

IN THE MATTER OF

The Resource Management Act 1991

AND

IN THE MATTER OF

An application by Tegel Foods Limited (CRC194459) to the Canterbury Regional Council to discharge contaminants to air from an existing poultry processing operation.

BETWEEN

TEGEL FOODS LIMITED

Applicant

AND

CANTERBURY REGIONAL COUNCIL

Consent Authority

REPORT AND DECISION OF HEARING COMMISSIONER

John G Iseli

29th September 2020

Heard on 12-13th August 2020 at Wigram Base, Christchurch.

Representations and Appearances

Applicant:

Ms S Eveleigh, Ms J Harman, Solicitors

Ms R Marshall, Site Manager, Tegel Foods Ltd

Ms F McAlpine, National Environmental Health and Safety Manager, Tegel Foods Ltd

Mr A Atkinson, Site Engineer, Tegel Foods Ltd

Mr J Pene, Consulting Environmental Engineer

Mr R Cudmore, Consulting Air Quality Scientist

Ms A Brabant, Consulting Planner

Submitters:

Ministry of Education - **Mr R Sutton**, Hornby High School Principal

- **Mr P Whyte**, Consulting Planner

Mr B Curtis, 20 Bella Rosa Drive

Ms G Ratna, owner 89 Carmen Road, via phone conference

Section 42A Reporting Officers:

Mr M McCauley, Consulting Planner

- **Mr D Irving**, Consulting Engineer

Decision Summary

Consent to discharge contaminants to air is approved for a term of 20 years, subject to conditions. These conditions are comprehensive and include requirements for regular odour monitoring and provisions for review.

BACKGROUND AND PROCEDURAL MATTERS

1. This is the report and decision of independent Hearings Commissioner Mr John Iseli. I was appointed by the Canterbury Regional Council (**CRC**) to hear and decide the application by Tegel Foods Limited (**Tegel** or 'the applicant') pursuant to the Resource Management Act 1991 (**RMA** or 'the Act') for a resource consent to discharge contaminants to air from an existing poultry processing operation, including a rendering plant, at 112 Carmen Road, Hornby.
2. Poultry processing has occurred on the application site, legally defined as Section 27SO 459717, since the 1950s. Up to 75,000 chickens and 5000 turkeys are now being processed at peak operation. Heat for the process is supplied by boilers fired by various fuels. The application seeks to continue to discharge to air from existing processes at the site, subject

to modifications and upgrades to the protein recovery plant (**PRP**) and associated odour controls, and also the boiler plant.

3. The current discharges to air from poultry processing are authorised by consent CRC971639.1 and the discharges from the boilers are authorised by CRC054334.2. These consents had an expiry date of 28 August 2018. However, discharges authorised by these consents are able to continue under section 124 of the RMA while the current application is being processed.
4. The applicant originally applied for consent CRC185584 which would allow a substantial increase to the size of the processing plant in terms of bird numbers and hours of operation. Application CRC185584 has been superseded by this application (which does not seek any increases) but by agreement between Tegel and Environment Canterbury the original application remains in process to facilitate a continuation of operation under s124 of the Act and will be withdrawn once this application is decided. Two associated additional applications have been created for administrative purposes – CRC185732 and CRC185733 - and these will also be withdrawn when this process is concluded.
5. An assessment of effects (the **AEE**) was prepared by Tonkin and Taylor Limited (**Tonkin and Taylor**), dated April 2019, attached as Appendix D to the application.
6. The applicant requested that consent be granted for a duration of 20 years.
7. Prior to the hearing, a report was produced on behalf of the CRC pursuant to section 42A by Mr Myles McCauley, Consulting Planner with expertise in air quality matters. This 's42A Report' included a technical review of the application by Mr Darryl Irving, Consulting Engineer, in relation to the PRP odour extraction system and biofilter treatment.
8. The hearing to decide the application commenced on Wednesday 12th August 2020 and evidence was heard over two days. The hearing was adjourned on 13th August and I issued a minute requesting that an updated odour management plan and proposed consent conditions be provided by the applicant and be circulated to all parties who requested to be heard, in addition to the s42A reporting officers. Those parties were invited to provide comments specifically relating to the circulated material, that were to be considered by the applicant in providing a written reply with final proposed consent conditions. I received the applicant's reply via the CRC on 15th September 2020 and, after considering all the information provided, determined that the hearing was closed on that date.
9. I visited the application site during the afternoon of 12th August 2020, during a break in the hearing. I also observed the location of neighbouring properties and roads following adjournment of the hearing on 13th August.

NOTIFICATION AND SUBMISSIONS

10. The application was publicly notified on Saturday 7 December 2019. Notification was on the Environment Canterbury website and in the Christchurch Press. Properties within a radius of 500 metres were notified by letter. A total of 24 submissions were received, with 12 submissions in opposition, eight submissions in support of the application and four submissions adopting a neutral position. Six submitters indicated that they wished to be heard.
11. The s42A Report summarised the matters raised in submissions. The matters raised by submitters included:
 - odour experienced at neighbouring properties in the past, sometimes requiring that windows be closed, and fatty deposits observed on cars;
 - frequent odours leading to effects on school pupils at the Hornby High School and Hornby Primary School;
 - need for improved odour control measures;
 - residential growth in the neighbouring area, resulting in increased sensitivity to odour;
 - frequent occurrence of “rotten meat” type odour west of the plant;
 - a community odour survey should have been conducted;
 - support for the application and improved odour control measures proposed.

THE HEARING

Applicant's Case

12. **Ms Sarah Eveleigh**, solicitor at Anderson Lloyd, presented opening legal submissions for the applicant. She stated that significant upgrades to the processing plant and odour control are proposed. In most cases these upgrades have already been implemented to mitigate potential odour effects associated with the discharge. She noted that the improvements completed include upgrades to the PRP air extraction system, enclosure of the wastewater tank, and installation of a re-designed biofilter. Replacement of the front boiler house and emission stacks is currently in the early stages of construction.
13. Ms Eveleigh submitted that comprehensive management and monitoring of the process occurs. She considered that the updated odour management plan and proposed conditions of consent provide confidence that effects of the discharge will be well managed so that they are no more than minor.
14. In regard to assessment of the application under section 104 of the Act, she noted that the positive effects of the activity and the value of the applicant's investment in the site should be considered. Ms Eveleigh also noted that the appropriate zoning of the site under the District Plan is an important consideration. She disagreed with Mr McCauley's reasons for

recommending a 10-year duration of consent, stating that the expressed concerns can be managed sufficiently through appropriate conditions of consent.

15. **Ms Robyn Marshall**, Site Manager, presented a summary of her evidence. She stated that the Carmen Road site is an important component of the Tegel business, being the only Tegel processing plant in the South Island. The site is the main fresh chicken supplier in the South Island. She noted that the site employs approximately 400 people working in operational areas and support functions.
16. Ms Marshall stated that the site's processing facilities are highly sophisticated and automated. Significant investment has been made in the Carmen Road site in the years it has been established. She noted that typically on an annual basis Tegel would spend between \$3-5 million towards site upgrades and maintenance. In 2019 through into 2020 a three-phase work plan of interlinked improvements to odour discharges has been undertaken. Ms Marshall explained that these projects include fitting an effluent tank lid, a PRP ventilation upgrade and replacement of the biofilter. She noted that the total investment in these three projects is \$1,150,000. Ms Marshall estimated that if Tegel built a new processing facility on a greenfield site with all existing capabilities of the current site it would cost upwards of \$100 million and take 5-10 years to complete. She observed that this would not be a viable financial or practical option for Tegel.
17. Ms Marshall stated that Tegel has developed an odour management plan with detailed procedures to ensure tight control of potential odour sources. If an odour event was to occur, an escalation process is in place and trained staff are designated who are responsible for investigating and identifying the root cause. Corrective actions will be implemented and monitored. Ms Marshall considered that the recently installed improvements will have a noticeable positive effect in reducing odour discharges.
18. **Ms Fiona McAlpine**, National Environmental Health and Safety Manager, provided evidence. She stated that Tegel has an overarching Environmental Policy and a documented Environmental Health and Safety management system. Roles and responsibilities of relevant site managers are clearly defined and the site is supported by Regional Environmental Health and Safety staff who are based at the Carmen Road site. Ms McAlpine observed that the site management team are committed to controlling odour and preventing impact on the community. She stated that this commitment is evidenced by the implementation of plant improvements including the biofilter redesign, protein recovery plant ventilation and fitting the wastewater tank lid.
19. Ms McAlpine noted that Tegel has developed an Odour Management Plan which outlines the controls in place to reduce the risk of objectionable odours beyond the site perimeter. She considered that ongoing regular monitoring of site conditions and annual reviews of the Odour Management Plan will ensure that the site controls are effective in the management of odour. She noted that Tegel has considered the evidence of Mr Paul Whyte for the Ministry of Education, particularly with regard to the Odour Management Plan.

