfeed underfeed stoker. No grit arrestor.	18	100	0.3	1.8	No	
2.	Trevett 1,000 kW vertical boiler with bunkerfeed underfeed stoker. Cyclone grit arrestor.	18	250	0.7	4.5	No	
3.	Trevett 1,000 kW vertical boiler with bunkerfeed underfeed stoker. Cyclone grit arrestor.	18	250	0.7	4.5	No	
4.	Morrow 3 MW economic boiler with bunkerfeed underfeed stoker. Multicyclone grit arrestor. PLC control.	16.5	700	1.9	12.6	Yes	§
5.	Morrow 6 MW economic boiler with bunkerfeed underfeed stoker. Multicyclone grit arrestor. PLC control.	16.5	1400	3.8	25	Yes	§
6.	Morrow 6 MW economic boiler with bunkerfeed underfeed stoker. Multicyclone grit arrestor. PLC control.	16.5	1400	3.8	25	Yes	§
7.	Morrow 6 MW economic boiler with bunkerfeed underfeed stoker. Multicyclone grit arrestor. PLC control.	16.5	1400	3.8	25	Yes	§

Notes:

§ All concentrations shall be expressed as hourly averages with gas volumes corrected to dry gas basis, 0°C, 12% CO₂ by volume (or equivalent oxygen concentration) and one atmospheric pressure.

Date Confirmed:

Chair: