

IN THE MATTER OF: The Resource Management Act 1991

And

IN THE MATTER OF: The hearing of Resource Consent Application APP-2005011098.01 by AFFCO NZ Ltd to discharge odours and other contaminants into air from a meat processing works at Imlay Place, Whanganui.

DECISION OF THE HEARING COMMITTEE

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1 Introduction

This is the decision of a hearing committee comprising Commissioners Andrew Curtis, Councillor Rachel Keedwell and Dr Brent Cowie (chair) appointed jointly by the Manawatu Wanganui Regional Council (MWRC, the Regional Council) to hear and decide an application from AFFCO New Zealand Limited (AFFCO, the applicant) to allow the ongoing discharge of contaminants to air, particularly odour, from its meat processing works at Imlay in Whanganui.

The hearing was held in Whanganui on Tuesday 31 October and Wednesday 1 November 2017. We heard from legal counsel and four witnesses from the applicant, four submitters and three officers from the Regional Council. The hearing commenced at 1pm on the Tuesday and was adjourned at about 5pm on the Wednesday. Prior to the adjournment we discussed with the applicant and the officers the procedure from that point on, and we confirmed that in our third minute.

We undertook two site inspections. The first was in the morning prior to the hearing. The second was after the hearing was adjourned. The reason for the second inspection was that the rendering plant, which is the main potential source of odour on the AFFCO site, was not operating during the first site inspection as it does not commence daily operations until about midday, and we wanted to see that operating. We particularly thank Mr Ricky Gowan, the Compliance Manager, and Mr Terry Te Weare, the rendering plant supervisor, for showing us around so willingly.

The Regional Council received the revised draft conditions from the applicant on 24 November 2017 and we received the right of reply on 5 December 2017. Once we were satisfied that we had all the information necessary to make our decision, we closed the hearing on 14 December 2017.

2 The Proposal

2.1 The AFFCO Operations at Imlay

The construction of a freezing works at Imlay commenced in late 1914 and the site became operational in 1916. While Imlay and the land around it is zoned for industry in the Whanganui District Plan, other industrial activities have become established on and near the site, and extensive urban development has taken place nearby. In broad terms the land to the west along the river is used for industrial and commercial purposes, while well established urban development encircles the plant, particularly to the north and east. The site is closely bordered by the Whanganui River to the south, and there is a cycleway/walkway between the meat works and the river and only about 10 metres from the property boundary.

There are other nearby industrial activities that could also discharge odour to air. Immediately to the north, and on the same site as Imlay, is a large milk powder factory

known as Open Country Dairy, which like AFFCO is owned by the Talley's Group. This opened in 2009. About 500m to the west is the Tasman Tanning, which takes cattle hides and processes them into leather used for a variety of companies around the world, and another AFFCO subsidiary known as Lands Meats which processes beef is about 6km to the west.

The Imlay plant undertakes a number of main activities that could generate odour or other adverse offsite effects. These main activities include:

- Stockyards.
- Refrigeration, which uses large volumes of ammonia.
- Collection and storage of offal, which includes offal from Lands Meats and another AFFCO plant at Fielding.
- A rendering plant, which processes offal.
- Two large biofilters, which treat odour from the site before it is discharged to air.
- A Wastewater Treatment Plant (the WWTP), which provides some treatment of the wastewater from the site by settling out solids.
- A gas fired boiler.

Before we describe these there is one other matter. In its application AFFCO also sought to potentially construct a new Chemical WWTP on the Imlay site. However, no assessment of environmental effects was provided. Although Mr Edwards gave us an outline of how the proposed WWTP would operate, we decided that if AFFCO wanted to proceed with this part of the application, the hearing would have to be adjourned while a proper assessment of effects was prepared. After a brief adjournment, AFFCO withdrew the Chemical WWTP from the ambit of the application.

The stock yards house sheep and bobby calves prior to processing and occupy an area of approximately 2,500 square metres. At the peak of the processing season they can hold up to 10,000 sheep, which is sufficient for a full 19 hours of processing. The main potential for discharges to air comes from the faeces and urine excreted by the animals held in the yards. This effluent is discharged to the WWTP.

Once processed the meat carcasses are stored in a variety of chillers and freezers prior to being dispatched from the site. These systems operate by pumping high pressure ammonia liquid around a circuit, as it passes through an expansion valve, the ammonia boils and its temperature drops drawing heat out of the system. The ammonia is then recompressed into a liquid and goes through the cycle again. While there are not direct discharges from this type of system, there are occasionally leaks, which can generate odour, and if of a sufficient volume a range of health effects. At Imlay there is up to 19 tonnes of ammonia in the system at a time.

In its consent application AFFCO did not apply to discharge ammonia to air from the site. We accept that the ammonia used to freeze carcasses should not leak and so should not

discharge to air. If a significant volume of ammonia does somehow leak from the plant, that will be an illegal discharge and the MWRC would then need to decide what enforcement action, if any, it would take.

Offal, both hard (bone) and soft, collects at two locations on site with the offal from the slaughter floor passing directly to a machine which grinds it up before being transferred to an uncovered bin with a capacity of approximately 1 m³ located on the south side of the site approximately 15 m from the public walkway along the river. Once full these bins are transferred to the rendering plant. Offal from the cutting floor is stored in a large enclosed hopper, and once full the hopper is emptied into a truck which transfers the material to the rendering plant.

Imlay operates a low temperature rendering plant, which converts the offal from Imlay, AFFCO Feilding and Lands Meats into a dried meal which is used in stock foods, and tallow which is used primarily in the production of soaps. The rendering plant also coagulates blood, which is then transferred to another site for further processing. The offal is first loaded into the external raw materials bin, which has a lid but is otherwise in the open air, before being transferred to the indoor bin via a screw conveyor, which feeds what is called the wet site of the operation. This involves “cooking” the ground materials and then separating out the liquids (tallow and water) and solids which are then further processed by drying in two indirect fired rotary driers. While all of the main rendering processes are connected to point, or localised extraction systems which ultimately discharge to air through one of the two biofilters, there is the potential for odour to discharge into the building, which in turn can be discharged untreated to air via the roof mounted building ventilation. All of the air extracted from the rendering processes, pass through a heat recovery system before passing into one of two biofilters and then discharging to air.

The existing WWTP is on the south west boundary of the property. It consists only of primary treatment to settle out solids, notably fats, via a series of baffles after the effluent has passed through a contrashear to remove larger solids. The resulting trade waste discharge, which would remain highly loaded with various contaminants, is then discharged to the trade waste network and then to the Whanganui District WWTP. AFFCO acknowledged that their existing annual trade waste charges are in excess of \$1 million per annum.

Process heat for the operations is provided by a 10.5 MW natural gas fired boiler. This single unit has replaced various older boilers, including a coal fired boiler that was on-site previously. The boiler is regularly serviced, and based on the atmospheric dispersion modelling included in the application, discharges from its operation comply with the National Environmental Standard for combustion related discharges.

We also note here that the consents granted in 2007 allowed AFFCO to construct a fellmongery on the site. While this was established, it was removed from 2013 onwards, primarily due to the seismic risk it posed (although it was not necessarily portrayed that way

to us – for instance legal counsel said the “main catalyst” for its removal was to ensure compliance). The discharge of odour from a fellmongery was accordingly not part of proposal before us.

2.2 Notification and Submissions

The application was accompanied by an Assessment of Environmental Effects prepared we were told by Mr Roger Cudmore of Golders, (although his name did not appear on the document as an author) in March 2017. It was publicly notified on 25 May 2017 to parties within 750 m of the rendering plant, and a number of statutory bodies, including local iwi. The details were given in Ms Adsett’s officer’s report. Twenty-six submissions were received, of whom eight wanted to be heard. One of those submitters later withdrew their right to be heard, but in the end we only heard from four submitters (three spoke to the one joint submission), of whom only Sharon Semple lived within 750m of the rendering plant.

The main matters raised in submissions were summarised in Ms Adsett’s s42A officer report. Of the 26 submissions received, four supported the application, five (including the Whanganui District Council and the Public Health Service of Mid Central Health) neither supported nor opposed the application, and the other 16 submitters opposed the application in various ways.

By far the most frequent submission point was the effects of odour discharges from the Imlay plant on the local community, particularly on people’s ability to be able to enjoy the amenity afforded by their properties, including not being able to go outdoors and having to shut windows and the like during significant odour events. An associated concern was the effects of odour discharges on health and well being. Many submitters also commented on the applicant’s proposed mitigation measures, including those in the AEE, with a common theme being that the mitigations proposed were not necessarily adequate. Concerns were also raised about the Wastewater Treatment Plant as a source of odour.