Further refinements have been made in response to that evidence, as indicated in the updated plan provided at the hearing.

20. **Mr Anthony Atkinson**, Engineering Manager at the Tegel plant, provided evidence. He explained that the new ventilation system installed in the PRP has increased the airflow extraction by approximately 70%. He considered that the new ventilation design ensures that the PRP is maintained under negative pressure, directing odorous air to the biofilter for treatment. Mr Atkinson also explained that air is now extracted from the covered wastewater tank to the biofilter for treatment.
21. Mr Atkinson noted that the PRP ventilation system and biofilter are controlled and monitored by a computer control system, allowing process variables to be displayed to the operators on a computer screen. The computer control system initiates an alarm that alerts plant operators if process variables are outside the specified range.
22. Mr Atkinson discussed the issues encountered with the previous biofilter on site. He described the process of designing the new biofilter with appropriate monitoring of the filter media, expressing confidence that the new biofilter installed at the plant can be managed to effectively control odour from the rendering process and wastewater tank. He considered that the biofilter design is consistent with industry best practice.
23. **Mr Roger Cudmore**, Principal at Golder Associates, provided evidence regarding the biofilter design and operation. He has considerable experience in the design and operation of biofilters serving rendering plants in New Zealand. He reviewed the design of the biofilter, advised on media composition, moisture control and monitoring.
24. Mr Cudmore stated that the former biofilter bed at the plant was prone to water inundation, air channelling and excessive air pressure drop across the media. This led to poor performance. He considered that the design air loading rate for the new biofilter is conservative, noting that the proposed limit of 45m³/hr/m² media is appropriate for the source mix of building air and concentrated point source extraction from the rendering plant.
25. With regard to monitoring, Mr Cudmore described the key biofilter parameters that should be continuously monitored to verify ongoing performance. He suggested conditions of consent that specify these key parameters and recommended that the continuous biofilter monitoring should be included in the Odour Management Plan for the site. He concluded that the new biofilter at the Tegel plant should be able to effectively eliminate rendering-type odours from the discharge.
26. **Mr Jason Pene**, Principal Environmental Engineer at Tonkin and Taylor, provided evidence regarding the air quality effects of the discharges from the site. He noted that the primary emissions from the Tegel plant include: odour (particularly from the PRP); discharges from combustion of a range of fuels in the boilers, including recycled lubrication oil and diesel;

and particulate matter (**PM**) from the smokehouse. He stated that PM emissions from the smokehouse are intermittent and small in scale and are therefore unlikely to cause adverse effects.

27. Mr Pene explained that the discharges from the boilers were assessed using dispersion modelling. He considered that proposed changes to the boilers and fuels burned at the site are likely to result in a substantial reduction to impacts on air quality, resulting in minimal potential impact on human health in the local area.
28. Turning to the effects of odour, Mr Pene noted that community feedback and a programme of odour observations have indicated a potential for odour nuisance in the area surrounding the site. The PRP had been identified as the primary source of odour. He explained that Tegel has implemented upgrades to odour management that he considered would substantially improve odour control at the site. Mr Pene concluded that, with the upgrades now in place and the modified consent conditions he recommended, offensive and objectionable odour beyond the site boundary should be avoided.
29. **Ms Andrea Brabant**, Technical Director - Planning at Tonkin and Taylor, provided planning evidence for the applicant. She stated that Tegel has proposed and implemented upgrades to the existing plant to better control air discharges, enabling the site to reduce potential adverse effects of odour and combustion emissions.
30. Ms Brabant noted that the site is located within an identified industrial zone in the Christchurch City Plan. She considered that the underlying zoning of the site is significant and confirms that the activity is sited and located within an area identified for this type of facility. She considered that the proposal is classified as a non-complying activity and provided an assessment against section 104D of the Act. Based on the expert air quality evidence, she considered that potential adverse effects following the upgrades (now largely implemented) would be no more than minor and that the proposal is consistent with the objectives and policies of the relevant plans.
31. In response to questions regarding duration of any consent granted, Ms Brabant considered that a shorter term of consent (such as the 10-year term recommended by Mr McCauley) would be a crude measure to manage potential effects of the discharges. She stated that a 20-year duration would enable the existing activity to operate with some security, subject to a review condition. She also noted that a condition is proposed that would require five-yearly review of the best practicable option (**BPO**) for the discharges. Ms Brabant considered that the proposed monitoring and review conditions give comfort to the consent authority that any adverse effects that may arise during the term of consent can be adequately managed.

Submitters

32. **Mr Paul Whyte**, Senior Planner with Beca, provided evidence in support of the submission by the Ministry of Education. He noted that the Tegel plant is approximately 300m from the closest building at Hornby High School and 570m from the Hornby Primary School. He stated that the schools have experienced odour from the Tegel plant that is particularly noticeable during northeast winds. He added that the Ministry had valuable discussions with the applicant on 15th July 2020 and some of the concerns had been addressed. Mr Whyte detailed outstanding matters of concern to the Ministry.
33. Mr Whyte stated that significant “freezing works” type odour, believed to be associated with PRP discharges, was experienced at the high school in February 2020. He noted that some improvements at the plant had occurred prior to that date, with only the upgrade to the biofilter not completed. Whilst accepting the evidence of Mr Pene that the full effect of the upgrades would not be evident until after May 2020, he expressed concern that the odour removal efficiency of the biofilter is not adequately addressed in proposed consent conditions.
34. Turning to the issue of open doors at the PRP that can allow fugitive odours to escape, Mr Whyte considered that this matter is not adequately addressed in the Odour Management Plan or proposed consent conditions. Accordingly, he recommended amended consent conditions. He also provided support for the 10-year term recommended by Mr McCauley, acknowledging that the odour control improvements are not yet proven.
35. **Mr Robin Sutton**, Hornby High School Principal, described the effect that odour has had on the school learning environment. He noted that on some days it had been necessary to close windows to reduce the odour impact. Mr Sutton stated that the odour has lowered the focus and concentration of students and affected the sense of pride in the school. He confirmed that the odour had been particularly noticeable during north-east wind conditions that prevail in Christchurch.
36. **Mr Brian Curtis**, resident at 20 Bella Rosa Drive, stated that he had lived at that address for the past nine years. He considered that the current emission controls at the Tegel plant appeared to be working adequately, but no increase to the effects of the discharge should be allowed. In response to questions, Mr Curtis stated that he had not noticed odour from the Tegel plant since May 2020.
37. **Ms Geetna Ratna**, owner of a dwelling at 89 Carmen Road, spoke to her submission via phone link. She stated that she had lived at her Carmen Road property between 2006 and 2011. She submitted that very bad odour had been experienced during that period, forcing her to close windows and doors. The dwelling is now rented and Ms Ratna stated that she has had difficulty finding a tenant due to odour issues. She considered that the processing plant should not be located in such close proximity to residential properties.

Section 42A Report

38. **Mr Myles McCauley**, Technical Consultant at Enviser Limited, prepared a s42A report on behalf of the CRC that was circulated to the parties prior to the hearing. His report included a technical review prepared by Mr Irving that addressed the rendering plant extraction system and the proposed biofilter design. The report recommended that the application be granted for a 10-year term, subject to conditions.
39. Mr McCauley's report discussed the effects of boiler discharges from the site, describing changes to the boiler configuration and fuels burned under the proposal. The total 6.6MW heat output capacity of the boiler plant would be retained, but it is proposed that coal will no longer be burned. He explained that the proposed changes are expected to result in a significant reduction in peak predicted PM₁₀ ground level concentrations caused by the boiler discharges, primarily driven by the relocation of a boiler house further from tall buildings on site. Mr McCauley concluded that there would be an overall improvement in air quality associated with the changes to the boiler discharges on the Tegel site.
40. Mr McCauley noted that the key issue is odour effects caused by the various emission sources on site. Referring to historical complaint records held by the CRC, he stated that substantiated complaints had occurred in 2014 and 2015 in relation to plant upset conditions in the PRP. He observed that odour complaints had reduced in recent years, with three complaints recorded in 2020 (to June) and nine recorded in 2019. None of these complaints were substantiated by a CRC enforcement officer. Mr McCauley considered that the field-based odour observation survey undertaken in early 2018 indicated that odour nuisance was likely to have occurred in the industrial/commercial area adjacent to the plant, but nuisance effects were unlikely in residential areas. Fugitive odour from the PRP was considered to be a substantial component.
41. **Mr Darryl Irving**, Technical Director - Air Quality with Pattle Delamore Partners Ltd (**PDP**), provided comment in relation to his review of the odour extraction and treatment system, including biofilter design. He concluded that the changes are likely to result in a reduction in odour emissions from the rendering building and odour treatment system.
42. During the hearing it became apparent that the design of the PRP extraction system varied from the layout attached to the S42A report. I therefore requested that Mr Irving visit the rendering plant to determine the installed design of the extraction system and determine if there were any changes to his conclusions. He provided verbal comment following the site inspection, noting that the overall air extraction rate from the PRP building is relatively high and thus point source extraction of sources such as the press and augurs is not essential. He noted that the building is generally well sealed, but that openings at pipe penetrations high in the building should be sealed to minimise risk of fugitive odour emissions. He stated that the biofilter overall design and irrigation system is appropriate, but considered that an additional condition requiring even distribution of air across the filter bed should be imposed.

Further evidence

43. The hearing was adjourned on 13th August 2020 and I sought further comment from the parties in attendance concerning the conditions and odour management plan proposed by the applicant. The parties were requested to provide comment on those documents before the applicant submitted a written reply with a final set of proffered conditions.
44. In accordance with my directions I have received the following further information:
 - (a) A detailed set of proposed consent conditions and an odour management plan from the applicant;
 - (b) Written comment on the conditions and management plan from the Ministry of Education;
 - (c) Updated final proposed conditions from the applicant, taking into account the comments received;
 - (d) A final written reply from Ms Eveleigh, on behalf of the applicant.

Applicant's Right of Reply

45. Ms Eveleigh provided verbal comments at the adjournment of the hearing that addressed a number of matters that had been raised by the officers and submitters, and also in response to my questions, including some specific changes to proposed conditions. She stated that the pipe penetrations in the PRP building will be sealed to prevent fugitive odour emissions and the blue flexible ventilation pipe connection to the biofilter will be upgraded. She confirmed that Mr Irving's suggested condition regarding even airflow distribution through the biofilter bed is acceptable to the applicant. In addition, Ms Everleigh indicated that the applicant is willing to adopt changes to the conditions controlling PRP door openings to be generally consistent with the recommendations of Mr Whyte.
46. Ms Eveleigh also provided a written right of reply on behalf of the applicant. She referred to the memorandum supplied by the Ministry of Education, stating that the majority of issues raised have been addressed by the conditions of consent and the air discharge management plan now proffered by the applicant. She discussed one outstanding area of disagreement regarding a condition suggested by the Ministry that would require the biofilter to achieve 95% odour removal efficiency. She referred to the evidence of Mr Pene and Mr Cudmore, who are of the view that an alternative condition would be more appropriate, requiring that the biofilter does not discharge rendering odour. In addition, she noted that several other proposed conditions apply to the management and monitoring of odour from the site as a whole, including a requirement for site boundary odour assessments.
47. Ms Eveleigh submitted that the revised conditions and management plan proffered by the applicant appropriately respond to matters raised by the officers, submitters and during the course of the hearing. She concluded that the applicant has no additional matters to address in written reply and requested that, in light of the investment in the existing plant

and its location within appropriate industrial zones, consent be granted for a duration of 20 years.

ASSESSMENT

48. In assessing the application, I have considered the application documentation and AEE, the s42A Report and technical review, all submissions received and the information provided after the hearing adjournment in accordance with my directions. I have summarised this evidence above.

Status of the Application

49. The starting point for my assessment of the application is to determine the status of the proposed activity.
50. Both Mr McCauley and Ms Brabant concluded that the proposal is classified as a non-complying activity under the Canterbury Air Regional Plan (**CARP**). In response to questions, Ms Eveleigh explained that this classification has been adopted with an “abundance of caution”, given that the discharge is likely to have caused objectional and offensive odour beyond the site boundary in the past. It is not proposed that such effects would occur under the current proposal.

Statutory Considerations

51. In terms of my responsibilities for giving consideration to the application, I am required to have regard to the matters listed in sections 104, 104B, 104D and 105 of the Act.
52. In terms of section 104(1), and subject to Part 2 of the Act, which contains the Act’s purpose and principles, we must to have regard to-
- (a) *Any actual and potential effects on the environment of allowing the activity;*
 - (ab) *Any measure proposed or agreed to by the applicant for the purpose of ensuring positive effects on the environment to offset or compensate for any adverse effects on the environment that will or may result from allowing the activity;*
 - (b) *Any relevant provisions of a national environmental standard, other regulations, a national policy statement, a New Zealand coastal policy statement, a regional policy statement or a proposed regional policy statement, a plan or proposed plan; and*
 - (c) *Any other matters the consent authority considers relevant and reasonably necessary to determine the application.*
53. Section 104(2) states that when forming an opinion for the purposes of section 104(1)(a), I 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 referred to as consideration of the ‘permitted baseline’.

54. In terms of section 104B for a non-complying activity, I may grant or refuse the application, and if granted I may impose conditions under section 108.

55. Section 104D states that:

Despite any decision made for the purpose of notification in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either—

(a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or

(b) the application is for an activity that will not be contrary to the objectives and policies of—

(i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or

(ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or

(iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.

56. The applicant's position is that the AEE demonstrates that adverse effects will be no more than minor and the proposal is consistent with the applicable plan objectives and policies.

57. In terms of section 105, when considering section 15 (discharge) matters, I must, in addition to 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 reason for the proposed choice; and

(c) Any possible alternative methods of discharge, including discharge to any other receiving environment.

58. I consider each of these sections of the RMA in reaching my decision on the application.

Permitted baseline

59. I do not consider there are any permitted activities that are relevant to my consideration of the application. I consider that the odours caused by the rendering plant and associated activities will not be similar in character, nature or scale to typical odours associated with activities permitted by the CARP.

Section 104(1)(a) Actual and potential effects on the environment

60. The following actual and potential effects on the environment have been identified and assessed:

(a) Effects of the discharge of odour, including effects on amenity values;

(b) Effects of the discharge of combustion products and particulate matter; and

(c) Positive effects of the proposal.

61. I record that I have considered all of these actual and potential effects in relation to the proposal.
62. On the basis of the evidence and information presented, including submissions, my assessment focusses on adverse odour effects of the discharge from the poultry processing operation. My assessment of odour effects below includes impacts on amenity values.

Odour Effects

63. Several submissions have focussed on the odour effects caused by the existing processing plant and have expressed concern regarding the potential for ongoing odour effects if consent is granted. The available information, including the complaints record and the odour observations in 2018, indicates that significant odour is likely to have been experienced at times in the past at nearby residential properties, the schools and neighbouring industrial properties. The Ministry of Education has submitted that odour nuisance at Hornby High School has occurred as recently as February 2020. The key issue I am required to determine is whether the odour control improvements implemented by the applicant, completed in May 2020, are likely to be sufficient to prevent odour nuisance effects in future.
64. The applicant has stated that the primary odour control upgrades have now been completed. These improvements include fitting a wastewater tank lid with extraction to the biofilter, increasing the ventilation air extraction rate from the PRP building, and construction of a re-designed biofilter. The expert evidence of Mr Cudmore and the review by Mr Irving indicate that the biofilter is appropriately designed to effectively remove odour from the rendering plant discharge, identified as the primary source of odour from the site. The expert evidence of Mr Pene and the review by Mr McCauley concluded that the overall site odour control measures now implemented are expected to prevent adverse effects to the extent that consent could be granted.
65. I accept the expert evidence that the proposed odour mitigation is likely to be sufficient to prevent significant adverse effects at neighbouring properties in the Hornby area. However, I am mindful of the need for ongoing monitoring and appropriate site management procedures to prevent a recurrence of odour issues that have arisen in the past. In this regard, I am satisfied that the revised odour management plan and the comprehensive conditions of consent supplied in response to my minute are sufficient (subject to minor amendments) to enable achievement of this goal. The conditions require continuous monitoring of key parameters in the biofilter, daily off-site odour monitoring with annual reporting in relation to any potential acute or chronic odour effects, and five-yearly assessment of the BPO for odour control at the site.
66. The evidence from Mr Atkinson is that Tegel has significantly increased (by approximately 70%) the airflow extraction rate from the PRP building such that the building is held under negative pressure. The applicant has proposed a revised condition requiring that doors in the PRP building remain closed at all times, except for the purpose of ingress of goods or

egress of products and staff movements, unless internal air temperatures become a health and safety concern. Tegel has also proposed, within 12 months, to undertake an investigation of the opening of doors and windows of the PRP building during high temperatures and suggest solutions to minimise these openings. The conditions now proffered in relation to openings in the building meet the concerns expressed by the Ministry of Education.

67. In respect of proposed consent conditions, one outstanding area of disagreement remains between the Ministry of Education and the applicant. Mr Whyte has recommended a condition requiring that “the biofilter shall be designed and operated to achieve an odour removal efficiency of at least 95%”. Both Mr Pene and Mr Cudmore have provided evidence that does not support imposition of a condition in that form, and they recommend a condition requiring that “the biofilter shall not discharge rendering odour and shall only discharge an earthy/bark type odour immediately adjacent to the biofilter”. I have considered that evidence and find that the latter condition is appropriate in this case. I note that the condition is consistent with a condition imposed on a consent recently granted to Southern Proteins Limited for a new rendering plant in Washdyke, Timaru.
68. The proposed condition requiring daily odour monitoring does not specify a procedure, but rather refers to a procedure (yet to be fully documented) set out in the management plan. That approach does not provide sufficient assurance that appropriate odour monitoring procedures will continue to be followed. I have therefore determined that the condition should require that monitoring be undertaken using methods documented within the most current Ministry for the Environment Odour Management Guideline. I have also found that the condition should be amended to require that the person undertaking the monitoring be trained by a suitably qualified person in the assessment of ambient odours via methods documented within the most current Ministry for the Environment Odour Management Guideline. Those changes are consistent with conditions recently imposed on the Southern Proteins consent.
69. With regard to the proposed five-yearly BPO review condition, I have determined that the review should be undertaken by an independent person who is suitably qualified and experienced in the control of odour emissions from the activities occurring at the site.
70. I am cognisant of the comments of Mr McCauley that improved mitigation of PRP odours could result in odours from other sources, such as the bird receipt area and scalding stacks, becoming more noticeable, particularly at industrial/commercial properties in close proximity to the Tegel plant. The evidence is that additional odour control at the bird receipt area would be difficult to achieve. However, I am also aware that the existing processing plant is operating in an appropriately zoned industrial area where it would be unreasonable to expect that there be no odour beyond the boundary at all times. Overall, I accept that the mitigation measures now proposed are likely to be able to control odour to the extent that is not objectionable or offensive beyond the site boundary.

71. The recent odour complaints record, the site inspection, and the expert evidence presented indicate that the improved odour mitigation implemented by Tegel is likely to be effective in reducing adverse effects of odour at neighbouring properties. I am satisfied on the evidence that sufficient site management procedures and monitoring are proposed to achieve ongoing odour control to a satisfactory degree and address any issues that might arise. I therefore find that the adverse effects of odour from the existing poultry processing plant are likely to be acceptable.

Effects of Combustion Products and Particulate Matter

72. The proposed changes to the boiler configuration will retain the total consented heat output capacity for the site of 6.6MW. Coal will no longer be burned in the boilers and an overall reduction in particulate matter emissions from the site is anticipated.
73. The evidence of Mr Pene stated that reconfiguration of the combustion appliances, including boiler replacements and conversion to mainly diesel fuel, will contribute to a "substantial reduction" in effects. Mr McCauley agrees, noting the effects will be acceptable and result in an improvement in discharge quality, and local air quality. Whilst he considered that a complete change to diesel use in the boilers would be ideal, in terms of minimising emissions, I nevertheless find that the assessment of air quality impacts demonstrates acceptable effects. I accept that there are potential environmental benefits offered by providing for the range of fuels proposed, primarily associated with the burning or reprocessed oil.
74. I accept the conclusions of Mr McCauley and Mr Pene that the effects of boiler combustion, subject to the limits proposed, are expected to be minor. The proposed consent conditions relating to the boiler discharges include regular emission testing requirements and I find that these conditions are generally consistent with those imposed on consents for similar combustion sources.
75. The applicant has calculated the approximate emission rate of particulate matter from the smokehouse. Based on the small quantum of discharge relative to the boiler plant emissions, dispersion modelling of the smokehouse discharge was not undertaken. I note that the expert evidence is in agreement that any adverse effects of smokehouse emissions are predicted to be minor. I accept that evidence.

Positive Effects

76. Ms Eveleigh has pointed out that the discharges to air are a necessary component of the chicken processing activity undertaken at the site. Ms Robyn Marshall has stated that the existing activity has a range of positive benefits, including food security through the supply of chicken and turkey products to the domestic, and particularly South Island, market; employment of the local community; and wider employment and economic benefits throughout the poultry supply chain and associated contracting services. The site employs approximately 400 people working in operational areas and support functions

77. I accept that granting consent to continue to discharge from the poultry processing plant would provide for the economic wellbeing of the local community and that the proposal is consistent with the efficient use of resources. I have taken these positive effects into account in evaluating the proposal under section 104(1) and Part 2 of the Act.

