



In the matter of Applications to the Selwyn District Council (RC 125217) and the Canterbury Regional Council (CRC 130776) by Westland Co-operative Dairy Company Limited to establish, operate and maintain a Nutritional Dairy Plant and to discharge contaminants to air from that plant at Izone Business Park, Rolleston.

**DECISION OF HEARINGS COMMISSIONER
JOHN GRAHAM ISELI**

Hearing: 10th and 11th December 2012, Rolleston Rugby Clubrooms

Site: 11.6 hectares at 7-41 Westland Place, Izone Business Park, Rolleston (containing an existing reverse osmosis plant and dry store). Planting for visual screening purposes is proposed on a separate 3.8 hectare site at 64 Wards Road.

Zoning: Business 2A (Izone) in the Selwyn District Plan.

Activity Status: Both applications are for discretionary activities.

Decision: The consents sought are granted, subject to conditions.

1. APPOINTMENT

- 1.1 I have been jointly appointed and empowered by both consent authorities to determine the land use consent and discharge permit applications associated with the Nutritional Dairy Plant proposed by Westland Co-operative Dairy Company Limited (hereafter referred to as “Westland Dairy”).
- 1.2 I have been involved in the hearing of several other applications to establish and operate dairy plants in the South Island. While this background has provided me with an understanding of the general issues involved with such proposals, I have been conscious of the need to assess this proposal with an open mind.
- 1.3 On two separate occasions during the course of the hearing I visited the site and the surrounding area.
- 1.4 The hearing was conducted over two full days and I have had the benefit of comprehensive application documentation and evidence, detailed assessments by council reporting officers, and critiques by submitters in opposition. These documents contain a large amount of information and are publicly available from the records of the two consent authority councils. I have therefore not attempted to set out all the information and evidence in this decision; rather I have focussed on the central facts and key evidence relating to the aspects of the proposed development in contention, and the aspects where I consider there is potential for adverse environmental effects.

2. THE PROPOSAL

Land Use Consent

- 2.1 Westland Co-operative Dairy Company Ltd (trading as Westland Milk Products) presently operates a dry store and reverse osmosis plant on the 11.6ha site at 7 - 41 Westland Place, Izone Business Park. The 14.3m high, 1.7ha dry store building was established in 2009. The plant was extended in 2011 with the development of the reverse osmosis plant including two 19m high silos, milk transfer facilities, and road and rail facilities including a rail siding. The existing plant and buildings including the railway siding are subject to existing consents and will continue to operate under the terms of those resource consents.

2.2 Westland Dairy now proposes to establish, operate and maintain a nutritional dairy plant on the site. The proposal includes new structures and facilities, generally located to the east of the existing dry store building including:

- Three milk dryers up to approximately 34.5m high, each having a noise-insulated stack with a maximum height of approximately 43.5m (adjoining the eastern end of the existing dry store);
- Two coal-fired boilers within a building approximately 17.5m high, with a single emission stack approximately 50m high (near the eastern end of the site);
- An extension to the existing administration building;
- An extension to the existing rail siding (double tracking and slight extension of the existing eastern siding);
- New vehicle access, crossing and parking areas (generally at the eastern end of the site accessed from Westland Place);
- Six metre high acoustic barriers located next to the existing and extended rail siding (generally inside and behind the line of the existing Railway Road shelter planting);
- Ancillary buildings and structures to support the dairy plant activities including water tanks, silos, wastewater tanks, pipe bridge extensions, milk reception and workshop facilities (these are generally located in the eastern parts of the site).

2.3 The new dairy plant and operational characteristics are proposed to include:

- A Nutritional Dairy Plant processing raw milk into various nutritional milk products;
- Capacity for 24 hour per day and 365 day per year operation - although actual operation is expected to be less (approximately 80% of maximum capacity during spring/early summer, reducing during the winter months);
- Capacity to process up to 2400m³ of milk per day;
- Approximately 8720m² floor area over an area of 4.4ha;
- 141 full time staff over four 12 hour shifts;
- Three 6 tonne per hour dryers contained in two separate buildings, processing raw milk product into milk powder (approximately 5800m² floor area);
- Administration area extension (approximately 560m² floor area);
- Two Infant Formula Batching Areas (wet process areas) for manufacture of infant formula products;
- An Anhydrous Milk Fat (AMF) Area for manufacture of AMF from cream;
- A second milk reception area in addition to that established in 2011 for the reverse osmosis plant (approximately 235m² canopy area);

- Additional silos for milk and water storage, new milk silos being located adjacent to the existing silos at approximately 19m height;
- Clean in Place (CIP) facilities for tanker cleaning;
- Bulk Chemical Storage - use and storage of several substances;
- A Dissolved Air Flotation (DAF) Plant for treatment of wastewater from milk processing activities (approximately 270m² area);
- Two 25 megawatt (MW) Coal Fired Boilers supplying steam energy to the dryers (building approximately 720m² floor area);
- A coal delivery area adjacent to the boilers;
- Water/Wastewater Holding Tanks, including three 2000m³ water tanks (8m height) and three wastewater tanks (10m height);
- Buildings finished in Westland Milk Products company colour scheme;
- A 36.4m² (14.0m x 2.6m) sign containing “Westland Milk Products” logo on eastern facade of a dryer at 20m height, with other existing signage also to be retained;
- A Truck Workshop/Engineering Facility for vehicle maintenance, including a parking area;
- Modified car park areas and access including a new exit to Westland Place, change to the existing two way truck entrance to become one-way entry (83 car parks are proposed to serve the existing and proposed development);
- Approximately 346 vehicle movements per day (75 in peak hour);
- The existing rail siding to be double tracked and extended slightly towards the east (hours of operation for the siding to remain unchanged at 7:30am - 8:00pm);
- A new 6m high acoustic barrier constructed adjacent to the railway siding along the southwest and southeast boundaries of the site, set back inside the line of existing hedging adjacent to the Railway Road boundary and the common boundary with the Ballance Agri-Nutrient site at 5 Railway Road;
- Connection to the existing SDC reticulated water supply (estimated 739m³/day required);
- On-site stormwater collection, treatment and disposal - in accordance with existing Environment Canterbury discharge permits;
- Approximately 1910m³ wastewater discharge per day to the SDC reticulated system (subject to trade waste agreement);
- Construction earthworks with cut depth up to 2.5m (total excavation of approximately 17,000m³ with 3000m³ re-used on site);
- Landscaping, including retention and maintenance of existing plantings and additional poplar planting in the western corner adjacent to Railway Road.

- 2.4 Westland Dairy also proposes to establish a small exotic plantation in the northwest corner of a separate Rural - Inner Plains zoned 3.83ha site at 64 Wards Road. The plantation will primarily comprise “Manna Gum” which are estimated to grow to a height of 7-8m after 5 years and 20m after 15 years. This planting is intended to provide visual mitigation from the Wards Road area. The plantation is on a separate site located to the south of Railway Road and the Midland Rail Line and does not in itself require resource consent. However it has been included in the application and offered by the applicant as mitigation, proposed to be required as a condition of consent.

Discharge to Air Consent

- 2.5 The dairy plant is proposed to be built in two stages. Stage one of the planned development includes two 6 tonnes per hour (t/h) milk powder dryers and a 25 megawatt (MW) coal fired boiler. Stage two consists of an additional third 6t/h dryer and a second 25MW coal fired boiler. Consent to discharge contaminants to air is sought for a term of 35 years.
- 2.6 The key contaminant discharged from the dryers and the boilers is assessed as fine respirable particulate matter less than ten micrometres in diameter (PM₁₀). Other primary contaminants have been identified as oxides of nitrogen and sulphur dioxide (SO₂) discharged from the boiler plant.
- 2.7 The coal fired boiler plant will be fitted with a bag filtration system to remove PM₁₀ from the discharge, achieving a concentration of less than 50 milligrams per normalised cubic metre (mg/Nm³). It is proposed to discharge combustion products via a single 50 metre high emission stack.
- 2.8 Westland Dairies proposes that each powder dryer will discharge PM₁₀ via a bag filtration system and an emission stack at a height of between 36m and 43.5m above ground level. The final stack height will depend on the height of the dryer buildings, determined after selection of the powder dryer design. The PM₁₀ concentration in the discharge from the dryers will be less than 10mg/Nm³ after bag filtration.
- 2.9 The discharge would also include dust from various sources including product storage and handling, construction activities, vehicle movement on unsealed areas, handling of coal and any failure of the bag filtration equipment. Such dust has the potential to affect neighbouring properties if adequate controls are not in place.

3. NOTIFICATION AND SUBMISSIONS

- 3.1 The land use consent application was formally received by the Selwyn District Council (SDC) on 19 September 2012. The discharge permit application to Environment Canterbury (ECan) was lodged on 18 September 2012. The applications were publicly notified in The Press on 29 September 2012, the Selwyn Times on 2 October 2012 and Central Canterbury News on 3 October 2012.
- 3.2 The submission period on both consent applications closed on 29 October 2012. A total of 15 submissions were received on the land use consent application (six were neutral, three in support and six in opposition). Eleven submissions were received in relation to the discharge permit application. Eight submitters opposed the application, while three indicated neither support nor opposition.
- 3.3 The issues of concern raised by the submitters to the discharge permit application include:
- Effects of air pollution in general;
 - The need for monitoring of consent conditions;
 - Reverse sensitivity effects on neighbouring industry;
 - Noise effects; and
 - The health risks of chemicals stored on-site.
- 3.4 Matters raised by submitters on the land use consent application include:
- Economic growth benefits associated with the development;
 - Reverse sensitivity effects on an adjoining fertiliser storage and dispatch business;
 - Noise effects, including those associated with the rail siding and reversing beepers on plant vehicles;
 - Effects of discharges to air;
 - Formation of a liaison group between Westland Dairy, SDC, ECan and residents;
 - Setting of appropriate consent conditions and monitoring;

- Confirmation that connection to the SDC reticulated water supply and sewerage networks can be achieved;
- Visual amenity effects, including the impact of colours and reflectance of tall buildings;
- Effects of truck movements;
- Effects of the usage of coal and storage of hazardous substances;
- Proximity of a heat source to neighbouring fertiliser storage;
- Lack of assessment on tangata whenua values;
- Visual impact of the height of buildings and structures;
- Preference for planting of native rather than exotic species.

3.5 I have read all the written submissions and taken these into account in reaching my decision. Several submitters provided verbal presentations at the hearing and their comments are summarised later in this decision.

4. THE HEARING

The Case for the Applicant

4.1 Mr Stephen Christensen presented opening legal submissions on behalf of Westland Dairy. He noted that the applicant already operates a reverse osmosis plant and dry store on the site. That initial stage of development was approved in May 2011. He added that there are several reasons for choosing to locate the plant at the Izone site, including the presence of the existing operations, ready access to the rail network and State Highway 1, the Business 2A zoning, servicing with reticulated water and wastewater, proximity to Rolleston Township, and the anticipated growth in dairying in the surrounding area.

4.2 Mr Christensen outlined the statutory context in which the applications sit. With regard to visual effects, he accepted that the dryer towers will be prominent from some viewpoints due to their bulk. However he considered that, given the growth in dairying in Canterbury, the sort of buildings proposed (including their height) would inevitably be required somewhere. Mr Christensen submitted that in this context, locating such buildings within the Izone industrial area is appropriate.

- 4.3 Turning to the issue of noise, Mr Christensen noted that 6m high acoustic barriers are proposed. As a result noise levels from existing consented rail activities within the site are predicted to be significantly lower than currently occurs. He stated that activities on the site will comply with the relatively stringent night-time noise standard for permitted activities in the Selwyn District Plan. Mr Christensen submitted that the extent to which the effect of rail operations can be considered is limited, because operations on the Midland Line (outside the site) occur within a designated rail corridor.
- 4.4 In regards to the soil assessment of the site in terms of the National Environmental Standards (NES), Mr Christensen submitted that NES approval is not required in this case. He considered that the 'permitted baseline' (in relation to section 104(2) of the Act) is relevant to this case. The Business 2A zoning of the site anticipates large scale industrial buildings and development. Mr Christensen submitted that the adverse effects of the proposal are largely comparable to the effects of activities permitted within Izone, with the exception of the height of the dryer buildings.
- 4.5 Mr Antony Michalik is the Business Development Manager - Growth Strategy for Westland Milk Products. He explained that the existing nutritional dairy plant at Hokitika will be at full capacity within two years and therefore a new plant at Rolleston is required. He noted that it is more efficient to locate the new plant near to where the milk is produced. Mr Michalik considered that the selected site has significant advantages in terms of efficiency of resources. He stated that the applicant has been working with KiwiRail to minimise night-time rail noise due to carriage drop-offs, these being now generally limited to between approximately 7am and 8pm daily. He noted that there would be substantial difficulties associated with locating the noise barrier on the south side of the rail corridor because that land is not under the control of Westland Dairy.
- 4.6 Mr Craig Mitchell, a Senior Traffic and Transport Engineer with Aurecon, provided evidence related to traffic effects. He described his analysis of the expected vehicle trip generation and distribution for the plant that used to assess the effects of vehicle movements during both the construction and operational phases of the proposed development. Mr Mitchell considered that the proposal would have little effect on the future performance of the transport network. He identified a number of potential roading network capacity issues but concluded that those would be primarily due to the wider planned growth in the area, and would be addressed through the SDC's planned programme of network upgrades. With regard to milk tanker

movements, he considered that tankers generally would not travel through Rolleston township.

- 4.7 Mr Mitchell stated that the proposal complies with the majority of the relevant district plan rules. While there are minor non-compliances with respect to parking matters, he found that the available parking is sufficient to meet demand. Overall Mr Mitchell considered that transportation effects related to the proposal would be negligible.
- 4.8 Mr Stuart Camp, a Principal of Marshall Day Acoustics, presented evidence regarding noise effects. He found that operation of the proposed nutritional dairy plant could comply with the District Plan noise rules for permitted activities, subject to the implementation of specific noise control measures. He therefore considered that residents in the rural zone would continue to enjoy an appropriate level of amenity. Mr Camp considered that the noise effects of traffic and construction activities would also be minor.
- 4.9 Mr Camp concluded that noise from the plant would be generally inaudible during the daytime. The proposed 6m high acoustic fence is an important mitigation measure to minimise night time noise at residences located to the south of the plant. Mr Camp acknowledged that commissioning noise measurements to determine compliance with the proposed noise limits would be appropriate, should the development proceed. In response to questioning, Mr Camp agreed to draft a condition that would prevent night-time rail movements on site unless a detailed acoustic assessment had been completed demonstrating that the proposed noise limits can be achieved.
- 4.10 Mr Tony Milne, a Director of Rough and Milne Landscape Architects Limited, provided evidence relating to landscape and visual effects. He stated that the application site and its immediate setting are dominated by the large scale warehouses and industrial activity within the B2A Zone. Beyond the immediate environs of the site, he found that the surrounding rural residential and rural landscape has a moderately high level of amenity due to its inherent greenery, open spaces and maturity of vegetation.
- 4.11 Mr Milne noted that the proposal would result in significant structures that are over and above the height anticipated for the B2A Zone as a permitted activity. The associated amenity effects include the visual effects arising from the building location, height, colour, reflectivity and the proposed landscaping. He considered that the mitigation measures proposed would ensure that the overall visual effects of the development would be negligible to slight. However Mr Milne found that visual effects would be significant for a small number of properties in the Rural Zone that are in close

proximity and have clear easterly views to the site from Wards Road. Nevertheless he considered that the proposed gum woodlot would provide effective visual mitigation for these properties, over time. Overall he concluded that the proposed development would be generally consistent with the objectives and policies of the SDP relating to quality of the environment.

- 4.12 In response to questions, Mr Milne stated the he agreed with the recommendations of Mr Craig (who reviewed the landscape aspects of the proposal on behalf of the SDC) in relation to building colour and planting. He confirmed that it is now proposed to plant totara trees along the western edge of the gum plantation at 64 Wards Road.
- 4.13 Mr Chris Pullen, Environmental Manager for Westland Milk Products, presented evidence relating to trade waste discharges, hazardous substances management and the assessment of contaminants in soil. He confirmed that wastewater would be treated in a Dissolved Air Flootation (DAF) plant before discharge to the Rolleston Wastewater Facility. Mr Pullen stated that a trade waste agreement is being finalised with SDC.
- 4.14 Mr Pullen discussed storage and handling methods proposed for hazardous substances. He considered that the potential for any adverse effects arising from storage or use of such substances would be minimal. Regarding the soil assessment for the site, Mr Pullen considered that it is unlikely that previous activities on the site have caused significant contamination of the soil. He stated that soil sampling undertaken by the applicant on the site supports this conclusion.
- 4.15 Mr Don Pullen, an Air Quality Consultant with AP Consulting Services, provided evidence regarding the effects of the discharges on air quality. He described the results of dispersion modelling that predicted maximum ground level concentrations (GLCs) of PM₁₀ and sulphur dioxide (SO₂) discharged from the plant, as well as other contaminants he regarded as minor. He found that GLCs of all contaminants are predicted to be well within the National Environmental Standards (NES) and other relevant New Zealand air quality guidelines. Mr Pullen concluded that the effects of discharges to air from the site would be minor or less under normal operating conditions.
- 4.16 With regard to PM₁₀ emissions from the powder dryers, Mr Pullen explained that two separate scenarios were modelled based on 30m high and 34.5m high dryer tower options. He predicted maximum PM₁₀ concentrations for each scenario of approximately 14µg/m³ and 6µg/m³ (24 hour average)

respectively. The 30m high building scenario was based on a 6m dryer stack extension above the dryer tower roof, while the 34.5m high building scenario was based on a 9m dryer stack extension above the roof. In response to questioning, Mr Pullen conducted further dispersion modelling to predict the effect of increasing the proposed dryer stack height for the lower 30m building option from 6m to 9m above the dryer tower roof. The modelling results he presented indicated that the dryer stack height increase would reduce maximum PM₁₀ GLCs from approximately 14µg/m³ to 8µg/m³ (24 hour average).

- 4.17 Mr Pullen predicted peak SO₂ GLCs caused by the boiler discharge of approximately 65 µg/m³ (1 hour average) and 29µg/m³ (24 hour average). He explained that these concentrations are well within the relevant New Zealand guidelines, but that 24 hour average concentrations could exceed the 2005 World Health Organisation (WHO) guideline of 20µg/m³. However he noted that the WHO guideline has not been adopted in New Zealand, but in any case future compliance could be achieved by limiting the sulphur dioxide emission rate or coal sulphur content.
- 4.18 Regarding air intake filtration of the dairy plant, Mr Pullen stated that high efficiency particulate filters would be installed to prevent any contamination of milk products. It was noted that it would be in the applicant's own interests to maintain a high level of hygiene within the plant. In response to questioning regarding potential odours from the DAF wastewater treatment plant, Westland Dairy confirmed that the plant would be enclosed and fitted with carbon filtration.
- 4.19 Mr Geoffrey Butcher, a Director of Butcher Partners Limited, provided written evidence regarding economic effects. He calculated that Stages 1 and 2 of the proposed development would create approximately 141 jobs at the plant and 360 jobs in the region. He estimated that regional GDP would increase by approximately \$93 million per year including \$23 million per year of earned household income. Mr Butcher's evidence explained that several factors suggest that the proposed nutritional dairy plant is likely to be a highly efficient use of resources for processing milk.
- 4.20 Mr Daniel Thorne, a Planner with Aurecon, presented planning evidence. He considered that the key issues to be determined in this case relate to noise, landscape/visual amenity, traffic and air quality. Mr Thorne assessed the compatibility of the proposal with relevant objectives and policies of the Selwyn District Plan (SDP), the Canterbury Natural Resources Regional Plan (NRRP) and the Regional Policy Statement (RPS). Based on the evidence presented by experts for the applicant, he found that the proposal would

overall have significant positive effects, and adverse effects that are minor or less than minor. He concluded that the proposal is consistent with the objectives and policies of the SDP, NRRP and RPS and with the sustainable management purpose of the Act.

