

BEFORE ENVIRONMENT SOUTHLAND

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Lorneville Processing Plant Resource Consent Applications (APP-20158595)

**STATEMENT OF EVIDENCE OF FRANCES WISE
ON BEHALF OF ALLIANCE GROUP LIMITED**

4 July 2016

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QUALIFICATIONS AND EXPERIENCE

- 1 My full name is Frances Helen Wise.
- 2 I hold a Bachelor's Degree in Horticulture from Lincoln College and a Graduate Diploma in Environmental Management from the University of Auckland. I hold a National Diploma in Wastewater Treatment and a National Certificate in Water Treatment.
- 3 I have been employed at Alliance Group Limited (**Alliance**) for more than 21 years. In my current role as Group Environmental Manager I am responsible for overseeing all environmental issues at each of Alliance's eight processing sites. I have held this and a similar position for eight years. Prior to this I was responsible for environmental performance at the Lorneville Processing Plant (**Lorneville**) for six years.
- 4 I have managed consenting processes for several Alliance processing sites. This includes discharges to air (Levin and Maitua), discharge of wastewater treatment solids to land (Pukeuri and Maitua), discharge of treated wastewater to water (Makarewa), abstraction of surface water (Makarewa), abstraction of groundwater (Makarewa) and discharges of stormwater to water (Lorneville, Maitua and Makarewa).
- 5 I maintain an overview of environmental legislative compliance at all Alliance sites. I provide technical advice to sites as required particularly in areas of by product processing, water and wastewater treatment.
- 6 I have primary responsibility for Alliance's continuing certification to the ISO 14001 and Enviro-Mark®NZ environmental management standards.
- 7 I have responsibility for the resource consenting of the Lorneville operations and I am authorised to give this evidence on behalf of Alliance. My direct management of this process commenced in October 2012 when I first brought together a selected team of specialist consultants in order to appraise them of the upcoming consenting project.
- 8 For the duration of the project to date I have continued to manage the process and the team of consultants. I have provided the specific Lorneville knowledge required for the process to be understood. I have also been responsible for directing and overseeing the various process and environmental improvements that have occurred in the period since the consenting project began, and which are discussed later in my evidence and in the evidence of other witnesses. I have read and am

familiar with the Assessment of Environmental Effects and technical reports attached to the AEE, and I have read the Section 42A Report and the following briefs of evidence:

- (a) Danny Hailes;
- (b) Mike Copeland;
- (c) Tony Dons;
- (d) Richard Montgomerie;
- (e) Mike Fitzpatrick;
- (f) Mark James;
- (g) Azam Khan;
- (h) Peter Callander;
- (i) Roger Cudmore;
- (j) John Kyle;
- (k) Greg Ryder;
- (l) John Iseli; and
- (m) Rob Potts.

SCOPE OF EVIDENCE

9 My evidence addresses the following matters:

- (a) Environmental Management;
- (b) Lorneville Site;
- (c) Treatment of Wallacetown Sewage;
- (d) Recent Operational Improvements and Changes;
- (e) Resource consents;
- (f) Operational aspects;
- (g) Cost of implementing improvements; and
- (h) Stakeholder relationships.

EXECUTIVE SUMMARY

10 The replacement of expiring resource consents held by Alliance's Lorneville Meat Processing and export plant is critical to Alliance's operation. Alliance's approach to this consent process has been extensive and thorough, and has been designed to ensure new consents are able to be granted which provide Alliance with long term security so the company can plan for the future, while also ensuring that a high level of environmental performance is achieved throughout the life of the new consents. Alliance has also been acutely aware of its responsibility to adopt a position in relation to the wastewater discharge which will assist Environment Southland in the broader task of improving the overall environmental condition of the New River Estuary and the Oreti River catchment. While at this stage the timing of these catchment wide improvements is unknown, and the final standards to be achieved have yet to be determined, Alliance has committed to achieving a further major reduction in nutrient loads in line with the expectations of the national bottom lines in the National Policy Statement for Freshwater Management within 15 years. If the Commissioners accept this proposal, Alliance will be committed to the investment required to achieve this improvement even if other contributors of nutrients and other contaminants to the river system take longer to improve their performance. Other key aspects relevant to the consenting project include:

- (a) Alliance, including at its Lorneville Plant, maintains external certifications of its environmental management systems. The systems drive Alliance's objectives of legislative compliance and continual environmental improvement.
- (b) Lorneville is a fully integrated plant processing predominantly ovine species with calves being processed in the spring. Its operation is double shifted and seasonally variable with peak processing generally occurring between December and April. Processes include slaughter, further processing, chilling and freezing facilities, edible offals and co-products, soup stock, rendering, fellmongering, potable water and wastewater treatment, laboratory and a farm. A low level of processing occurs during winter and spring months. Short maintenance shut down periods occur usually in June or July and October / November.