Section 104(1)(b) National Environmental Standards

78. The National Environmental Standards for Air Quality (NESAQ) include regulations applicable to the processing of resource consents. Of particular relevance is Regulation 17, which relates to the discharges of PM₁₀. Regulation 17 states that a resource consent application to discharge PM₁₀ into a “polluted airshed” must be declined if the discharge would be likely to increase the 24-hour average PM₁₀ concentration by more than 2.5 micrograms per cubic metre beyond the subject site unless:
- the proposed consent is for the same activity as another consent held by the applicant when the application was made; and
 - the amount and rate of PM₁₀ to be discharged will not increase; and
 - the discharges under the new consent only occur when those from the previous one no longer occurs.
79. If these conditions cannot be satisfied, the consent can only be granted if the applicant can offset all of the discharges, from other sources.
80. Christchurch is a polluted airshed under the NES, therefore regulation 17 applies. However, Tegel holds existing consent CRC054334.2 which authorises the discharge of PM₁₀ and the discharge is not predicted to increase as a result of this application. CRC054334.2 has an expiry date of 28 August 2018 and is continuing under s124 of the Act while this application is processed. The authorisation to discharge will cease once this application is decided and appeals are determined. I determine that the NESAQ does not prevent consent being granted in this case.

Section 104(1)(b) Relevant objectives and policies

Canterbury Regional Policy Statement (RPS)

81. The evidence of Ms Brabant discussed the objectives and policies of the RPS. She noted that the objectives and policies are concerned with managing effects, but also with supporting and enabling industry and providing for recovery and growth of business activities. The RPS seeks to maintain and improve air quality through standards and conditions while ensuring that discharges adopt the BPO to minimise adverse effects (Objective 14.2.1). Ms Brabant considered that the location of the processing plant is supported by the RPS that affords priority for industry to operate within areas appropriately zoned for that purpose.

82. I accept the analysis of Ms Brabant and find that the proposal is consistent with the policies and objectives of the RPS.

Canterbury Air Regional Plan (CARP)

83. Mr McCauley and Ms Brabant have outlined the relevant objectives and policies of the CARP. They are in agreement that overall improvement to air quality is anticipated and the proposal is generally consistent with these objectives and policies.
84. Policy 6.8 states that objectionable and offensive effects are unacceptable and should be actively controlled via management plans. The application includes an odour management plan that has been updated in response to matters raised during the hearing. I have determined that, given the improvements undertaken and proposed, such odour effects are no longer anticipated and therefore I find that the proposal is consistent with this policy.
85. Policy 6.12 states that where activities locate appropriately to mitigate adverse effects on air quality a longer consent duration may be available to provide on-going operational certainty. The existing plant has been appropriately located in an industrial zone for several decades. Residential and commercial properties have now been established in close proximity to the plant. Nevertheless, I consider that Policy 6.12 is relevant to my consideration of consent duration. I discuss this policy further below when evaluating matters relevant to consent duration.
86. Policy 6.15 recognises that changes in technology may allow for improvements in the quality of discharge over the term of consent which can be acknowledged by imposing management and review conditions. Conditions to this effect have been proposed by the applicant, including a 5-yearly BPO review. I find that the proposal is consistent with Policy 6.15.
87. Policy 6.28 requires that discharges of odour from the storage, transfer, handling, treatment or disposal of liquid or solid waste be managed by ensuring that discharges to air are appropriately located. The plant is located in an appropriate industrial zone and has operated since the 1950s, but is now in close proximity to residential and commercial properties. I find that the existing poultry processing plant is appropriately located in a zone that provides for this type of activity. Taking into account the mitigation, management procedures and consent conditions now proposed, I consider that the proposal is consistent with this policy.
88. Overall, I determine that the proposal is consistent with the objectives and policies of the CARP.

Findings

89. I confirm that I have considered the all of the objectives and policies of the above statutory documents in making my determination.

90. I find that the application is either consistent with or not contrary to the key objectives and policies of the RPS and CARP that seek to protect air quality from significant adverse effects of allowing the activity. Accordingly, I determine that consent can be granted under section 104D of the Act.

Section 104(1)(c) Other matters

Iwi Management Plans

91. The Mahaanui Iwi Management Plan 2013 includes policies related to discharges to air and cultural amenity values. Mr McCauley reviewed these policies and considered that the application complies with them, given the location of the site and the distance to applicable sites of significance to Ngai Tahu.
92. I accept Mr McCauley's analysis and consider that the proposal is consistent with the iwi management plan.

Section 105

93. Mr McCauley addressed section 105 matters. I record that I have had regard to the nature of the discharge and sensitivity of the receiving environment, the applicant's reasons for the proposed choice, and possible alternative methods of discharge in reaching my decision. Treatment of odour from the PRP in an appropriately designed and managed biofilter is consistent with the current BPO. I find that the existing plant is appropriately located in an industrial zone and accept that there are sound reasons, including the substantial investment in existing infrastructure, for choosing to continue operating at the site. I am satisfied on the evidence that the methods of discharge and treatment are appropriate in this case.

Part 2 of the Act

94. Ms Brabant provided an analysis of Part 2 matters in her evidence. I consider that there is no specific reason to revert back to consideration of Part 2 matters in this case, as relevant considerations are encapsulated in the regional planning documents. However, for completeness, I have considered the proposal against Part 2 of the Act.
95. In accordance with Part 2, I consider that granting the application is likely to achieve the purpose of the Act and the principles of the sustainable management of natural and physical resources, as defined in section 5. I accept that continued operation of the plant would contribute to economic and cultural wellbeing and be an efficient use of resources. Taking into account the mitigation measures proposed, I consider that the proposal would safeguard the life supporting capacity of the air and provide for the health and safety of communities.

96. I consider that there are no matters of national importance (section 6) that require specific consideration in relation to this application.
97. I have had particular regard to section 7(b), (c) and (f) matters, and find that the application, subject to the comprehensive conditions now proposed, would adequately maintain amenity values and the quality of the environment. I am satisfied that the proposal represents efficient use and development of resources.
98. In achieving the purpose of the Act, I have taken into account the principles of the Treaty of Waitangi/Te Tiriti o Waitangi (section 8).

Duration of Consent

99. The applicant has requested a consent duration of 20 years. Mr McCauley and Mr Whyte have stated that a term of 10 years would be more appropriate if consent was granted. Submitters in opposition have indicated that any consent should not be for a long term.
100. Ms Eveleigh has provided considerable discussion on matters relevant to consent duration in her legal submissions. Ms Brabant has also provided comment on this issue. I have considered all the arguments presented when reaching my decision on the term of consent.
101. I do not consider that substantial changes that would increase the sensitivity of the receiving environment are likely, noting that the district plan review in 2017 retained industrial zoning in the immediate neighbourhood of the Tegel plant. I find that adverse odour effects can be effectively managed via the proposed upgrades, the odour management plan and the conditions of consent now proposed. The conditions include a requirement to assess the BPO for odour control every five years.
102. Policy 6.12 of the CARP provides that: *“Where activities locate appropriately to mitigate adverse effects on air quality a longer consent duration may be available to provide on-going operational certainty.”*
103. I consider that the existing activity is appropriately located in an industrial zone and determine that a term of 20 years would be consistent with a “longer consent duration” provided for by Policy 6.12. Such a duration offers operational certainty to the applicant.
104. Having considered all the relevant information I determine that a consent duration of 20 years is appropriate in the circumstances of this proposal.

Overall Conclusion

105. Based on the comprehensive and robust consent conditions I intend to impose, I find that any adverse effects of the discharge of odour and other contaminants from the Tegel poultry processing plant will be acceptable. The existing plant is appropriately located in an industrial zone with sufficient mitigation now applied to protect sensitive residential areas

from nuisance effects. I am mindful of the submitters' concerns regarding past odour effects caused by the existing plant, and the potential for continuance of such effects. However, the evidence is that the odour control upgrades recently implemented are expected to result in a significant improvement in off-site odour effects. Regular odour monitoring and reporting is proposed to confirm the effectiveness of those changes. I conclude that consent can be granted for a term of 20 years.

Decision

106. For the above reasons, it is the decision of the Canterbury Regional Council, pursuant to sections 104, 104B, 104D and 105, and subject to Part 2 of the Resource Management Act 1991, to approve the application by Tegel Foods Limited for Discharge Permit CRC194459 to discharge contaminants into air, for a duration of 20 years and subject to the conditions attached.