The Submitters

- 4.21 Ms Caroline Saunders resides at 14 Armack Place, to the west of the discharge. She stated that she can see the existing Westland Dairies site from her property. Ms Saunders submitted that her primary issue is noise from the proposed dairy plant, noting concern that the planned acoustic fence may exaggerate noise from railway activities. She expressed particular concern regarding any resumption of night-time shunting of rail wagons in relation to the proposal.
- 4.22 Ms Joan Penkman is a local resident at 38 Armack Drive, a property she purchased in 1999. She explained that she has a medical condition caused by low continuous noise that began in 1996. She expressed concern that the audible characteristics of noise from the site, particularly constant droning of low pitch noise, could cause adverse effects at her property.
- 4.23 Mr Nigel Bryce of Ryder Consulting Limited presented evidence on behalf of Ballance Agri-Nutrients (Ballance), supported by Mr Nigel Sadlier of Ballance. He described the nature of the fertiliser storage and dispatch operation at the Ballance site that adjoins the Westland Dairies site. He noted that discharges from the Ballance site are controlled by resource consent that requires they not cause objectionable or offensive effects at neighbouring properties. Mr Bryce considered that the establishment of a sensitive food processing facility next to the Ballance site has potential to cause reverse sensitivity effects on Ballance's lawfully established operations. He submitted that it would be appropriate to impose a condition of consent that requires filtration of air intakes to the Westland Dairies plant.
- 4.24 Ms Glenys Perkins of Taylor Coal provided comments regarding her submission in support of the applications. She considered that the proposal will bring income and economic growth to the local area and businesses should be encouraged to locate in the region. She explained that Taylor Coal supplies coal to the Westland Dairies plant in Hokitika and has found the company to be an environmentally responsible operator.
- 4.25 Ms Frania Zygadlo presented evidence on behalf of Te Taumutu Runanga. She considered that there had been insufficient assessment of the effects of the proposal on tangata whenua values. She identified several additional

measures regarded as appropriate to ensure that cultural values are protected. Ms Zygadlo stated that Taumutu Runanga oppose the use of exotic species for landscape planting and that native species would be more appropriate for this purpose. She submitted that a precautionary approach should be adopted towards the discharge from the 50MW coal fired boiler plant, noting that the WHO has stated that there is no safe level of exposure to PM₁₀. She considered that further assessment of alternative fuels is required. She further submitted that formal approval of access to the SDC reticulated wastewater system should be required before consent is granted.

- 4.26 Mr Kevin Chaney and Mrs Susan Chaney have resided at 47 Armack Drive since 1983. They expressed concern about noise from rail activities at all hours of the day due to use of the Westland Dairies rail siding and also the Midland Line. They requested that noise protection be established on the south side of the rail corridor. Mr and Mrs Chaney also submitted that the proposal should include structures and hazardous substance containment systems specifically designed for a high earthquake hazard area.

The Officer Reports

- 4.27 Mr Graham Taylor, a Director of Resource Management Group Limited, was appointed by the Selwyn District Council to review the land use consent application. He provided a comprehensive report which was pre-circulated to the applicant, the submitters and the commissioner prior to the hearing. Mr Taylor's report discussed the relevant provisions of the Selwyn District Plan and his assessment of the potential environmental effects of the proposed land use. He found that overall the proposal is in accordance with the objectives and policies of the District Plan. He concluded that the nature and range of adverse effects related to this application can be mitigated to a level anticipated in the SDP and in accordance with what is accepted by the plan in the Izone environment.
- 4.28 In coming to this conclusion Mt Taylor relied on reports prepared by experts appointed to review specific aspects of the application, in addition to input from SDC assets management and engineering staff. His report appended the peer reviews prepared by consultants Mr Andrew Craig, Landscape Architect, Mr Andrew Metherell, Traffic Planner, Mr Russell Malthus, Acoustic Engineer and Mr Ian McCahon, Geotechnical Engineer. Messrs Craig, Metherell and Malthus attended the hearing and provided comments on the evidence and submissions presented, as well as responding to questions relating to their reports and recommended consent conditions.

- 4.29 Mr Kevin Swete is a Consents Planner with Environment Canterbury who is experienced in the review of applications to discharge contaminants to air. He provided a section 42A report reviewing the discharge permit application. His report was pre-circulated to the parties and concluded that consent for the discharges to air from the proposed Westland Dairies operations could be granted, subject to conditions. Mr Swete found that the application is generally consistent with the objectives and policies of the RPS, proposed RPS and the NRRP. He provided additional comments in relation to matters raised during the hearing concerning the discharges to air.
- 4.30 Mr Swete noted that a correction to the PM₁₀ GLCs predicted by his audit dispersion modelling (as stated in the circulated section 42A report) is required. He confirmed that the PM₁₀ concentrations he predicted are similar in magnitude to those predicted by Mr Don Pullen. With regard to Mr Pullen's PM₁₀ modelling results for the 30m high dryer option with a 9m stack extension above the dryer tower roof, Mr Swete considered that these results indicated a substantial reduction in predicted GLCs relative to the 6m stack extension scenario. He noted that further development of permitted industrial activities within the Izone area during the 35 year requested term of consent could result in increased local PM₁₀ concentrations. In response to questioning, Mr Swete accepted that future PM₁₀ background concentrations in the vicinity of the proposed discharges could be in the general order of 30µg/m³ (24-hour average).
- 4.31 Mr Swete stated that there are approximately 10,000 residents in Rolleston at present and the township is experiencing significant growth. He noted that new wood burners can be installed in dwellings provided NES emission limits are met for the selected burner. Mr Swete explained that no ambient air quality monitoring has been undertaken by Environment Canterbury in the Rolleston area. However, given the nature of the township and its housing stock, he considered that the NES of 50µg/m³ (24-hour average) is unlikely to be exceeded. This applies particularly to the industrial area to the west of State Highway 1 where the proposed discharges would occur. He therefore considered that the application is not in a 'polluted airshed' and the NES regulations would not prevent granting of consent in this case.

5. STATUTORY ASSESSMENT AND PART 2 OF THE ACT

Status of the applications and key sections of the Resource Management Act 1991

5.1 The applicant and reporting officers agree that overall each of the applications has fully discretionary status. This was not disputed by any submitter.

5.2 Section 104(1) of the Act requires that the consent authority must, subject to Part 2 of the Act, have regard to:

“a) any actual and potential effects on the environment of allowing the activity; and

b) any relevant provisions of -

(i) a national environmental standard;

(ii) other regulations;

(iii) a national policy statement;

(iv) a New Zealand coastal policy statement;

(v) a regional policy statement or proposed regional policy statement;

(vi) a plan or proposed plan; and

c) any other matter the consent authority considers relevant or reasonably necessary to determine the application.”

5.3 Section 104(2) states: *“When forming an opinion for the purposes of subsection (1)(a), a consent authority may disregard an adverse effect of the activity on the environment if a national environmental standard or the plan permits an activity with that effect.”* This is commonly referred to as the “permitted baseline” assessment and is relevant to this application.

5.4 Section 104B of the Act states that:

“After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority-

(a) may grant or refuse the application; and

(b) if it grants the application, may impose conditions under section 108.

5.5 Section 105(1) of the RMA states that:

“If an application is for a discharge permit or coastal permit to do something that would contravene section 15 or section 15B, the consent authority must, in addition to the matters in section 104(1), have regard to—

- (a) *the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and*
- (b) *the applicant's reasons for the proposed choice; and*
- (c) *any possible alternative methods of discharge, including discharge into any other receiving environment."*

5.6 Consideration of applications under section 104 of the Act is "*subject to*" the purpose and principles of the Act set out in Part 2, sections 5 to 8. The Part 2 matters of particular relevance to this case are:

- the sustainable management of resources purpose of the Act set out in section 5;
- the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga (section 6(e));
- the efficient use and development of natural and physical resources (section 7(b));
- the efficiency of the end use of energy (section 7(ba));
- the maintenance and enhancement of amenity values (section 7(c)); and
- the maintenance and enhancement of the quality of the environment (section 7(f)).

5.7 I have had regard to all of these matters and the matters specified in sections 104(1), 104(2), 104B and 105(1) and I am satisfied that the proposal, subject to a comprehensive set of amended conditions, would on balance meet the purpose of the Act. Specific changes to the conditions proposed are discussed during the body of this decision. I am satisfied that the mitigation measures required by the conditions of consent are sufficient to ensure that adverse effects are acceptable in terms of the purpose and principles of the Act. I accept the evidence that there would be significant positive effects, including social and economic benefits, associated with the proposed development.

5.8 Section 125 of the Act specifies that resource consents lapse five years after commencement unless given effect to, except where a longer period is specified in the consent. In the present case Westland Dairies has sought a lapsing period of 10 years for both consents. I consider this to be reasonable, given the scale of the proposed development. In my view it is unlikely that there would be a substantial change to the receiving environment, technology or other particular circumstances that would make it appropriate to require the consents to be applied for again if not implemented within five years.

Regional Policy Statement, Selwyn District Plan and the Natural Resources Regional Plan

- 5.9 Analyses of the relevant provisions of the RPS, the Proposed RPS, the NRRP and the SDP have been provided in the section 42A reports of Messrs Taylor and Swete and in the evidence of Mr Thorne.
- 5.10 During the course of the hearing I asked some questions regarding the application of Objective AQL2 of the NRRP. Objective AQL2(a) states:
“(a) Where existing ambient air quality is equivalent to or better than the acceptable target specified in the Regional Ambient Air Quality Targets in Schedule AQL1, maintain air quality at its existing level.”
- 5.11 The evidence presented at the hearing indicated that the acceptable Regional Ambient Air Quality Target (RAAQT) for PM₁₀ of 33µg/m³ (24 hour average) is likely to be currently achieved in the local area, although ambient air quality monitoring has not been undertaken in Rolleston. There is potential for substantial further development of permitted industrial activities (with associated permitted discharges to air) in Izone that could cause cumulative PM₁₀ concentrations to approach the RAAQT over the 35 year term of consent sought. It is therefore appropriate that PM₁₀ GLCs caused by the Westland Dairies discharges alone be minimised in accordance with good practice, thereby reducing the likelihood of cumulative exceedance of the acceptable RAAQT. As discussed later in this decision, I am satisfied that this can be achieved by requiring that the powder dryer stacks extend at least 9m above the dryer tower roofs.
- 5.12 I am also satisfied that the mitigation measures proposed, including bag filtration, limiting the SO₂ emission rate and setting minimum stack heights, are sufficient to ensure that ambient air quality of all contaminants is maintained to a level that is not inconsistent with Objective AQL2 of the NRRP.
- 5.13 Messrs Taylor and Craig pointed out that there is some tension with the SDP Policy B2.4.24 concerning maintenance of a predominantly low rise skyline. However I agree that this policy should be considered in the context of the Business 2A zone (Izone) that permits large and bulky buildings. I find that, taking into account the mitigation proposed and the location within Izone, the dryer tower height does not prevent overall achievement of the SDP objectives.
- 5.14 The reporting officers and the applicant’s legal and planning representatives are in overall agreement that the proposed development is generally

consistent with the relevant objectives and policies of the RPS, the proposed RPS, the NRRP and the SDP. Having had regard to those provisions and having considered the detailed updated proposal and conditions (as provided in writing with the applicant's closing legal submissions), I am satisfied that the proposed activities are consistent with almost all the relevant objectives and policies. On balance I find that the proposal is generally consistent with the overall objective and policy framework.