- (c) Significant site improvements have been made in recent years and further projects are planned. Some of the improvements have resulted in improvements that were able to be taken into account in the preparation of the AEE and its accompanying technical reports while other improvements post-date the technical reports and are therefore addressed in evidence. The improvements include:
- (i) Commissioning of a new energy efficient and low waste rendering plant with comprehensive odour management processes;
 - (ii) Improved emission controls in one of the coal fired boilers;
 - (iii) Additional primary wastewater treatment;
 - (iv) Improved disposal of stock yard waste;
 - (v) Reconfigured wastewater discharge outlets; and
 - (vi) Improved operational control of fellmongery waste streams.
- (d) Lorneville currently holds 12 resource consents issued from Environment Southland or Invercargill City Council. These authorise:
- (i) Abstraction of water from the Oreti River and the Makarewa River and a land use consent associated with the abstraction from the Oreti River;
 - (ii) Discharge of treated wastewater, including sewage from Wallacetown, to the Makarewa River;
 - (iii) Discharge of treated wastewater to land by irrigation, and for short term storage;
 - (iv) Discharge of contaminants to air from site activities;
 - (v) Discharge of contaminants to air and land from sheepyards solids;
 - (vi) Discharge of site stormwater to the Makarewa River; and
 - (vii) Discharge of leachate to ground from a closed landfill.
- (e) Peak processing at Lorneville coincides with the period most likely to produce warm dry conditions that lead to low river flows and low soil moisture. It is critical to the region that the plant can continue to

operate at these times to ensure the welfare of animals on drought stricken farms, the welfare of the farmers, continued employment at the plant and to minimise regional economic impacts. Key to this is the ability to continue abstracting water, while increasing water use efficiency measures, and to have the ability to manage the discharge of treated wastewater by matching the discharged volumes to the Makarewa River's assimilative capacity and utilising the extensive on-site storage capability.

- (f) In its resource consent application, Alliance has committed to a very significant wastewater treatment up-grade along with a range of other improvements. Timing of the proposed capital spends, and their associated increases in operating costs, is critical to Alliance for both financial and implementation planning purposes. The cost of all up-grades is borne by Alliance's farmer shareholders who are also facing the costs of on-farm environmental improvements.
- (g) Alliance has strong and cooperative relationships with a wide range of stakeholders including Environment Southland, Invercargill City Council, Southland District Council, Te Ao Marama Incorporated, Southland Fish and Game, Department of Conservation, Public Health South and its neighbouring community. These relationships are maintained in a range of ways including regular community meetings and newsletters, readily available plant contacts, and the formation of a Technical Working Group with respect primarily to wastewater discharges.

ENVIRONMENTAL MANAGEMENT

- 11 Alliance's environmental policy commits to the sustainable management of the natural and physical resources its operations depend on. In meeting this commitment Alliance's management systems are certified to the ISO 14001 and Enviro-Mark®NZ environmental management standards. Alliance strives to meet or exceed relevant regulatory requirements and to continually improve its environmental performance. Alliance's environmental management systems are concerned with more than just compliance with resource consent conditions, although this is of course a major consideration. Extensive process control and compliance monitoring and key performance indicator programmes are in place and this is the way by which we measure our performance and develop baselines for renewed improvement objectives and targets. These

certifications, objectives and programmes are fully implemented at Lorneville.

- 12 Lorneville employs a site Environmental Coordinator. Their primary responsibility is to manage and report on compliance with resource consents, to manage the extensive environmental monitoring and key performance indicator programmes implemented for the site and to identify opportunities for improvement in environmental performance.
- 13 In recent years, Lorneville has maintained an excellent compliance record. No enforcement action has been taken by Environment Southland during the life of the current consents. If compliance issues or site malfunctions that potentially could lead to a compliance issue arise the Environmental Coordinator advises Environment Southland promptly and keeps them informed of relevant timeframes and corrective actions. If issues are raised by external stakeholders these are also promptly responded to and dealt with appropriately. At an operational level Alliance enjoys a healthy relationship with Environment Southland, and we value the open channels of communication that exist.
- 14 Alliance approached preparing an application to renew Lorneville's resource consents in a structured and methodical way. Structured preparatory work commenced almost four years ago. The work carried out since has been extensive and comprehensive and I believe it to be all encompassing, robust and to strike a sensible balance between protecting and enhancing the environment and meeting the needs of Alliance's farmer shareholder owners.

LORNEVILLE SITE

- 15 The Lorneville meat processing and export site is the largest ovine processing and export plant in the world. It has the capacity to process 32,000 lambs per day and employs in excess of 1800 people. A site plan (which is Figure 2 from the AEE) is attached to my evidence as Attachment 1.
- 16 Lorneville currently operates seven chains of its eight chain capacity with four chains operating a day shift and three a night shift. With this configuration the plant can process up to 28,000 lambs per day at peak processing. A five day week usually operates with the ability to operate a half day on a Saturday. Peak processing generally occurs between December and April, with shoulder processing in November, May and

June, and a low level of winter processing including processing of bobby calves between July and October.