Dated this 29th day of September 2020.

A handwritten signature in black ink, appearing to read 'John Iseli', written in a cursive style.

John Iseli
Hearing Commissioner

Conditions of Consent CRC194459 - Tegel Foods Limited

1. The discharges shall be only:

- a. Odour from the processing and cooking of poultry, the rendering of by-products and the storage and conveyance of wastewater;
- b. Combustion products from boilers fuelled on diesel oil, biodiesel, light fuel oil, reprocessed oil or liquefied petroleum gas; and
- c. Smoke and odour from meat smokehouses;

located at 112 Carmen Road, legally described as Section 27 Survey Office Plan 459717, at or about map reference NZTM 1562227, 5179717, as shown on Plan CRC194459A, attached to and forming part of this consent.

2. A maximum of 80,000 birds (chickens and turkeys) shall be processed per day.

3. The discharges shall not cause odour or the deposition of particulate matter that is noxious, dangerous, objectionable or offensive beyond the boundary of the property on which the consent is exercised.

4. The boilers shall have a combined maximum heat output rating of 6.6 megawatts, configured as follows:

- a. A maximum of two boilers with a maximum combined heat output rating of 2.2 megawatts, discharging from either the existing front boiler stack or the proposed front boiler stack; and
- b. A maximum of four boilers with a maximum combined heat output rating of 4.4 megawatts, discharging from the rear boiler stack;

as shown on Plan CRC194459B, attached to and forming part of this consent.

Advice note: For the avoidance of doubt, during commissioning of the new front boiler, existing and proposed front boilers may be operated simultaneously provided that the combined heat output of the operated front boilers is collectively no greater than 2.2 megawatts.

5. The sulphur content of fuel burned in the boilers shall not exceed the following:

- a. 0.5 percent by weight as a monthly weighted average; or
- b. 0.8 percent by weight as an absolute maximum value.

6. The reprocessed oil burned in the boilers shall comply with the following specifications:

- a. Lead 100 parts per million maximum;
- b. Arsenic 5 parts per million maximum;
- c. Cadmium 2 parts per million maximum;
- d. Chromium 10 parts per million maximum;
- e. Total halogen content 1,000 parts per million maximum (no polychlorinated biphenyls allowed); and

f. Flash point 60 degrees Celsius minimum.

7. The discharges from the boilers shall occur:

- a. From the front boiler house, via a single stack at a height of 19 metres above local ground level;
- b. From the rear boiler house, via a single stack at a height of 22 metres above local ground level; and
- c. From both stacks, directed vertically into air and not impeded by any obstruction above the chimney stacks which decreases the vertical efflux velocity.

8. The efflux velocity of the exhaust gas from the boiler stacks, when the boilers are operating at 100 percent of their maximum continuous ratings, shall be not less than:

- a. 16 metres per second from the front boiler house stack; and
- b. 18 metres per second from the rear boiler house stack.

9. Particulate matter with an equivalent aerodynamic diameter of ten microns or less (PM₁₀) shall not exceed:

- a. A concentration in either boiler stack of 250 milligrams per cubic metre (corrected to 0 degrees, dry gas, 101.3 kilopascals and 12 percent carbon dioxide); and
- b. A mass emission rate of 0.2 grams per second (0.72 kilograms per hour) in the discharge from the front boiler house; and
- c. A mass emission rate of 0.4 grams per second (1.44 kilograms per hour) in the discharge from the rear boiler house.

10. The concentration and mass emission of PM₁₀ in the combustion gas discharged from each of the boiler stacks shall be measured in accordance with the following:

- a. The frequency of testing shall be as follows:
 - i. testing shall be undertaken at least once every 12 months, except where ii applies;
 - ii. where the concentration and rates of PM₁₀ emissions measured in three consecutive tests conducted in accordance with i comply with the limits specified in Condition 9, testing shall be undertaken at least every 24 months.

The results shall be expressed as the average of at least three measurements.

- b. Each test shall comprise three measurements and shall be undertaken as far as practicable when the boiler plant is operating at greater than 70 percent of the maximum continuous rating or at the maximum safe load that can be maintained throughout the testing period.
- c. Particulate concentration results shall be adjusted to zero degrees Celsius, 101.3 kilopascals and 12 percent carbon dioxide by volume on a dry gas basis and mass emission results shall be expressed as grams per second and/or kilograms per hour.
- d. The consent holder shall record the plant's operational steam load or fuel usage rate during the tests.

e. The method of monitoring shall comply with US EPA Method 201A or an equivalent method as agreed by the Consent Authority.

f. Tests are to be designed and carried out by an appropriately qualified and independent person (i.e. holding ISO 17025 accreditation and with accreditation for the test methods from IANZ or an equivalent body).

g. The results of the analysis, including a description of the method used, the rate of fuel consumption during testing and any assumptions made, shall be provided to the Canterbury Regional Council, Attention: Regional Leader – Monitoring and Compliance, within 20 working days of the date of testing.

11. The boilers and any associated emission control systems shall be maintained in accordance with the manufacturers' instructions by a person(s) competent in the maintenance of such appliances. The maintenance shall include as appropriate:

- a. ash removal;
- b. adjustment, if necessary, of the fuel to air ratio; and
- c. testing of the ratio of combustion gases discharged, i.e. carbon monoxide, carbon dioxide and oxygen.

Maintenance reports shall be prepared and copies shall be provided to the Canterbury Regional Council on request.

12. The consent holder shall keep a record of the amount and type of fuel used each month in each boiler. Where light fuel oil or reprocessed oil are used the record shall also include sulphur content. The record shall be provided to the Canterbury Regional Council on request.

13. The opacity of the emissions from the boiler stacks shall not be darker than Ringelmann Shade 1 as described in New Zealand Standard 5201:1973; except:

- a. In the case of a cold start for a period not exceeding 30 minutes in the first hour of operation; and
- b. For a period not exceeding a total of four minutes in each succeeding hour of operation; and
- c. For a period not exceeding two minutes continuously, in each succeeding hour of operation.

14. The discharge to air from chicken scalding shall be via two stacks, each with a height of 18 metres above local ground level.

15. Odorous air from the protein recovery plant shall be extracted and conveyed to the biofilter operated and maintained in accordance with condition 19. The extraction system shall operate at all times during operation of the protein recovery plant, and the rate and method of extraction shall be sufficient to ensure that the protein recovery plant building is held in a state of negative pressure at all times.

16. All doors and windows on the protein recovery plant shall be kept closed at all times except for the purpose of ingress of goods or egress of products and staff movements, provided that the doors

may be open when the air temperature within the building exceeds 35°C and the temperature is a health and safety matter for operators.

16A. The consent holder shall undertake an investigation of the opening of doors and windows of the protein recovery plant during high temperatures and suggest solutions to minimise these openings. The consent holder shall provide a report on the investigation and suggested solutions to the Canterbury Regional Council within 12 months of the commencement of consent.

17. The extraction of air from the protein recovery plant and wastewater balance tank shall be in accordance with Plan CRC194459C, attached to and forming part of this consent.

18. The wastewater balance tank shall be enclosed and head space air shall be extracted and conveyed to the biofilter operated and maintained in accordance with condition 19.