6. PRINCIPAL ISSUES, EVALUATION, AND FINDINGS OF FACT

6.1 In summarising and evaluating the principal issues I have considered the applications and the associated assessment of environmental effects, all submissions made in response to the applications, the section 42A reports and all the information provided at the hearing, including the revised suite of consent conditions proposed by the applicant.

6.2 The principal issues and actual or potential adverse effects were discussed in some detail in the section 42A reports and in the evidence provided by the applicant and the submitters, and can be summarised as:

- Positive effects
- Landscape and visual amenity effects
- Noise effects
- Transportation effects
- Air quality effects
- Other matters

Positive Effects

6.3 The purpose of the Act, set out in section 5, is to manage the “...*use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural wellbeing and for their health and safety...*” This enabling purpose is subject to provisos in section 5(2) about sustainability and avoiding, remedying or mitigating adverse effects on the environment.

6.4 The main resources at issue in this case are the resources required to construct and operate the nutritional dairy plant, the land to be built over, the air to be used as the receiving environment for discharges, the road and rail network, and the “rural amenities” of the local area in proximity to the development.

- 6.5 The evidence from Mr Butcher indicated that the proposed development would create 141 jobs at the plant and contribute to a regional GDP increase of approximately \$93 million. Clearly there are significant economic benefits associated with the proposal. I accept that the nutritional dairy plant is likely to be an efficient use of resources. The proposed plant is well sited to take advantage of the local rail and roading network and the projected growth in dairying in the surrounding area. Location in the Izone industrial area allows the existing reticulated water supply and wastewater disposal system to be utilised. I agree that this is a substantial advantage over the majority of possible alternative sites where discharge of wastewater to large areas of land would typically be required.

Landscape and Visual Amenity Effects

- 6.6 The permitted baseline is generally applicable to the landscape and visual impact of the proposed development, with the primary exception of building height. The proposed dryer towers have a height of up to 34.5m and substantially exceed the permitted activity height of 15m for buildings established in the Izone area. However I accept the evidence that the visual impact of the development should be considered in the context of other industrial development that has occurred, and will be permitted to occur, within the Izone industrial area. The design of milk powder dryers requires relatively tall drying towers and the proposed buildings would likely be required at some location, given the projected growth in dairying.
- 6.7 The most significant visual effects of the buildings and emission stacks would be experienced by a relatively small number of rural residential properties at Wards Road, to the southwest of the site. The applicant proposes to establish the Manna Gum plantation on a 3.8 hectare property at 64 Wards Road to provide visual screening for these properties. The gum trees are a fast growing species and I accept that, over time, this mitigation will become effective. Taking into account the proposed planting and the general orientation of affected dwellings towards the north and west, I consider that the visual amenity affects can be mitigated to the extent that they are acceptable.
- 6.8 In response to submissions requesting that native plants be used for landscaping, Westland Dairies has proposed to plant totara trees along the western boundary of the gum plantation at 64 Wards Road. I find this to be an appropriate solution whereby fast growing exotic species are required for screening purposes and the slower growing native totara trees will eventually contribute to improved amenity. Overall I consider that the

landscaping and planting proposed is appropriate for the intended development.

- 6.9 Some discussion occurred at the hearing regarding the colour and reflectance of the walls of the proposed buildings. The landscape experts Messrs Milne and Craig ultimately agreed on an appropriate colour and reflectance value and a condition of consent was proposed by Westland Dairies accordingly. I accept that this condition would achieve a better match to sky colours and tones (relative to the original proposal) and it is imposed accordingly.

Noise Effects

- 6.10 Several submitters have identified noise as an issue of concern, particularly in relation to rail movements. The applicant has proposed that noise control measures will be designed to achieve the SDP noise limits at neighbouring properties. These noise limits are relatively stringent as they apply at the boundary of rural properties, not the notional boundary of dwellings on those properties (as is more usual).
- 6.11 The evidence is that the proposed 6m high acoustic fence would result in less noise from current on-site activities being experienced at rural residential properties to the west of the site. The proposed fence would control noise from rail activities on the siding within the site, but of course could not control off-site effects caused by train movements within the rail corridor. I accept that it is appropriate to impose a condition requiring that the fence be constructed within the Westland Dairies property. Construction of an acoustic fence on the south side of the rail corridor would likely offer benefits to Wards Road residents, as many of their concerns relate to noise generated from the rail corridor. However such works would require the agreement of KiwiRail and the SDC. Westland Dairies has offered to consult with these parties regarding building the fence on the south side of the rail corridor and I expect the company to honour that commitment.
- 6.12 A concern was raised that the proposed acoustic fence could cause sound reflectance, thereby exacerbating noise caused by trains on the Midland Line. Mr Camp did not expect this to be a significant issue given that existing vegetation will diffuse reflection to an extent. Nevertheless the applicant has proposed a condition requiring the noise reflectance issue to be considered in the design of the acoustic fence. I have imposed that condition accordingly.

- 6.13 Concerns have also been expressed regarding the noise generated by night time rail movements at the existing Westland Dairies site. I find that it is appropriate to impose a condition preventing night time activities within the rail siding inside the site during the hours of 8.00pm to 7.30am, unless the consent holder provides the consent authority with a report by a suitably qualified acoustic consultant confirming that operation of the siding during those hours will meet the noise limits imposed. I have required that this acoustic assessment be supported by representative noise monitoring of such movements.
- 6.14 The permitted baseline is relevant to noise effects in this case. It would not be appropriate to impose conditions that are more stringent than those applying to permitted industrial activities that could establish within Izone. I am mindful of the concerns of residents regarding the effects of low continuous noise (particularly at night). However the evidence of Mr Camp was that there are no special audible characteristics associated with noise from the site, such that a tighter noise limit may be appropriate. Further Mr Malthus advised that the predicted noise levels for Ms Penkman's property at 38 Armack Drive are very low, similar to expected background levels.
- 6.15 I find that noise effects associated with the proposed development are acceptable. In reaching this conclusion I have taken into account the comprehensive set of conditions imposed. These conditions require noise monitoring to confirm the predicted levels and the development of a noise management plan for the site.

Transportation Effects

- 6.16 The transportation evidence from Messrs Mitchell and Metherell concluded that traffic generated by the proposed development will have little effect on future performance of the transport network. The effect of traffic generated by Izone industrial activities on the surrounding external transport network was considered when the zoning was established. Mitigation measures were included in the SDP to address wider area traffic effects at that time.
- 6.17 Mr Mitchell considered that milk tanker movements are generally not expected to occur through Rolleston township. A traffic management plan is proposed (and will be required by condition of consent) that would enable appropriate route selection for tankers.
- 6.18 Parking and access non-compliances with permitted activity rules in the SDP are regarded as minor. Overall I am satisfied on the evidence that

transportation effects associated with the proposed development will be no more than minor.

Effects on Air Quality

- 6.19 The primary discharges to air from the proposed nutritional dairy plant are combustion products from the 50MW boiler plant and particulate matter from the milk powder dryers and boilers. Relatively minor discharges to air of odour and dust will also occur as a result of wastewater treatment, coal handling and temporary construction activities.
- 6.20 The dispersion modelling predicted peak short-term SO₂ ground level concentrations (GLCs) at neighbouring properties that are well within the NES and relevant New Zealand air quality guidelines. The peak 1-hour average GLC predicted by Mr Pullen is 65µg/m³, approximately 19% of the NES of 350µg/m³. Continuous in-stack monitoring of SO₂ emissions is proposed. I am satisfied on the evidence that any short-term effects of SO₂ caused by the discharge will be minor.
- 6.21 The predicted maximum 24 hour average SO₂ GLC caused by the boiler discharge is 29µg/m³. This value is well within the New Zealand ambient air quality guideline of 120µg/m³ (24 hour average). However the World Health Organisation (WHO) has promulgated a substantially lower guideline of 20µg/m³ (24 hour average) that could be exceeded by the proposed discharge.
- 6.22 It is accepted that the stringent WHO 24-hour average guideline for SO₂ has limited applicability to New Zealand conditions, particularly in relation to industrial discharges located outside major metropolitan areas. The WHO guideline has not been formally adopted in New Zealand at this time. I find it is appropriate to include a clause in the review condition that can require measures to reduce the emission rate of sulphur dioxide from the boiler plant in the event that there is a change to any National Environmental Standard or ambient air quality guideline set by the New Zealand Government or the Canterbury Regional Council that sets a guideline or standard for sulphur dioxide of less than or equal to 20µg/m³ (24 hour average).
- 6.23 Westland Dairies proposes to control particulate matter (PM) emissions from the powder dryers and the boilers by bag filtration. The filtration is designed to achieve PM emission concentration limits of 10mg/Nm³ for the dryers and 50mg/Nm³ for the boiler plant. Proposed monitoring includes detection of the pressure differential across the powder filter bags (to indicate leakage) and a continuous PM monitor in the boiler stack. The

evidence is that these controls are consistent with good practice for modern dairy plants.