- 17 A short shut down period usually occurs in June or July and a slightly longer shut down period in October / November. These shut down periods are important opportunities to complete larger scheduled maintenance and major plant upgrades and replacements. While engineering work will occur outside the shutdown periods when necessary (e.g. due to an item of plant failing and needing to be repaired) this can impose significant operating constraints and costs on the Plant and is avoided where possible. The various process upgrades that Alliance proposes in the current consent applications will generally be scheduled to take place during shut downs. This is important to understand because it means that the various upgrade steps have to be carefully programmed and implemented, with appropriate time allowed for commissioning, adjustment, and verification of performance at each step in the upgrade process. This is discussed further in the evidence of Azam Khan.
- 18 The plant includes a fully integrated set of support departments for the sheep, lamb and calf processing operations. This includes four further processing rooms and a frozen cutting room. Also located on site are a number of ancillary activities which include extensive chilling and freezing facilities, edible offals and co-products, soup stock, rendering, fellmongering, potable water and wastewater treatment, laboratory and a farm. The farm is primarily used as a buffer grazing unit to support sheep and lamb processing. Parts of the farm are also used for land disposal of treated wastewater and waste from the stock yards.
- 19 Water required for the site is abstracted primarily from the Oreti River at Wallacetown with the ability to take a smaller volume from the Makarewa River. The water is conveyed via a pipe line to one of two reservoirs for untreated water. A proportion is treated on-site to very high quality for use in edible processes with the remainder used untreated in non-edible processes. A large proportion of the water pumped to the site is used more than once with water used in relatively clean processes being reused for purposes such as the transfer of inedible products.
- 20 Steam and hot water is supplied to processing areas by two lignite fired boilers. Waste heat is recovered and reused wherever possible. Alliance maintains key performance indicator reporting with fuel, electricity and

water use being targeted, measured against production units and reported weekly.

- 21 The site waste streams are primary treated by screens and Dissolved Air Flotation tanks prior to discharge to the Lorneville waste water treatment plant. This is a lagoon-based system with the majority of the treatment occurring in an anaerobic lagoon. The anaerobic lagoon is followed in sequence by an aerated lagoon and these provide the majority of the treatment. Five further lagoons in sequence provide storage and buffering capacity with little additional treatment.
- 22 Discharge of treated wastewater is primarily to the Makarewa River with a smaller volume discharged via irrigation to the Lorneville farm when soil conditions allow. The extent of the lagoon system allows for significant storage of wastewater when the Makarewa River is not in a suitable condition to receive a full or restricted discharge, predominantly in low flow, warm conditions. The capacity provides for at least three weeks wastewater storage.

TREATMENT OF WALLACETOWN SEWAGE

- 23 In 2007 Lorneville commenced treating Wallacetown sewage by agreement with Southland District Council (**SDC**). The sewage is pumped to the head of the Lorneville treatment plant, mixed and discharged with the wastewater from the processing plant which includes the human sewage component. During the processing season the Wallacetown flow is relatively small in proportion to the plant's wastewater volumes (running at around 2%) but during the off season the Wallacetown contribution to total wastewater volumes rises in percentage terms to around 30% of daily volumes. Alliance's ability to receive and process the Wallacetown sewage provides an important benefit to the local community and the Southland District Council. While Alliance charges the community for the processing of the sewage on a cost recovery basis, the financial cost to the community or Council is significantly less than the capital, debt servicing and operational costs of alternative sewage treatment and disposal options which would likely include either a new oxidation pond (estimated to be around 0.8 hectares to service 1000 people) to treat and discharge to the Makarewa River, or the securing of a suitable land disposal area of around 23 hectares.