19. The biofilter shall be operated and maintained such that the following parameters are complied with:

- a. A minimum media volume of 1,388 cubic metres;
- b. A maximum air loading rate of 45 m³ air/hr/m³ media;
- c. A maximum fine bark or soil content of 10 vol. percent;
- d. Inlet air to the Biofilter shall be:
 - i. ≤35 °C for more than 95 % time;
 - ii. ≤40 °C for more than 99 % time; and
 - iii. A maximum inlet temperature of 45 degrees Celsius;
- e. A maximum pressure drop across the biofilter media and air supply plenum of 150 millimetres water gauge (except for up to 3 days following high precipitation events, when a maximum pressure drop of 200 millimetres water gauge applies);
- f. The media pH shall be;
 - i. pH 5 or higher at 600 mm from the top of the media surface; and
 - ii. pH 3.5 or higher at >600 mm from the top of the media surface;
- g. A moisture content between 50 percent and 65 percent by weight, except during and following periods of high precipitation (up to 3 days);
- h. The biofilter shall not discharge rendering odour and shall only discharge an earthy/bark type odour immediately adjacent to the biofilter;
- i. The flow of air through the biofilter bed shall be evenly distributed throughout and across the bed.

20. The following biofilter parameters shall be measured and recorded:

- a. The pressure drop and pH once per month;
- b. Moisture, inlet air temperature and inlet air pressure continuously; and

- c. The observations undertaken to confirm whether the flow of air throughout and across the bed is evenly distributed, as required by condition 19(i), once per year. This record shall include a description of the methodology used for analysis of air flow distribution.

The records shall be kept for a minimum of twelve months and provided to the Canterbury Regional Council on request.

21. All raw material to be processed at the protein recovery plant shall be:

- a. Only by products from the processing of poultry; and
- b. Processed or stabilised within 24 hours of its production.

22. All incoming loads of raw material for processing at the protein recovery plant shall:

- a. Be inspected prior to receipt; and
- b. Shall not be accepted if they cannot be processed within 24 hours of being produced, and/or are excessively odorous in comparison with a normal load received from that source.

22A. The roof and wall cladding of the protein recovery plant, within all areas where air is extracted for odour control, shall be kept in good condition and repaired/replaced if damaged. Non-functional holes or gaps, including around pipe penetrations, shall be repaired or blocked as soon as practicable. This excludes functional accessways such as the load out pods.

23. A site boundary odour assessment at a downwind location shall be undertaken by an agent, contractor, employee or staff member of the consent holder that is not regularly exposed to odour from the site at least once every day when birds are present on site (or at any lesser frequency with the prior written agreement of the Canterbury Regional Council). To ensure accurate identification of odour, the person undertaking the monitoring shall be trained by a suitably qualified person in the assessment of ambient odours via methods documented within the most current Ministry for the Environment Odour Management Guideline. The assessment shall be conducted using methods documented within the most current Ministry for the Environment Odour Management Guideline and the monitoring procedure shall be set out in the Air Discharge Management Plan required by Condition 27.

Advice note: In considering any reduction in the frequency of observations the Canterbury Regional Council shall consider the report(s) submitted in accordance with condition 25 and the record of compliance of odour emissions with Condition 3.

24. The results of the assessments made in compliance with condition 23 shall be recorded and kept at the site for a minimum of 24 months and be provided to the Canterbury Regional Council on request.

25. The consent holder shall submit a report to the Canterbury Regional Council no later than 1 October each year in relation to the results of the assessments made in compliance with condition 23, detailing but not limited to the following (in relation to the year to 1 September):

- a. A statistical summary of the results of the surveys and a discussion of this;
- b. A discussion of compliance with the applicable conditions of this resource consent;

- c. Whether the frequency, intensity, character, duration and location of observed odour in any odour event was offensive or objectionable based on acute exposure to the odour, and the reasons for the observed odour;
- d. Whether the frequency, intensity, character, duration and location of observed odour would be offensive or objectionable where there is chronic exposure to the odour, and the reasons for the observed odour;
- e. Any other notable odour events and the reasons for them; and
- f. Whether any events occurred that could be correlated with complaints made either to the consent holder or to Environment Canterbury; and
- g. Any proposed amendments to the frequency of site boundary odour observations to be undertaken in accordance with condition 23.

26. If a site boundary odour assessment undertaken in accordance with condition 23 identifies that an odour event is occurring that would be classified as offensive or objectionable, the consent holder shall immediately take all practicable steps to identify the source of the odour and rectify the problem.

A report describing the site boundary odour assessment, investigations undertaken, identified sources or causes of the odour and remedial steps undertaken shall be provided to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 10 working days of the initial observation of the odour event by the consent holder, or otherwise on request.

27. The operation of the site shall be in accordance with an Air Discharge Management Plan (ADMP), which shall include but be not limited to:

- a. A description of all odour sources;
- b. A description of all odour mitigation practices and associated operation, management and maintenance;
- c. Managing raw material quality, including that from off-site sources;
- d. Operation and management of the bird receipt area including cleaning, stock management, temperature control and ventilation;
- e. Operation and management of the protein recovery plant extraction system and the biofilter;
- f. The management of cooking cycles to avoid overloading of the condensers;
- g. Alternative arrangements in the event of loss of operation of the protein recovery plant;
- h. Boiler operation, servicing and maintenance;
- i. Wastewater system operation and cleaning;
- j. Contingency situations and responses; and
- k. Monitoring required by this resource consent, including but not limited to procedures for conducting site boundary odour assessments in accordance with Condition 23.

The ADMP may be updated or amended at any time but shall be reviewed at least annually and updated as necessary. A copy of the updated plan shall be forwarded to the Canterbury Regional Council within two weeks of it being updated.

28. The consent holder shall, at five-yearly intervals, undertake an assessment of the best practicable option for the control of odour from the site. The assessment shall be undertaken by an independent person who is suitably qualified and experienced in the control of odour emissions from the activities at the site. The assessment shall:

- a. Summarise the current practices for odour control from processes of the type undertaken at the site;
- b. Account for the sensitivity of the receiving environment and odour effects being created by the site at that time;
- c. Indicate whether, on consideration of factors including but not limited to the effects from the site that are occurring at that time, the effectiveness of the mitigation alternatives, their applicability to the site, and their cost, the practices are the best practicable option for the site;
- d. Indicate, if new practices are considered to be best practicable option and required at the site, the consent holder's strategy for implementing them; and
- e. Be provided to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance not later than five, ten and fifteen years following the commencement of this resource consent.

29. A record of all complaints relating to odour or particulate matter caused by the discharge shall be maintained, and shall include:

- a. The location where the odour or particulate matter was detected by the complainant;
- b. The date and time when the odour or particulate matter was detected;
- c. A description of the wind speed and wind direction when the odour or particulate matter was detected by the complainant; and
- d. The most likely cause of the odour or particulate matter detected and steps taken to address the cause(s).

A copy of the record shall be provided to the Canterbury Regional Council, Attention: Regional Leader - Monitoring and Compliance, within 10 working days of a complaint received by the consent holder, or otherwise on request.

30. The Canterbury Regional Council may, on the last five working days of March or November each year, 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 the consent; or
- b. Requiring the adoption of the best practicable option to remove or reduce any adverse effect on the environment.