- 6.24 Mr Pullen's dispersion modelling predicts that discharges from the plant would cause a maximum PM₁₀ GLC of approximately 8µg/m³ (24-hour average), provided the stacks for the lower (30m) dryer tower scenario extend 9m above the tower roofs. As discussed in Section 5.11 in relation to Objective AQL2 of the NRRP, there is potential for further development of permitted industrial activities (with associated permitted discharges to air) in Izone that could cause cumulative PM₁₀ concentrations to approach the acceptable Regional Ambient Air Quality Target (RAAQT) for PM₁₀ of 33µg/m³ (24 hour average). I therefore find that PM₁₀ GLCs caused by the Westland Dairies discharges alone should be minimised in accordance with good practice, thus reducing the likelihood of cumulative exceedance of the acceptable RAAQT during the 35 year term sought. I have decided to impose a condition requiring that the powder dryer stacks extend at least 9m above the dryer tower roofs.
- 6.25 The requirements for bag filtration and minimum emission stack heights are predicted to result in cumulative PM₁₀ concentrations (including background) that are within the NES of 50µg/m³ (24-hour average). I accept Mr Swete's opinion that the NES for PM₁₀ is unlikely to be exceeded. Consequently the NES regulations do not prevent granting of consent in this case. I am satisfied that any adverse health effects caused by PM₁₀ discharges from the dairy plant are likely to be minor.
- 6.26 The submission from Ballance raised the issue of reverse sensitivity in respect of discharges to air. In response the applicant explained that the dairy plant will operate to strict hygiene requirements and therefore high efficiency particulate filters will be fitted to air intakes and the internal building air will be maintained under positive pressure. I am satisfied that it will be in the best interests of Westland Dairies to ensure that discharges from Ballance and other industrial neighbours do not cause any contamination of milk products. I do not consider that a specific condition requiring particulate filters on air intakes is necessary.
- 6.27 The methods proposed to store and handle coal at the site are considered to be sufficient to prevent adverse effects of dust from that source at neighbouring properties. Construction activities are the primary source of any dust that might be experienced beyond the site boundary, albeit for a finite period. Westland Dairies proposes to undertake appropriate dust control practices during the construction phase, including application of water, setting of vehicle speed limits on unsealed surfaces, stopping work

during strong winds and establishing vegetation on bunds. These measures would be incorporated in the environmental construction management plan required by conditions of consent. Taking into account the temporary nature of any dust effects and the separation from neighbours, I find that dust could be controlled via a management plan to prevent significant adverse effects.

- 6.28 The primary source of potential odour from the dairy plant is the DAF wastewater treatment plant. The applicant has stated that the DAF plant will be enclosed with discharge to air via carbon filtration. Taking this into account and given the location of the plant on the site, I am satisfied that any off-site odour impacts are likely to be minimal. A condition of consent is imposed requiring that there be no offensive or objectionable odour at neighbouring properties.
- 6.29 Submissions have suggested that a precautionary approach should be adopted for discharges to air from the site, particularly in relation to the coal fired boiler. However the mitigation measures proposed and required by consent conditions are in line with good practice for modern dairy plants. These measures include bag filtration of the boiler and powder dryer discharges and continuous monitoring of particulate matter and SO₂ emissions. Taking into account the evidence of Messrs Swete and Pullen, I find that adverse effects of discharges to air from the proposed development are likely to be minor.

Other Matters

- 6.30 In regard to the soil assessment for hazardous contaminants at the site, Mr Christensen submitted that NES approval is not required in this case. The applicant contends that sufficient information is available regarding former uses and potential soil contamination. I agree with Mr Christensen and Mr Taylor that it is not necessary for me to make a determination on this matter. However an advice note will be added to the conditions of the land use consent, advising that the consent holder must ensure that a contaminated soil assessment for the site has been undertaken that meets the requirements of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health, prior to excavation or building construction commencing.
- 6.31 The applicant has proposed to connect to the reticulated wastewater system and water supply. Other local options for disposal of wastewater are limited. I have decided that it is not necessary in this case to require connection agreements with the SDC prior to granting consent.

- 6.32 Some discussion occurred regarding the form of the accidental discovery protocol condition to be attached to the land use consent. I consider that the condition offered by the applicant is reasonable and appropriate, without being unduly limiting, and I have imposed it accordingly.
- 6.33 Mr Malthus advised that the proposed volume of hazardous substance containment systems (110% of maximum hazardous substance volume for roofed systems, 120% for unroofed systems) is in line with current good practice. He was not aware of any technical standards that support 200% volume of containment systems, as requested by Ms Zygadlo. I am satisfied that the application is consistent with SDP and HSNO requirements.
- 6.34 During the hearing I raised questions regarding the value of a community liaison group. Having regards to the specifics of this case, I have decided that a condition requiring such a liaison group is not necessary. There is potential for confusion regarding the source of any annoyance (notably noise) given the other industries operating within Izone and also rail movements on the Midland Line. I find that in this case comprehensive conditions are sufficient, including requirement for Westland Dairies to keep a complaint register of any reported incidents and the corrective action taken. Overall I consider that the conditions proposed, including the amendments discussed during the course of this decision, are consistent with current good practice and will require that the activities are undertaken in a manner that achieves the purpose and principles of the Act.

7. DECISIONS

For the reasons detailed in this report I grant both resource consent applications, under sections 104, 104B, 105 and 108 of the Resource Management Act 1991, subject to the attached conditions.



John Iseli
Hearing Commissioner
31st January 2013

Resource consent RC 125217 is granted subject to the following conditions imposed under Section 108 of the Act.

General

1. The proposal shall proceed in general accordance with the information submitted and plans lodged in support of the application. The plans that are held by Council and form part of this consent are as follows:
 - a. Site Plan - Proposed (10.375, P-SP-103, dated May 2012);
 - b. Site Development Plan (10.375, P-SP-101, Rev H, dated 29 June 2012);
 - c. Site Elevations Plan (10.375, A304, Rev F, dated 21 August 2012); and
 - d. Landscape Plans (Sheet 11A, 11B).
2. Should the consent holder choose to construct the milk powder dryers at a height lower than that set out in the Site Elevation Plan referred to in Condition 1 above, the consent holder shall provide an updated version of that plan (with the sole change being a reduced dryer height) to the Selwyn District Council, prior to commencing construction (the Revised Plan). The Revised Plan provided in accordance with this condition shall replace the Site Elevation Plan, referred to in Condition 1 above, shall be renumbered accordingly, and shall form part of this consent.

Landscape/Visual Amenity

3. The consent holder shall undertake the planting and landscaping which is referred to in the application and is required by these conditions within the first available planting season after commencement of this consent.
4. Where they are currently absent and are required in respect of the proposal, trees shall be planted along the Westland Drive frontage in accordance with Rule 16.1.2.1 (a) and Appendix 21 of the Partially Operative Selwyn District Plan (Township Section).
5. All planting and landscaping shall be planted and maintained in accordance with the Landscape Plans (Sheet 11A, and 11B), and in accordance with the following:
 - a. The ground preparation prior to planting shall include ripping the soil to a minimum depth of 300mm.
 - b. A dripper irrigation system shall be installed to ensure sufficient moisture for maximum growth rates.
 - c. Fertiliser pellets shall be added to each tree at the time of planting.
 - d. Predator protection shall be provided.
 - e. Weed control shall be undertaken to ensure the trees are free of weeds within a 500mm radius of the base of each tree.
 - f. The "Manna Gum" plantation on the site at 64 Wards Road shall be retained on site and the trees shall not be removed for a period of 15 years after planting, except where replacement is required of dead or diseased specimens. Harvesting / coppicing of the Manna Gum plantation can occur after a minimum period of 15 years but must

- ensure that visual mitigation afforded by the plantation from Wards Road is maintained.
- g. No planting shall be located closer than 7.5m from any water race.
6. *Podocarpus totara* shall be planted along the western boundary of the Manna Gum plantation at 64 Wards Road and shall be maintained at least until the dairy plant is decommissioned.
 7. Any vegetation planted as a condition of consent or in fulfilment of a District Plan Rule shall be maintained and if dead, diseased or damaged shall be removed and replaced within the next planting season.
 8. The dead *Pittosporum* trees alongside the rail siding fronting Railway Road shall be replaced with *Populus nigra x euramericana* 'Crow's Nest' spaced at no more than 3m centres.
 9. The acoustic fence referred to in the application shall be established in accordance with the following so as to provide appropriate protection to the existing macrocarpa shelterbelt along Railway Road:
 - a. The acoustic fence shall be located a minimum of 2m from the outside green foliage of the shelterbelt or at a distance no less than 8 times the diameter of the tree trunk (whichever is the greater) to allow for manual shelterbelt trimming.
 - b. Prior to the construction of the acoustic fence the shelterbelt shall be trimmed.
 - c. The location of the acoustic fence shall be subject to approval of the acoustic fence footing design by a qualified arborist or landscape architect before it is constructed.
 - d. The shelterbelt shall be maintained / trimmed a minimum of every 2 years.
 - e. No scalping of the shelterbelt shall take place that will incur dieback.
 - f. Any shelterbelt roots encountered during the construction of the fence shall be cleanly trimmed and treated according to best horticultural practise.
 10. The colour of the exterior surfaces of the milk processing facility shall be limited to;
 - i. Resene ½ Desert Sand (Roof, Canopies, Coloursteel Wall Cladding);
 - ii. Resene Pioneer Red (Pipe Bridges, Gutters, Downpipes, Doors); and
 - iii. Concrete Walls - a blue/grey colour with a light reflectance value not exceeding 65% and a blue component (RGB - Red, Green, Blue) of not less than 190).
 11. To reduce the perceived "bulk" of the buildings, nominally 30% of the Precast Concrete panels will be treated by the following method, to achieve a darker tone to the standard concrete panels:
 - a. The panels shall be sandblasted to a maximum depth of 6 mm, to achieve a tonal difference;

- b. The varying panels shall be placed to favour horizontal banding, to assist in reducing the visual bulk of the building.

Advice note: For operational reasons, the creation of a deep texture to the panels is not desired.

- 12. The maximum height of:
 - a. the dryer buildings shall be 34.5 metres above the existing ground level, with an allowance for up to an additional 9 metres above the building roof for three exhaust stacks; and
 - b. the boiler stack shall be 50 metres above the existing ground level.

Traffic

- 13. At least 20 working days prior to the commencement of operation of the milk processing facility as authorised by this consent, the Consent Holder shall prepare and provide the Asset Delivery Manager of the Selwyn District Council with a Traffic Management Plan, prepared by a suitably qualified person. The objectives of the Traffic Management Plan shall be:
 - a. To ensure the maintenance of a safe and efficient transport system;
 - b. To minimise potential adverse effects of vehicle movements during the operation of the milk processing facility.

The Traffic Management Plan required shall include (but not be limited to) consideration of:

- i. Routes taken and frequency of heavy vehicle movements on public roads within a 3 kilometres radius of the milk processing facility site;
 - ii. Description of the proposed routes, i.e. whether sealed or unsealed roads;
 - iii. Methods of minimising dust nuisance from changes to heavy vehicle movements adjacent to dwellings;
 - iv. Times of day when heavy vehicle movements will be occurring, i.e whether heavy vehicle movements will be occurring at night time;
 - v. Description of the types of heavy vehicles that will be used on public roads.
- 14. Operation of the milk processing facility shall not commence until the Traffic Management Plan has been certified by the Asset Delivery Manager of the Selwyn District Council.
- 15. The Consent Holder may at any time make amendments to the Traffic Management Plan by submitting the amendments in writing to the Asset Delivery Manager of the Selwyn District Council for certification.