RECENT OPERATIONAL IMPROVEMENTS AND CHANGES

- 24 Over the last few years Alliance has undertaken some improvements to its operations at the Lorneville site. In part this has been a way of maximising internal efficiencies before upgrades to the wastewater treatment plant are implemented, and in part this is indicative of Alliance's continual efforts at improving its efficiency and environmental performance.
- 25 In terms of the coal fired boilers, historically the Foster Wheeler (#2) boiler had discharged a higher concentration of particulate material than the Babcock and Wilcox (#1) boiler. A range of initiatives were undertaken to identify the reason for this and this resulted in the replacement of the grit arrestor in the #2 boiler with a modern version. This was commissioned by late February 2015 and resulted in a reduction in the concentration of PM₁₀ discharged from this boiler of about 40%. With the commissioning of this new grit arrestor I am confident that the combined boiler discharges will meet the proposed consent limits in the air discharge consents from commencement.
- 26 In 2012 the first stage of development of a consolidated rendering plant for Alliance's southern operations was commissioned at Lorneville. Initially a single process line was installed and this was followed in 2013 by a second line enabling all raw renderables from Alliance's Lorneville and Mataura Plants to be processed and the closure of Alliance's Makarewa and Mataura rendering operations. This had a consequent annual reduction of approximately 9,000 tonnes of lignite and 4.5 million kWhrs of electricity used in Alliance's Southland processing plants with only a small increase at Lorneville despite the significantly increased rendering throughput. These efficiency gains have both financial and environmental benefits to Alliance and to Southland as a whole.
- 27 The modern rendering process technology installed has significantly reduced the losses of organic material to the wastewater treatment plant. As described in evidence presented by Roger Cudmore a reduction of organic load to the wastewater treatment plant reduces the odour potential.
- 28 Rendering processes produce odorous emissions and in the new plant these are all contained via an extraction system and the resultant air

stream is treated through a biofilter to remove odour as also described in the evidence of Roger Cudmore.

- 29 In skin processing, when the spent liquors from the fellmongery process drums have been stored within the drums over the weekend and then simultaneously discharged to drain over a short period of time on a Monday morning there is the potential to cause a short term unpleasant odour as described in Roger Cudmore's evidence. This procedure has been changed to ensure that the de-liming process and subsequent discharge from the operative drums is staggered.
- 30 Another way in which Alliance has altered its practices is by making changes to the discharge pipe to minimise the creation of foams in the River and this is mentioned in the evidence of Dr James. There has been a significant reduction in the amount of air entrainment in the discharge as a result of these changes and since they have been in place there have been no conspicuous foams or scums attributable to the discharge.
- 31 Recent work has seen the development of a successful disposal operation for the stock yard waste. Significant volumes were discharged to land over the 2016 summer as authorised by resource consent and this is expected to increase in the 2016 / 2017 season with a planned new collection sump facilitating the discharge operation. A successful operation will see up to 2,000m³ of slurried stock yard waste discharged to land each year rather than to the wastewater treatment plant. It is difficult to quantify the exact impact this will have on the site wastewater but the full discharge of the stock yard waste to land is expected to apply in excess of 1 tonne per annum of both Total Nitrogen and Total Phosphorous to the land.
- 32 Many of the waste streams from the processing areas are primary treated by screening and Dissolved Air Flotation (**DAF**) tanks before reaching the wastewater treatment plant. Two seasons ago a second DAF tank was installed targeting low volume high strength waste streams associated with the rendering plant. Although not fully optimised yet the introduction of this additional primary treatment has already delivered an approximate 40% reduction in contaminant loads in total site waste water after primary treatment in the current 2016 season compared with the 2013 'baseline' season. This has resulted in a 35% reduction in the annual median concentration of ammonia-N in the discharged wastewater with a comparable reduction in the measured seasonal median ammonia-N

concentrations in the Makarewa River at the downstream compliance point in 2016 when compared to 2013 values. These data have not been adjusted for volumes discharged nor for river flow at the time. These results are shown in Graphs 1 and 2 attached to my evidence. A comparable reduction in Total Nitrogen concentration has also been measured. The reduced median concentrations are likely to result in an annual (1 Oct 2015 – 30 Sep 2016) discharged Total Nitrogen load of approximately 15% less than that discharged in the 2012/2013 season.

- 33 Additional projects are planned to further optimise the primary treatment of high strength waste streams. These include diverting an additional wastestream to the second DAF and enhancing its performance by polymer dosing, recovery of the proteins contained in the liquors produced during blood processing and further recovery of processed fat from the wastestream.
- 34 The reductions in Amm-N and other contaminants in the wastewater that have been achieved in the current season are expected to be sustained. However it is important that this situation is assessed over the next production seasons to determine the consistency and reliability of this reduction compared to the 2012/2013 season, and the outcomes achieved with the further work planned.
- 35 It is important to understand that the existing environment data presented in the AEE and supporting documents reflect the discharge quality prior to the successful introduction of the second DAF tank. While for the reasons explained in the evidence of Dr James (relating to the dominant influence of habitat) those reductions are unlikely to translate into significant changes in the in-river ecology, they nevertheless represent a tangible expression of Alliance's commitment to on-going improvement in environmental performance. The proposed consent conditions for the wastewater discharge (as attached to John Kyle's evidence) include a requirement to reduce the total nitrogen load discharged from the treatment system in the short term (within 2 years), in line with the reduction described above. While I am hopeful that the improvements we have seen in the current season will be repeated next season, I am conscious that with a new treatment system it can take a couple of seasons to 'bed in' and for that reason I would be uncomfortable in adopting new compliance numbers until we have seen the new DAF unit operating over a fuller range of conditions. I note that the improvements

in the quality of the discharge as a result of the commissioning of the second DAF unit have not been taken into account in the Section 42A Report. I do not know the reason for this.