31. The lapsing date for the purposes of Section 125 of the Resource Management Act 1991 shall be 31 December 2025.

Plan CRC194459A

 Site outline



0 0.04 0.09 0.14 0.18
Kilometres

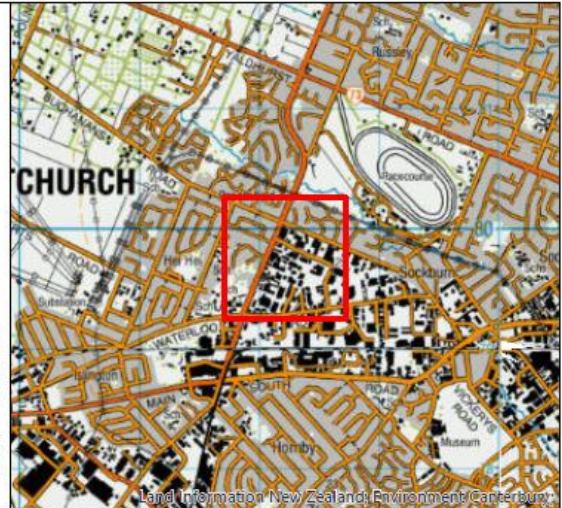
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Map Created by Canterbury Maps on 15/07/2020 at 3:19 PM

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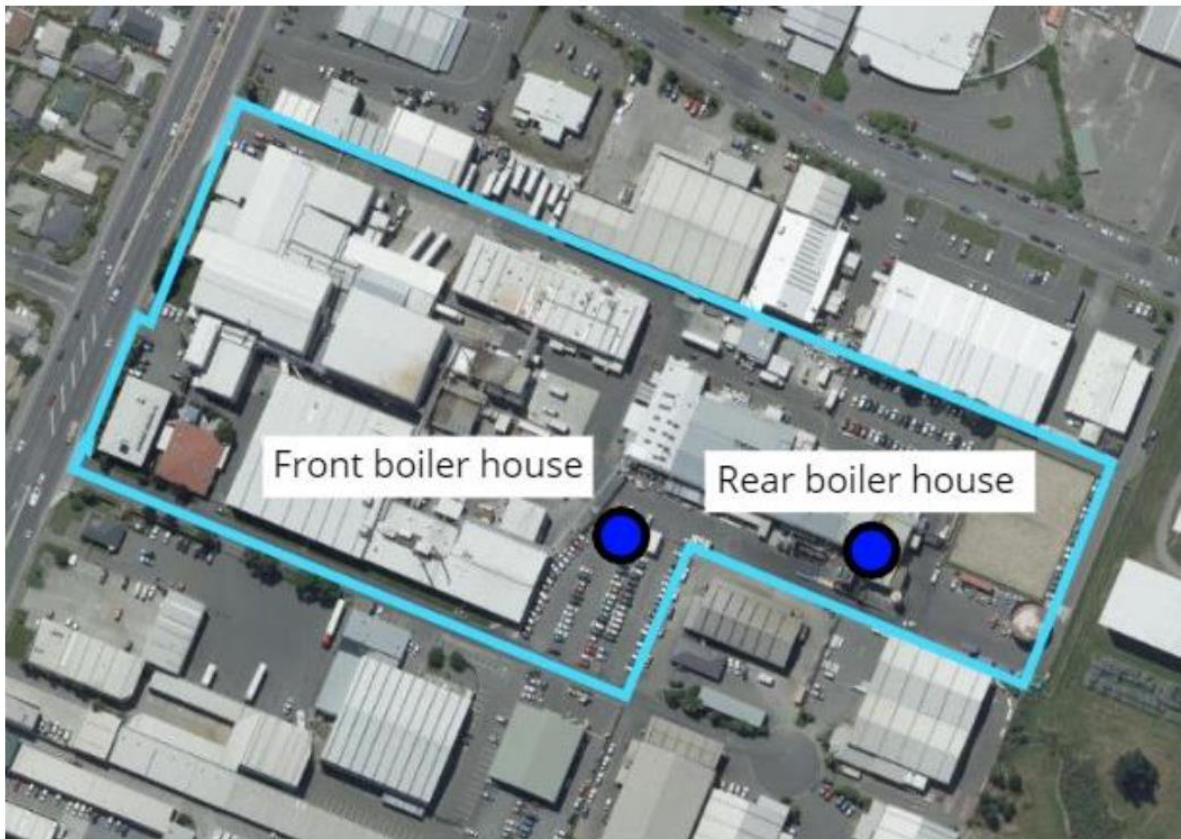
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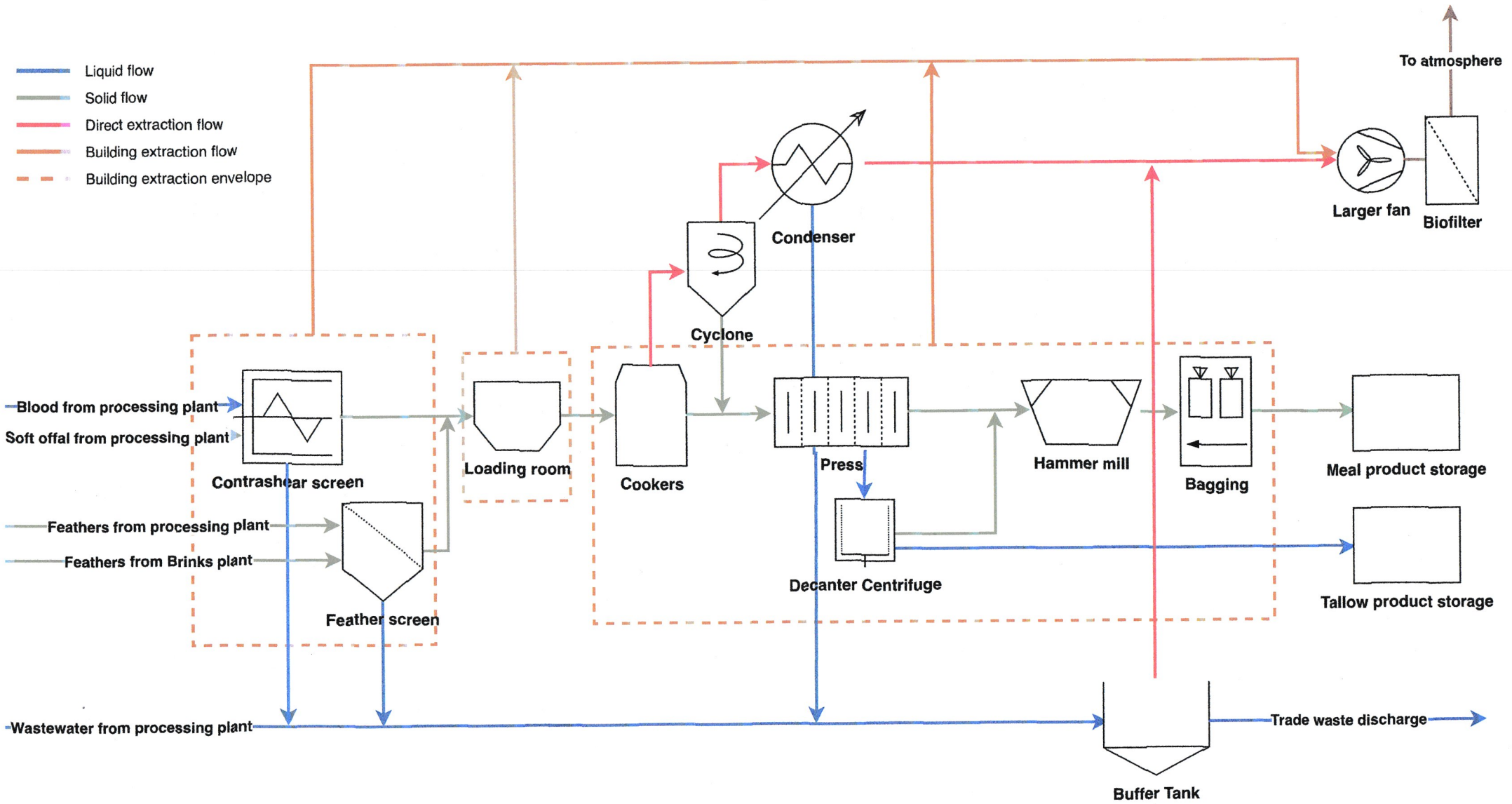
Legend note: If you have a large number of layers on the map, they may not all be visible in the legend.



Environment Canterbury Regional Council; Hurunui District Council; Waimakariri District Council; Timaru District Council; Waimate District Council; Mackenzie District Council; Otago Regional Council; LINZ; NIWA; Environment Canterbury; Waimakariri DC; LINZ

Plan CRC194459B





PLAN CRC194459C