16. A minimum of 83 car parks shall be provided on site. The total parking provision shall include a minimum of 3 visitor parking spaces and 3 mobility impaired parking spaces located in close proximity to the administration building entrance.
17. Prior to the commencement of the operation of the plant, all vehicle parking and manoeuvring areas shall be constructed, formed and sealed (with drainage) in accordance with relevant Selwyn District Plan standards, Appendix 13.
18. A heavy duty vehicle crossing complying with the SDC Engineering Code of Practice shall be formed in accordance with Appendix 13 of the Partially Operative District Plan (Townships Volume) to service the site as an exit only. The vehicle crossing shall be sealed to match the existing road surface for the full width of the crossing and for the first 5.5 metres, as measured from the edge of the existing formed carriageway towards and into the property.
19. Traffic signs and markings shall be installed on the site to indicate the vehicle entry and exit points.

Lighting/Glare

20. All lighting on the site shall be designed and installed under advice from an appropriately experienced lighting engineer, so that the following requirements are met:
 - a. All outdoor lighting shall be shielded from above in such a manner that the light source is not visible from the outside of the Business 2A Zone;
 - b. All fixed outdoor lighting shall be directed away from adjacent roads outside of the Business 2A Zone;
 - c. Levels of light spill onto other properties shall not exceed:
 - i. 3 lux spill (horizontal or vertical) within the notional boundary of any dwelling within any Rural zone,
 - ii. 10 lux spill (horizontal or vertical) on to any part of any adjoining property within the Business 2A zone or the adjacent B2 zone.

Noise

21. Construction on-site shall be managed in accordance with the requirements of NZS 6803:1999 "Acoustics-Construction Noise", and shall comply with the limits given in Table 2 of that standard for 'long term' duration activities. For the avoidance of doubt, these limits apply at dwellings in rural areas, and not at the boundary of any site in the Rural zone.

22. Operational noise from the site shall not exceed the following limits when assessed at or within the boundary of any site within a Rural Zone, excluding road, waterway and railway reserves:

	dB L _{Aeq}	dB L _{Amax}
7:30am - 8.00pm	60	80
8.00pm - 7.30am	40	65

23. The consent holder shall only undertake activities within its rail siding inside the site during the hours of 7.30am to 8.00pm, unless the consent holder provides the consent authority with a report by a suitably qualified acoustic consultant confirming that operation of the siding during the hours of 8pm to 7.30am will meet the noise limits set out in condition 22 above. Such acoustic assessment shall be supported by representative noise monitoring of such movements.
24. Any concrete pours that are necessary between 8:00 pm and 7.30 am shall not take place until the noise control barrier is constructed along the Railway Road section of the site boundary, as indicated in the approved Plans.
25. The noise control barrier along the Railway Road section of the site boundary shall be completed before the plant is operational. The design and standard of construction of the noise control barrier shall be determined by a suitably qualified acoustic consultant and shall take into account possible reflection of noise from along the rail corridor and Railway Road towards neighbouring residences.
26. Operational noise shall be measured in accordance with NZS6801:2008 Acoustics—Measurement of environmental sound, and assessed in accordance with NZS6802:2008 Acoustics— Environmental noise. Copies of all noise monitoring reports held by the Consent Holder relating to the exercise of this consent shall be made available to the Council’s Environmental Policy and Approvals Manager or their representative, on request.
27. Prior to the commissioning of the plant, the consent holder shall submit an Operational Noise Management Plan to the Selwyn District Council’s Environmental Policy and Approvals Manager for certification. The Noise Management Plan shall include:
- The procedures for a representative noise monitoring programme for determining compliance with the noise limits specified in condition 22 above, including monitoring for the purposes of conditions 29 and 30;
 - The procedures for determining compliance with the noise limits specified in condition 22 following the replacement, repair or recommissioning of any plant or equipment which has potential to affect compliance (in the opinion of the consent holder’s acoustics consultant).
 - The lines of responsibility and procedures to be taken in receiving, recording and actioning of noise complaints.

- d. The procedures for determining compliance with the noise limits specified in condition 22 following any complaint.
 - e. The procedures for review of the Plan's provisions as and when necessary to address issues of non-compliance or noise annoyance.
28. Prior to the issue of building consent, a report shall be submitted by a suitably qualified and experienced acoustic consultant confirming that noise from the completed site development will comply with the noise limits set out in condition 22 above. Such report shall outline the noise control methods proposed for the site.
29. Within 3 months of commissioning the site, the consent holder shall undertake noise monitoring to confirm compliance with the noise limits set out in condition 22 above. Results of this monitoring shall be submitted to Council no later than 1 month after completion of the monitoring. In the event that monitoring identifies a non-compliance, the report shall include a detailed plan to achieve compliance, and a timeline for implementation of that plan.
30. In the event that the plant is commissioned in stages, noise monitoring shall be undertaken in accordance with condition 29 above at the completion of each stage.
31. Reversing alarms on mobile machinery permanently located on-site shall be replaced with alternative technology such as broadband alarms or lights. For the avoidance of any doubt, this condition does not apply to milk tankers or trucks operating on the site.

Environmental Construction Management Plan

32. Best practicable measures shall be taken to avoid or mitigate the dispersal and deposition of dust resulting from construction activities beyond the property boundary. These dust control measures shall include, but are not limited to, the following:
- i. Application of water by water tanker and/or sprinkler systems during dry windy conditions;
 - ii. Restricting vehicle speeds on unsealed surfaces;
 - iii. Restricting dust generating operations during strong wind conditions; and
 - iv. Rapid establishment of grass by "hydroseeding" or similar methods on soil bunds and other unsealed areas.
33. At least 20 working days prior to the commencement of construction works on site, the consent holder shall prepare and submit to Selwyn District Council, Attention: Asset Delivery Manager, an Environmental Construction Management Plan. This shall include, but not be limited to:
- a. The best practicable measures that shall be adopted during construction to avoid, remedy or mitigate dust related adverse effects on adjoining properties and surface water bodies, as well as outlining:
 - i. The contact details of the Lead Contractor;

- ii. The phases in which work will be undertaken for the purposes of constructing the Nutritional Dairy Plant and associated infrastructure on site;
- iii. The timing and duration for each phase, including the working hours within which works will be undertaken;
- iv. The disturbed area in square metres, including location, area and volume of earthworks associated with each phase of the construction;
- v. The sediment and erosion control measures that are to be implemented for each phase of the works authorised by this consent, including but not limited to swales and soakage pits (if required);
- vi. Construction noise limits, minimum buffer distances and attenuation measures for specific activities and areas in order to comply with NZS6803:1999 Acoustics - Construction Noise;
- vii. The establishment and retention of a water supply on site for dust control;
- viii. A 20 kilometre per hour speed limit on unsealed roads and surfaces left exposed during the construction period;
- ix. Details of locations and quantities of cuts and fills, including details of backfilling techniques to ensure fugitive dust controls are prevented as much as is practicable;
- x. Processes and procedures for updating the plan.

34. A copy of the Environmental Construction Management Plan shall be provided to adjoining landowners / residents upon request.

35. Stockpiles of soil shall be dampened with water during dry periods to mitigate dust effects.

Hazardous Substances

36. For the purposes of this resource consent:
- a. HSNO means the Hazardous Substances and New Organisms Act 1996 and associated regulations.
 - b. Hazardous substance means a substance that is subject to HSNO.

37. The management of hazardous substances at the site shall include compliance with the following requirements:

- a. All areas or parts of the site where hazardous substances (including waste) are stored, used, loaded or unloaded shall be sealed, bunded and roofed or covered;
- b. Secondary containment systems shall be provided for hazardous substances that are liquids or that are “pooling substances” as defined in the Hazardous Substances (Emergency Management) Regulations 2001;
- c. The volume of any secondary containment system shall be 110% of the maximum volume of the hazardous substance when the area is roofed, or 120% when unroofed;

- d. Any secondary containment system shall be designed in such a way as to ensure containment of any hazardous substance that spills due to the collapse of any container, and the containment from the direct leakage from any container;
 - e. Any secondary containment system shall be sealed with impervious materials that are resistant to breakdown from the particular hazardous substances which they are designed to contain;
 - f. Any containment system and its sealment shall be maintained as and when necessary;
 - g. The collection of hazardous substances for disposal purposes, or for subsequent use, shall be in containers that seal and contain the hazardous substances collected;
 - h. All hazardous substance area shall be adequately signposted according to the Code of Practice for "Warning Signs for Premises Storing Hazardous Substances" of the New Zealand Chemical Industry Council.
38. The consent holder shall ensure that:
- a. all practicable measures shall be undertaken to prevent oil and fuel leaks from vehicles, storage vessels and machinery; and
 - b. storage of hazardous substances or refuelling of vehicles and machinery shall not occur within 50 metres of any ephemeral or flowing surface water body.
39. The consent holder shall maintain on site at all times, measures to prevent spills entering land or water including:
- a. spill kits to contain or absorb any spilled hazardous substance;
 - b. signs to identify the location of spill kits; and
 - c. written procedures in a clearly visible location that are to be undertaken to contain, remove and dispose of any spilled hazardous substance.
40. Copies of HSNO Test Certificates for each storage system where required, stationary container certificates, and approved handler certificates shall be retained on site at all times and made available for inspections by officers or agents of the Consent Authority.
41. The consent holder shall maintain a current inventory of all hazardous substances stored on the site, and a copy of the inventory shall be made available to the Consent Authority on request.
42. In the event of a spill of a hazardous substance within the site, the consent holder shall:
- a. take all practicable measures to prevent the hazardous substance being further discharged into land or water; and
 - b. collect and remove the hazardous substance and any contaminated material as soon as practicable.
43. In the event of a spill of more than 50 litres or 50 kilograms of a hazardous substance on site, the consent holder shall record and provide to the Canterbury Regional Council, Attention: RMA Compliance and Enforcement

Manager, and to the Selwyn District Council, Attention: Environmental Policy and Approvals Manager, within 24 hours of the spill:

- a. the date, time, location and amount of the spill;
 - b. the substance spilt;
 - c. a description of the remediation measures taken in response to the spill;
 - d. a description of the measures taken to prevent the spilt substance being discharged into land or water;
 - e. the cause of the spill and measures that will be taken to prevent a reoccurrence; and
 - f. the timeframes for such measures.
44. Any contaminated material, resulting from a spill as specified in condition 43, which is removed from the site shall be disposed of at a facility authorised to receive such material and the consent holder shall provide the Canterbury Regional Council and the Selwyn District Council with written confirmation of such disposal within 10 working days of the disposal.