RESOURCE CONSENTS

- 36 Alliance currently holds 12 resource consents issued from Environment Southland or Invercargill City Council (**ICC**). The processing and wastewater treatment sites are located on land zoned industrial within the jurisdiction of SDC. Farm land to the south of the processing and wastewater treatment sites is within the jurisdiction of ICC and is zoned rural.
- 37 Resource consents held authorise the following activities:
- (a) The abstraction of water from both the Oreti River and the Makarewa River. Water is primarily abstracted from the Oreti River with the Makarewa supply available in the event of pump or pipeline failure or short term increased demand. A land use consent authorises the maintenance of the Oreti abstraction intake channel.
 - (b) The discharge of treated wastewater, including the sewage from Wallacetown, to the Makarewa River. The discharge is from either or both of the final two facultative ponds to the "Boiler Ditch" and thence to the Makarewa River.
 - (c) The discharge of treated wastewater to land, by irrigation and for short term storage. Associated land use consents are also held. Irrigation occurs when soil conditions allow on approximately 100 hectares of land within ICC jurisdiction. The short term storage area is also located on land within ICC jurisdiction.
 - (d) The discharge of contaminants to air, predominantly emissions from the coal fired boilers and odours.
 - (e) The discharge of contaminants to air and land from sheepyards solids, discharged to land under SDC jurisdiction.
 - (f) The discharge of stormwater collected on site via the "Boiler Ditch" to the Makarewa River.
 - (g) The discharge of leachate to ground from closed landfill.

OPERATIONAL ASPECTS

- 38 Peak processing at Lorneville inevitably coincides with the summer / early autumn period most likely to produce warm dry conditions leading to low river flows and low soil moisture which in turn leads to reduced pasture growth. At this time the demand for processing space can become extreme as farmers look to destock to manage the welfare of their flocks. The processing plant has the capacity to increase throughput by working additional hours and days but may become limited by both water supply and the ability to discharge wastewater.
- 39 Water use efficiency is a key operating driver at all times and this becomes more focused as natural river flows reduce and conditions become more difficult for farmers leading to increased processing demand. Alliance is proposing the continuation of a Low Flow Contingency Plan associated with the water abstraction consent which requires additional measures to be put in place at low flow triggers.
- 40 The ability to continue to process (take water and discharge) during times of severe drought is critical to the region to ensure primarily the welfare of animals on drought stricken farms, to ensure the welfare of farmers managing those stock, to ensure continued employment at the processing plant and to minimise the consequent regional economic impact. If the ability to discharge was lost there would also be a significant impact on the Wallacetown community as I have described earlier in this evidence.
- 41 Managing the effects of the discharge is complicated by the tidal nature of the receiving water and the impact of upstream land uses and associated discharges and nutrient enrichment. These factors mean that the receiving environment changes every day. Discharge management is critical. Particularly during periods with reduced river flows, the receiving environment is assessed daily by both observations and in-river monitoring and an appropriate discharge volume is determined to ensure in-river resource consent compliance is maintained. The lagoon based treatment system provides approximately 300,000m³ of storage and this is utilised to hold back wastewater when river conditions are unsuitable.
- 42 The consented temporary storage of treated wastewater provides approximately an additional week of storage in times of extreme drought. The stored wastewater would be returned to the treatment plant and

discharged under the conditions of the discharge consent when river conditions permitted.

- 43 Irrigation of treated wastewater occurs when soil conditions are suitable, usually for a period between December and April. This occurs routinely to minimise the discharge to the river over summers but only a small proportion of the daily volume can be irrigated to the available land. In moist or wet conditions even over the summer the soil condition is often unsuitable to receive wastewater without causing ponding or forced drainage. Under these circumstances irrigation cannot occur and can only be recommenced when soil conditions return to being suitable. In response to concerns about nitrate leaching through the less well drained Zone 2 soils, Alliance proposes to exclude these soils from the treated wastewater irrigation area.

COST OF IMPLEMENTING IMPROVEMENTS

- 44 In 2013, Alliance investigated the likely costs of implementing proposed improvements.
- 45 The capital cost of the wastewater treatment up-grade to remove 75% of nitrogen is estimated at \$19 million. This includes \$800,000 for the primary upgrade, most of which has now been completed, and the necessary infrastructure for the wasted solids from the biological nutrient removal plant (BNR solids). The annual operating costs of the wastewater treatment and the discharge of BNR solids are between \$1 and \$1.5 million compared with the current annual wastewater operating costs of \$150,000.
- 46 The capital costs of disinfection are \$4.4 million and Wallacetown's share of this would be around \$100,000. The capital cost of separating human sewage would be around \$1.7 million, with Wallacetown's share of this around \$250,000, plus operating costs.
- 47 The capital cost of treating the full wastestream to remove 90% of nitrogen and including the required BNR solids infrastructure is \$23 million. Wallacetown's share of this would be around \$500,000 plus operating costs.
- 48 In terms of other potential costs:

- (a) The cost of bag house filters for the coal fired boilers has been estimated at \$5.8 million and the cost of an electrostatic precipitator (**ESP**) has been estimated at \$3.2 million.
 - (b) The capital cost of continuous in-stack sulphur dioxide monitoring is estimated to be in excess of \$300,000 with on-going additional operating costs.
 - (c) Golder has estimated the cost of installing the new fish screens on the intake at \$100,000.
 - (d) Monitoring costs for the coal fired boilers are expensive. For example PM₁₀ testing is \$10,000 per test.
- 49 As Alliance is a co-operative, any costs of upgrades are borne by its farmer shareholders who are also facing on-farm costs for environmental improvement. It is important that Alliance has time to set aside money for large capital projects such as the wastewater treatment upgrade. Shortening the time in which these upgrades are to occur essentially means that all of this extra money is required upfront. This is even more disheartening when the consent term is for only 5 or 10 years as recommended in the Section 42A Report. I have read the evidence of Danny Hailes. I agree with the sentiments he expresses about the insulting nature of that recommendation given the process that Alliance has followed and the company's commitment to being an early adopter of the changes necessary to improve the Oreti catchment.
- 50 The logistics of implementing any upgrades also need to be considered. Time is required for planning projects and as I outlined earlier in my evidence, planned upgrades are always scheduled for the winter shut-down period so that processing is not disrupted. By the time a decision is made on these consent applications, the 2016 winter shutdown will have passed and in effect we will be one year down the track on any timeframes. Also, if the recommendations in the Section 42A Report are adopted and the timeframes for implementing different upgrades across the Plant are shortened, the ability for Alliance staff to implement and manage these different workstreams will be compromised.

STAKEHOLDER RELATIONSHIPS

- 51 Communication with all stakeholders is a key component of Alliance's environmental programme and is a strong aspect of the Lorneville plant's relationship with its community and stakeholders. While there may not

always be agreement, through consultation and communication Alliance has developed strong relationships with local authorities, organisations and individuals and in general receives very strong community support.

- 52 Annual neighbourhood meetings are held giving an opportunity for Alliance to inform neighbours of the plant's environmental performance and for the neighbours to let Alliance know of issues they may have. Where appropriate, issues are responded to promptly and plant contact numbers are always provided. Small numbers of people attend these meetings indicating the neighbourhood has few concerns. A public information meeting was also held as part of the consenting process. This was widely publically advertised but again only a small number of people attended indicating the public generally has few concerns about the impact of the Alliance Lorneville Plant. This consultation is discussed further in Tony Dons' evidence.
- 53 Wallacetown is the closest community to the Lorneville processing plant. A good relationship has been developed particularly with the Wallacetown Community Board. Recently the Southland District Council has suggested that the Wallacetown community be invited to have a community representative on the Technical Working Party and Alliance is happy with this suggestion. Condition 28 of the Wastewater Discharge consent, attached to John Kyle's evidence, has been amended to reflect this. As discussed earlier, a key part of the close relationship with Wallacetown is that Alliance treats and discharges Wallacetown sewage on a cost recovery basis providing a rates advantage across the Southland District.
- 54 Alliance maintains a close working relationship with Te Ao Marama Incorporated and this has been apparent through the comprehensive and very positive consultation meetings through this consenting process. Te Ao Marama noted in their submission; "*We acknowledge the consultation process that has been undertaken by the Alliance Group Ltd. We appreciated being able to consult kanohi ki te kanohi (our face to face meetings with Alliance), and the ability to provide a Cultural Values Report.*" Alliance in turn fully appreciated the face to face meetings and the understanding of Te Ao Marama's perspective gained through this process."
- 55 Alliance acknowledges Te Ao Marama's preference that consent terms are not granted for longer than 25 years. The review conditions proposed

in both the Air Consent and the Discharge to Water Consent were developed initially to give Te Ao Marama assurance that necessary improvements would be implemented beyond a 25 year term. These conditions have been strengthened significantly subsequent to pre-hearing discussions with Council staff and consultants.