Complaints Register

45. The consent holder shall maintain a Complaints Register for any complaints about the construction activities or operation of the milk powder plant received by the consent holder in relation to traffic, noise, glare, dust and odour.
46. The Register shall record, where this information is available:
- a. the date, time and duration of the incident that has resulted in a complaint;
 - b. the location of the complainant at the time of the incident; and
 - c. any corrective action undertaken by the consent holder in response to the complaint, including timing of that corrective action.
47. The Register shall be made available to both the Selwyn District Council and the Canterbury Regional Council at all reasonable times on request. Complaints received by the consent holder which may relate to compliance with the conditions of this resource consent shall be forwarded to the appropriate Council within 48 hours of the complaint being received.

Accidental Discovery Protocol

48. If historic artefacts, cultural remains, koiwi Tangata (human bones) or taonga (treasured artefacts) are discovered during the site excavation authorised by this consent, then:
- a. All work in the immediate vicinity (within 20 metres) of the discovery shall stop;
 - b. The Consent Holder shall inform the Team Leader - Resource Consents, Selwyn District Council, of the discovery as soon as possible. If the discovery includes koiwi Tangata or taonga, the Consent Holder shall also inform the Taumutu Runanga of the discovery.

- c. The Consent Holder shall then contract a suitably qualified and experienced archaeologist (i.e. a person with a post graduate degree in archaeology, and who is a member of the New Zealand Archaeological Association) to prepare a written report on whether the discovery is from an archaeological site, as defined in the Historic Places Act 1993. The Consent Holder shall provide a copy of that report to the Team Leader - Resource Consents, Selwyn District Council.
- d. If the report referred to in (c) above finds that the discovery is not from an archaeological site, work in the immediate vicinity of the discovery may resume 24 hours after the Consent Holder has provided a copy of the report to the Selwyn District Council.
- e. If the report referred to in (c) above finds that the discovery is from an archaeological site and an archaeological authority under the Historic Places Act 1993 is required, the Consent Holder shall obtain that authority from the Historic Places Trust before work in the immediate vicinity may resume. If the discovery includes koiwi Tangata or taonga, the Consent Holder shall also consult with Taumutu Runanga, before lodging the application for the authority, about the action to be undertaken in relation to the koiwi Tangata or taonga.

Advice note: The contact information for Taumutu Runanga can be obtained by contacting the Selwyn District Council (phone 03 318-8338) or the Canterbury Regional Council (phone 0800 324 636).

Review (Section 128 of the RMA)

- 49. The Selwyn District Council may, once per year, on any of the last five working days of April or October, serve notice of its intention to review the conditions of this consent for the purposes of:
 - a. dealing with any adverse effect on the environment which may arise from the exercise of this consent and which it is appropriate to deal with at a later stage; and/or
 - b. requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment, and/or
 - c. requiring monitoring in addition to, or instead of, that required by the consent.

Water

- 50. The consent holder shall comply with the following requirements of Selwyn District Council Policy W213:
 - a. All high risk properties shall have testable RPZ type backflow prevention devices installed at the point of supply. These devices are manufactured in accordance with AS/NZS 2845 and installed in compliance with AS/NZS 3500:1 at the point of supply (likely to be the

- property boundary). (Note: High Risk is to be interpreted as those properties with activities that have the potential to cause death).
- b. This work shall be undertaken by Council, or Council's approved agent, on behalf of, and at the cost of, the owner of the property to which the backflow prevention device is installed.
 - c. The Council, or Council's approved agent, may undertake annual backflow testing on point of supply backflow prevention devices on behalf of, and at the cost of, the owner of the property to which the backflow prevention device is installed and keep appropriate records of this.

Lapsing

51. This consent shall lapse ten years after the date of commencement, unless the consent is given effect to before that lapsing date, under section 125 of the Resource Management Act 1991.

Advice Notes:

1. *The consent holder must contact the Transportation Department to coordinate the inspection of the entranceway formation in accordance with condition 18 above. At least two days notice should be given before work commences.*
2. *A trade waste agreement must be submitted and approved, and appropriate charges contained within must be paid to Council prior to any waste water discharge commencing from the development.*
3. *The consent holder must install stormwater treatment and disposal systems to service the development in accordance with the approved Engineering Plans and the requirements of the Canterbury Regional Council.*
4. *In accordance with Section 36 of the Resource Management Act 1991, the Council's standard monitoring fee is charged.*
5. *The consent holder must ensure that a contaminated soil assessment for the site has been undertaken that meets the requirements of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health, prior to excavation or building construction commencing. The granting of this land use consent does not indicate that NES requirements have been met.*

General and As-Built Plans

6. *All work must comply with the Engineering Code of Practice except as agreed with the Council.*

7. *All Management Plans and Engineering Design Plans required to be certified by the appropriate person(s) at Selwyn District Council should be submitted at least 20 working days prior to the works subject of those plans being commenced.*
8. *Two copies of the plans and specifications of all works, including water, water races, irrigation, sewer, access and parking, stormwater and landscaping, should be submitted to the Council for approval. Engineering approval of complying documents must be given in writing and work should not commence until this has been received from the Council. All sewer reticulation services should be as per Council CCTV specifications. Any subsequent amendments to the plans and specification must be submitted to Council for approval.*
9. *The consent holder must forward with the engineering plans and specifications, copies of any other consents required and granted in respect of the development, including any certificate of compliance or consent required from the Canterbury Regional Council.*
10. *Accurate 'as-built' plans of all services should be provided to the satisfaction of the Asset Manager. All assets being vested in Council should be provided in an appropriate electronic format for integration into Council systems. Actual costs involved in provision and transfer of this data to Councils systems are to be borne by the consent holder.*

Resource consent CRC130776 is granted for a term of 35 years subject to the following conditions imposed under Section 108 of the Act.

Duration of Consent: 35 years

General

1. Discharges of contaminants into the air shall be only from the construction and operation of a Nutritional Milk Processing Plant including coal fired boilers and milk powder dryers at 7 - 41 Westland Place, Izone Business Park, Rolleston, or about map reference NZTopo50 BX23:4910-7387 (NZMS 260 M36:5909-3548).
2. The discharges, including construction activities, shall not cause particulate matter or odour that is objectionable or offensive beyond the boundary of the milk processing plant site.
3. The processes resulting in discharges into the air shall be operated and maintained using emission control mechanisms to achieve the emission standards stated in the conditions of this consent.

Fuel and Ash Storage

4. After being brought on to the site, coal for the boilers shall be stored in covered underground bunkers (except for day bins attached to the boilers or any containers used to transport coal between the underground bunkers and the boilers).
5. All unloading of coal on the site shall be completed within a solid roofed area.
6. Ash from the coal fired boilers shall be contained and managed as much as is practicable so as to prevent the emission of fugitive dust and particulate matter.

Coal Fired Boilers

7. The coal fired boilers shall have a net combined maximum useful energy output of no greater than 50 megawatts.
8. Combustion gases from the boilers shall be:
 - a) Discharged to air via bag-filters, capable of achieving the particulate emission concentration limits specified in Condition 12 and the particulate mass emission limit specified in Condition 13, and from a common boiler-stack terminating not less than 50 metres above the local ground level; and

- b) Discharged from the stack vertically into the air and not impeded by any obstruction above the stack which decreases the vertical efflux velocity from that which would occur in the absence of such an obstruction.
9. The boiler plant common stack efflux velocity, at the combined maximum continuous rating of all boilers, shall not be less than 20 metres per second.
 10. The opacity of emissions from the common boiler-stack shall not be darker than Ringelmann Shade 1 as described in New Zealand Standard 5101:1973 except when the bag-filters are bypassed in accordance with Condition 11.
 11. Bypassing of the coal fired boiler bag-filters shall occur only:
 - a) In the event of an emergency situation such as if the flue gas temperatures are sufficiently high to damage filter bags but after boiler fuelling is stopped;
 - b) When drying out green refractory during commissioning of a boiler, following repairs to a boiler refractory, and during subsequent re-bricking, and only up to five days after commencing dry out at minimum output not exceeding 30% of a boiler's capacity;
 - c) In the event of bag-filter malfunction, providing the bypass shall not occur for more than two hours at any time; or
 - d) During start-up of a boiler until the flue gas temperature exceeds 140 degrees Celsius but only at a minimum output not exceeding 30% of boiler capacity.
 12. The concentration of total suspended particulate in the common boiler-stack shall not exceed 50 milligrams per cubic metre corrected to zero degrees Celsius and 101.3 kilopascals pressure on a dry gas basis adjusted to twelve percent carbon dioxide or eight percent oxygen by volume, except when the bag-filters are bypassed in accordance with Condition 11.
 13. The discharge of total suspended particulate from the common boiler-stack shall not exceed 5.0 kilograms per hour.
 14. The discharge of sulphur dioxide from the common boiler-stack shall not exceed 210 kilograms per hour when operating at maximum continuous rating or pro rata at a lesser operating condition. The sulphur dioxide discharge rate shall be calculated from the burning rate of the coal blend and the sulphur content of that coal blend or such other method as approved by Environment Canterbury.
 15. The common boiler-stack shall be fitted with a particulate measurement device that gives a continuous display and record of the particulate concentration of the discharge. The device shall be alarmed to the boiler control room and shall have a current calibration certificate or equivalent that is available for inspection in the control room. A broken bag detection system shall be incorporated into the particulate measuring device and shall be set to ensure, as far as practicable, that any damage or deterioration to filter bags or other problems that could cause an exceedance of the 50

milligrams per cubic metre particulate emission concentration standard are detected.

16. During periods when boiler bag-filters are bypassed:
 - a) The dates and times that bag-filters are bypassed and the reasons for the bypass shall be recorded and those records maintained; and
 - b) These records shall be made available to the Canterbury Regional Council on request and shall be included as part of the Annual Environmental Report required in accordance with Conditions 37 and 38.