- 56 During consultation Te Ao Marama explained that iwi took a Southland-wide view of discharges to the environment and recognised that the combined wastewater discharges from Lorneville, Makarewa and Maitai had decreased substantially in recent years as a result of consolidated processing. Alliance particularly notes the significant reduction in both the volumes and the strength of the discharged wastewater from both its Maitai and Makarewa Plants in recent years.
- 57 In relation to the treatment and discharge to the Makarewa River of Wallacetown sewage, Alliance acknowledges that the human waste component raises cultural issues for Maori, as does the human waste component of the Lorneville waste stream. This has been the subject of discussion with iwi representatives in the consultation process surrounding these applications, as discussed in the evidence of Tony Dons. The position reached as a result of those discussions is that the continuation of the existing arrangement whereby Alliance receives, treats and discharges the Wallacetown sewage together with the plant's wastewater to the river is accepted by iwi as the most appropriate option in the circumstances. For completeness I note that the physical process of separating all human waste at the plant would be onerous and very expensive. As I mentioned earlier in my evidence, the capital cost of separating human sewage would be approximately \$1.7 million with Wallacetown's share of the capital estimated to be around \$250,000.
- 58 Alliance appreciates Te Ao Marama's support for the process followed and the outcomes proposed. Alliance looks forward to working with iwi in developing the proposed habitat enhancement plan.
- 59 Alliance has always communicated freely with other organisations such as Southland Fish and Game, Department of Conservation and Public Health South. This continued through this consenting process by way of a Technical Working Party consultation group focusing on water related effects. This form of consultation followed a model successfully developed when the discharge of treated wastewater from the Alliance Maitai Plant was last reconcented. Alliance believes this was a useful method of

conveying information and receiving feedback. As a result of that consultation Alliance made several changes to its proposal to address issues identified by stakeholders, and it is pleasing that we have been able to achieve a high level of agreement with all major stakeholders on the appropriateness of a staged upgrade of the wastewater treatment system. The submission from Fish & Game is the one exception. While that submission is disappointing to Alliance in view of Fish & Game's involvement in the Technical Working Party we remain committed to trying to address legitimate issues that Fish & Game may raise.

- 60 Environment Southland was also represented on the Technical Working Party, although the ES participants in the consultation are no longer involved in this consenting process and the benefit of their involvement has largely been lost as the reporting officers and consultants now engaged have not had the benefit of the extensive discussion and development of the proposal through the Technical Working Party.
- 61 Since lodging the applications and responding to requests for further information Alliance has had the opportunity to informally discuss relevant issues with Council staff and consultants. This has been very helpful in clarifying issues of disagreement or misunderstanding between experts, and has resulted in Alliance producing a revised set of proposed consent conditions to address issues raised by the Council's staff and consultants. These conditions have been presented in legal submissions and are discussed in detail in John Kyle's planning evidence, and as appropriate in the evidence of Alliance's other experts.

CONCLUSION

- 62 In preparing these resource consent applications Alliance has gone through a robust and rigorous process. This has involved the formation of a Technical Working Party and extensive consultation with the Councils, iwi and other key stakeholders. Alliance has found this consultation to be beneficial in improving and maintaining existing relationships and being able to amend the proposal or conditions accordingly.
- 63 Alliance is proud of its environmental performance and is committed to ensuring operations at the Plant are run appropriately. To this end Alliance has undertaken, at its own initiative, improvements and changes to reduce nutrient loads in the wastewater discharge and improve the performance of the coal-fired boilers.

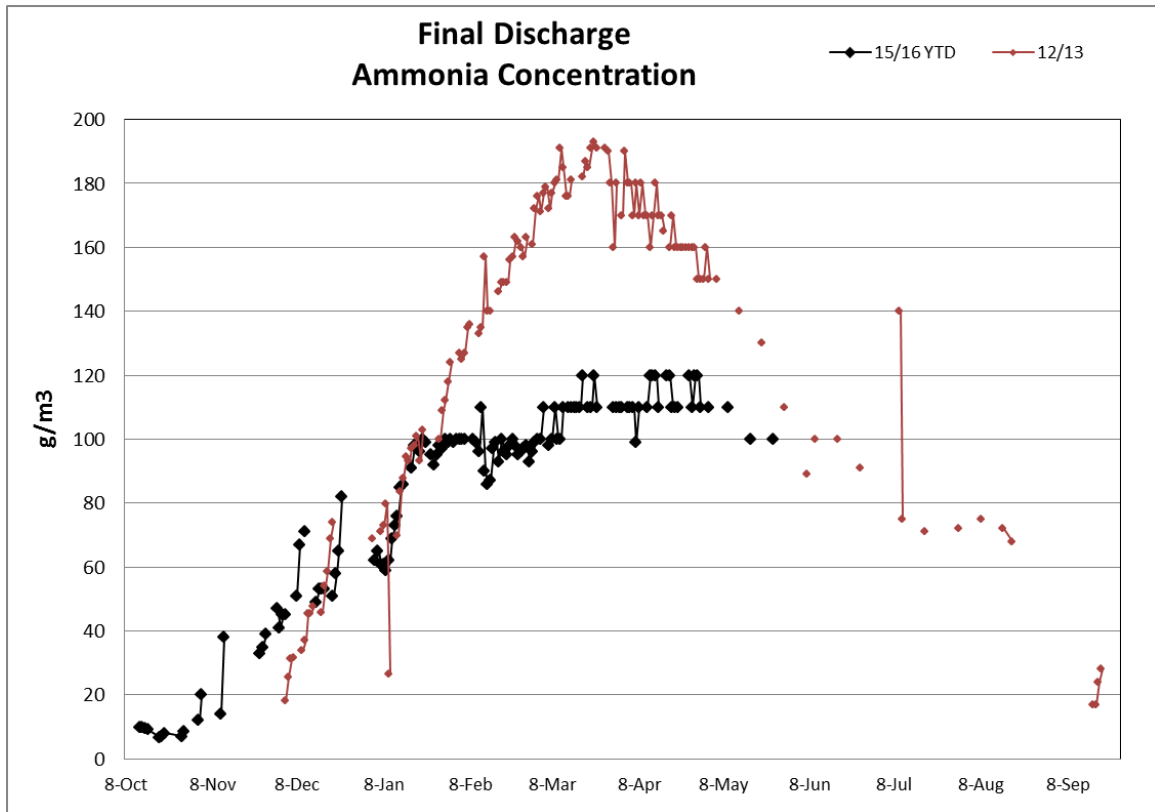
64 Alliance is also a business, and needs to take into account the ability of its farmer shareholders to meet the costs of any upgrades and manage the timing of these to spread the cost over a period of years. Alliance is committed to being an early adopter of change so as to assist in the attainment of improved water quality in the Oreti catchment and New River Estuary. The process and outcomes we have described in the proposed conditions reflect this. Alliance will not accept short term consents on the wastewater and boiler discharges as proposed in the Officer's report. I consider that the granting of short term consents would represent a failure of the process we have followed, and I ask the Commissioners to grant consents for the term and subject to the conditions Alliance proposes.

Frances Wise

4 July 2016

ATTACHMENTS

Graph 1



Graph 2

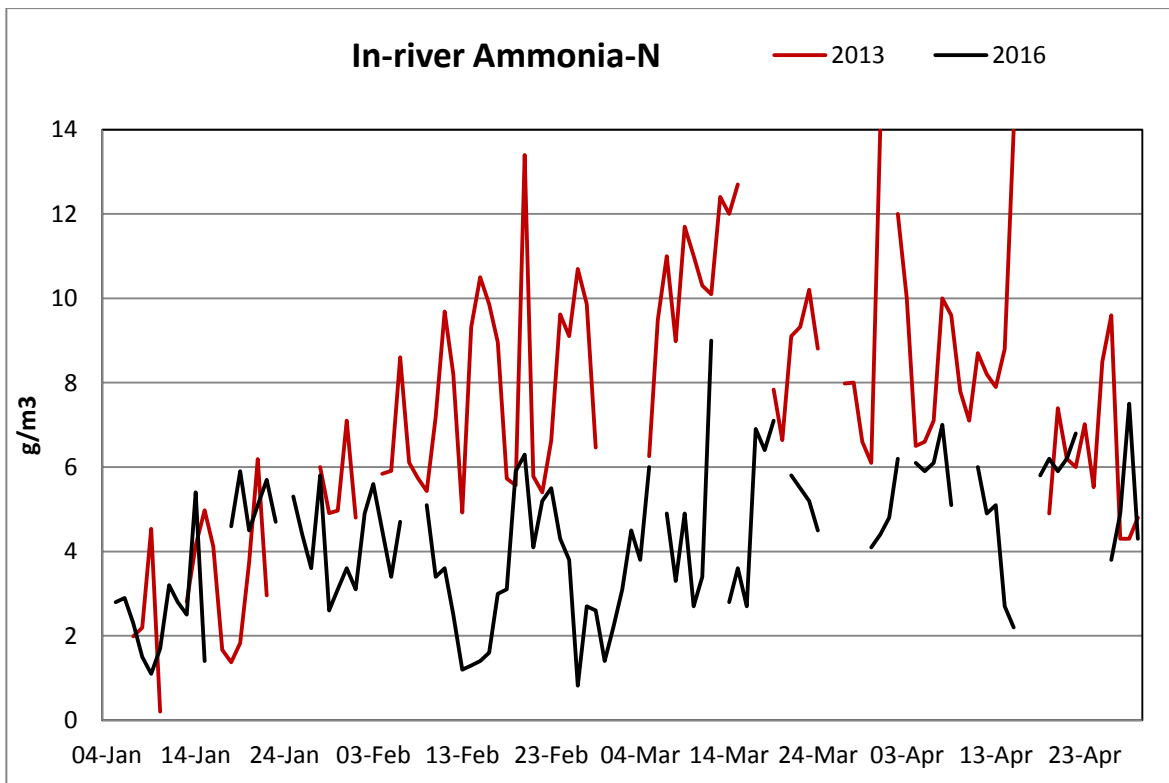




Figure 2 from the AEE