Monitoring

17. Records shall be kept of:
 - a) The tonnage of coal burned per month;
 - b) The average and maximum hourly rate of consumption of coal based on both the average and maximum steam production rates;
 - c) The average calorific value of the coal and the sulphur content by weight; and
 - d) Calibration of the in-stack particulate measuring device required by condition 15 above.

The records required by this condition shall be summarised in the Annual Environmental Report required in accordance with Conditions 37 and 38. The recorded data shall be retained and shall be made available to the Canterbury Regional Council on request.

18. In-stack monitoring of sulphur dioxide concentrations and combustion flow rates shall be undertaken in the common boiler stack that discharges emissions from the boilers. The meter shall be installed and operational from when the boiler is first operated. The method of sampling sulphur dioxide concentrations shall comply with:
 - a) USEPA Method 6C “Determination of Sulphur Dioxide Emissions from Stationary Sources (Instrument Analyzer Procedure)” or equivalent standard, or
 - b) ISO 7935:1992 “stationary source emissions - determination of the mass concentration of sulphur dioxide - performance characteristics of automated measuring methods”.
19. Sulphur dioxide emission rates shall be calculated at all times the boilers are operated, using in-stack sulphur dioxide concentration and gas flow measurements. The data shall be calculated for the combined boilers as a one-hour average and as a 24-hour average.

Milk Powder Dryers

20. Discharges to the air from the dryers shall be via bag-filters, capable of achieving the particulate emission concentration limit specified in Condition 23 and particulate mass emission limit specified in Condition 24.
21. Discharges from the dryers shall be:

- a) To air via stacks terminating not less than 39 metres above the local ground level;
 - b) Via stacks at least 9.0 metres above the roof level of the dryer buildings; and
 - c) From the stacks vertically into the air and not impeded by any obstruction above the stack which decreases the vertical efflux velocity from that which would occur in the absence of such an obstruction.
22. The minimum efflux velocity of exhaust air from the dryer exhaust stacks shall be 20 metres per second at the maximum continuous rating of each dryer.
23. The concentration of total suspended particulate in any dryer stack exhaust air shall not exceed 10 milligrams per cubic metre corrected to zero degrees Celsius and 101.3 kilopascals on a dry gas basis.
24. The combined discharge of total suspended particulate matter from all milk powder dryer stacks shall not exceed 4.0 kilograms per hour.
25. For each milk powder dryer:
- a) The outlet(s) of the dryer bag-filters shall (each) be fitted with a broken bag detector and alarmed to the Milk Powder Plant control room;
 - b) The broken bag detector shall be set to ensure, as far as practicable, that any damage or deterioration that could cause exceedance of the 10 milligrams per cubic metre (corrected to zero degrees Celsius and 101.3 kilopascals on a dry gas basis) total particulate emission concentration standard is detected; and
 - c) The operators shall be advised immediately if any such exceedance is detected.

Emission Testing Requirements

26. The consent holder shall install sampling ports in the common boiler-stack and in all of the dryer stacks in accordance with Australian Standard AS4323.1-1995, or equivalent method, for provision and location of sampling ports, services, platforms and access as well as provision of single phase electrical supply.
27. Measurement requirements and testing and analysis of samples:
- a) The concentration of total suspended particulate matter and the concentration of sulphur dioxide, in combustion gas in the common boiler-stack or in the duct into the common boiler-stack shall be measured within four months of completing commissioning of each boiler and bag-filter unit and thereafter at least every 12 months to determine compliance with Conditions 12, 13, and 14;
 - b) Measurement of the discharge from the boiler-stack shall occur when the boilers are operating at a rate of at least 75 percent of their maximum continuous rating;

- c) Testing and analysis of samples shall be carried out by an organisation and laboratory accredited by International Accreditation New Zealand (IANZ) for the tests and analyses involved.

28. For total suspended particulate:

- a) The concentration of total suspended particulate matter in the exhaust gas from all milk powder dryer stacks shall be measured within four months after completing commissioning of each milk powder dryer and bag-filters and thereafter at least once every 12 months;
- b) The method of sampling and analysis for total particulate matter shall comply with USEPA Methods 5 or 17, or ISO 9096:2003, ASTM D3685, or equivalent method, provided that such a methodology shall be provided to the Canterbury Regional Council on request;
- c) The testing time for each particulate sample shall be two hours continuous and at least three samples shall be collected;
- d) Results shall be adjusted to zero degrees Celsius, 101.3 kilopascals and twelve percent carbon dioxide or eight percent oxygen by volume on a dry gas basis and reported as a mass emission expressed as kilograms per hour.

29. For sulphur dioxide:

- a) The method of sampling and analysis for sulphur dioxide shall be USEPA Method 6 or 6A, or an equivalent method, provided that such a methodology shall be provided to the Canterbury Regional Council on request;
- b) The testing time for each sulphur dioxide sample shall be one hour continuous and at least three samples shall be collected;
- c) Results shall be adjusted to zero degrees Celsius, 101.3 kilopascals and twelve percent carbon dioxide or eight percent oxygen by volume on a dry gas basis and reported as a mass emission expressed as kilograms per hour.

30. Volumetric flow of combustion gas and gas temperatures during each particulate and sulphur dioxide emission test shall be determined and recorded. The results shall be presented as part of the emission test report.

31. Oxygen (or carbon dioxide) concentrations in combustion gases shall be continuously monitored and recorded during each particulate and sulphur dioxide emissions test. Results shall be presented as part of the emission test report.

32. The results of the emissions tests and a description of the testing methods shall be provided to the Canterbury Regional Council within 40 working days of the testing being completed. A summary of the results shall also be included in the Annual Environmental Report.

Servicing

33. The coal fired boilers shall be serviced at least once every year by a person competent in the servicing of such appliances. The servicing shall include:

- a) Internal cleaning and replacement or repair of damaged equipment and services as necessary;
- b) Adjustment of the air to fuel ratio to optimise energy efficiency and to minimise the emissions of products of incomplete combustion; and
- c) Adjustment of boiler monitoring equipment consistent with the intent of this consent.

Servicing reports shall be prepared and copies provided to the Canterbury Regional Council on request. Confirmation that each annual service has been undertaken and at least a summary of the service report shall be provided in the Annual Environmental Report.

34. All bag-filters shall be serviced at least once every year or in accordance with the manufacturer's recommendations. Servicing shall include, but not be limited to:
- a) Inspection of all bags for general condition; and
 - b) Replacement or repair of any defective bags.

Dust Control

35. Best practicable measures shall be taken to avoid or mitigate the dispersal and deposition of dust resulting from construction activities beyond the property boundary. These dust control measures shall include, but are not limited to, the following:
- a) Application of water by water tanker and/or sprinkler systems during dry windy conditions;
 - b) Restricting vehicle speeds to less than 20 kilometres per hour on unsealed surfaces;
 - c) Restricting dust generating operations during strong wind conditions; and
 - d) Rapid establishment of grass by 'hydro-seeding' or similar methods on soil bunds and other unsealed areas.

Complaints

36. A record of all complaints made to the consent holder relating to this consent shall be maintained and shall include:
- a) The date, time, location and nature of the complaint;
 - b) The name, phone number and address of the complainant, unless the complainant refuses to supply these details;
 - c) Details of the complaint;
 - d) A description of the wind speed and direction and rainfall (if any) at the time of the incident that gave rise to the complaint;
 - e) The most likely cause of the complaint; and
 - f) Any remedial action taken by the consent holder.

The record of complaints shall be provided to the Canterbury Regional Council upon request and as part of the Annual Environmental Report required in accordance with Conditions 37 and 38.

Annual Environmental Report

37. The consent holder shall, not later than 30 September of each year after the plant is commissioned, provide an Annual Environmental Report to the Canterbury Regional Council, Attention RMA Compliance and Enforcement Manager.
38. The Annual Environmental Report shall set out a summary of results (with analyses) and comments on all requirements, including emissions tests undertaken in relation to this consent over the previous processing season (from 1 August to 31 July inclusive).

Air Discharge Management Plan

39. At least 10 working days prior to the exercise of this consent, the consent holder shall prepare and submit to the Canterbury Regional Council, Attention RMA Compliance and Enforcement Manager an Air Discharge Management Plan (ADMP), which details methods and procedures to be used to control discharges to air from the site. The ADMP shall include, but not be limited, to:
 - a) A description of the site and its operation with a focus on the site components that are of direct relevance to the discharges to air from the site;
 - b) Management and operational procedures including cleaning, replacement procedures, regular maintenance and monitoring requirements, which are specific to the site's emission control systems;
 - c) Management and operational procedures, including shutdown systems, relating to the site's system failure mechanisms;
 - d) Management and operational procedures specific to the site's activities that have the potential to generate odour;
 - e) Management and operational procedures that specifically relate to cooling towers or evaporative coolers if used;
 - f) Management and operational procedures for ensuring boiler optimisation and burner efficiency;
 - g) Inspection and maintenance procedures for the site's plant needed to ensure that all aspects of the site's operation associated with discharges to air are maintained in good operating condition;
 - h) Monitoring and reporting procedures;
 - i) Emergency response and contingency plans for events;
 - j) Procedures for responding to complaints and community liaison including contact telephone numbers for staff of the consent holder who are responsible for responding to complaints; and
 - k) Procedures for reviewing and/or improving the ADMP.

Administration

40. The consent holder shall:
 - a) Within one week inform the Canterbury Regional Council, Attention RMA Compliance and Enforcement Manager, of the date on which this consent is first exercised; and

b) Report any changes to the coal blend burned in the boiler as part of the Annual Environmental Report required in accordance with conditions 37 and 38.

41. The Canterbury Regional Council may, once per year, on any of the last five working days of April or October, serve notice of its intention to review the conditions of this consent for the purposes of:
- a) Dealing with any adverse effect on the environment which may arise from the exercise of this consent and which it is appropriate to deal with at a later stage; and/or
 - b) Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment; and/or
 - c) Requiring monitoring in addition to, or instead of, that required by the consent; and/or
 - d) Requiring measures to reduce the emission rate of sulphur dioxide from the boiler plant in the event that there is a change to any National Environmental Standard or ambient air quality guideline set by the New Zealand Government or the Canterbury Regional Council that sets a guideline or standard for sulphur dioxide of less than or equal to $20\mu\text{g}/\text{m}^3$ (24 hour average).
42. This consent shall lapse ten years after the date of commencement, unless the consent is given effect to before that lapsing date, pursuant to section 125 of the Resource Management Act 1991.