Many submitters either sought a short term consent be granted, typically for five years, or that the application be declined. Conversely several submitters commented on the value AFFCO has to the local community, particularly in providing employment for up to about 600 staff.

There were also a number of submission points that are beyond our scope in hearing and deciding the present application. As a hearing committee we cannot address concerns about the pollution hotline or enforcement by Regional Council officers¹, we are barred by provisions in the RMA from considering effects on property values, and we have no control over livestock trucks.

¹ Although as a Councillor Dr Keedwell can and she has taken these concerns on board.

3 The Hearing

3.1 The Case for the Applicant

We heard from legal counsel and four witnesses for the applicant.

Ms Teresa Le Bas

Ms Le Bas was legal counsel for AFFCO at the hearing. In her opening submissions she emphasised two main matters. The first was the proposed Chemical Wastewater Treatment Plant, which as already discussed was not pursued by the applicant as part of the present application. The second was the term of the consent, which she addressed quite comprehensively, including by citing case law. She sought a consent term of between 18 and 25 years.

Mr Troy Lambly

In the original evidence provided before the hearing Mr Patrick Edwards, an Auckland based consultant, provided what was called “company evidence”. We were not at all satisfied that he could answer our questions about the applicant’s operations on the site, so we insisted that a senior employee of AFFCO on the site appear at the hearing. That representative was Mr Lambly, who is the General Manager of the AFFCO Imlay plant, a position he has held since 2011. As Mr Lambly did not provide any written evidence, we summarise what he said here in a little more detail. Much of this was in response to questions.

AFFCO has owned Imlay since 1990, and the company was fully bought out by Talley’s in 2011. Imlay is Talley’s primary ovine processing plant in the country with a kill of over 1 million stock units annually.

In 2014 the company started a major refurbishment of the rendering plant during an extended close down period. Mr Lambly acknowledged that there were problems during the commissioning of the plant (which led to significant off-site odour issues in early 2015)². One example he cited was the squeeze press (which separates the solids and liquids in the wet side of the rendering plant), which eventually had to be replaced.

Rendering volumes had not however met expectations. The rendering plant can process 260 tonnes of offal per day, but is usually doing about 130 tonnes per day. At least 50% of this daily volume is transported from Feilding, where the offal is acid dosed to stabilise (preserve) it, as it moves along the conveyor from the slaughterhouse to the truck. The last of the offal is generally received late in the afternoon, and the plant remains open until all the day’s offal is processed, which can be the early hours of the next morning. Mr Lambly said that there was no defined scale as to how AFFCO determine if offal from Feilding is fit for rendering, but he did say none has been rejected since 2011 despite acknowledging that there might be problems if that offal is more than six hours old. In this context he said that

² See the summary of the evidence of Mr Pita Kinaston, a reporting officer for the Regional Council

the odour issues at Imlay in August 2017 occurred because of a low kill at Feilding, and with trucks coming to Imlay less often, the offal was older before it was processed.

Asked what happens if there is a breakdown in the rendering process, leading to offal being “trapped” at some stage in the process, Mr Lambly said that the first step is diagnosis, then determining a timeframe for repair and how the adverse effects can be mitigated. Options include further acid dosing, or closing the rendering plant and diverting the aging offal to other plants at Horotiu or Rangiuuru. In these circumstances the company would notify the Regional Council, but has no proactive approach to advising the local community, such as by media releases or web based information. On a similar theme any odour complaints are logged and if deemed necessary, either Mr Gowan or Mr Te Weare carry out an inspection around the boundary or local streets where the complaint occurred from.

We also asked Mr Lambly which of Mr Cudmore’s recommendations in Table 5 of the AEE lodged with the application had been implemented to date.³ In response he said that less than 20% of the recommendations have been completed, that “a few” are debated and the others will mostly be completed by the end of 2017.

Mr Patrick Edwards

As already stated Mr Edwards provided written evidence as a “company representative”, but what he said was largely superceded by the evidence of Mr Lambly.

Mr Roger Cudmore

Mr Cudmore presented a summary of his report. He reiterated that the emissions from the gas fired boiler were negligible, with the odours relating to the rendering plant representing the greatest potential for off-site effects.

He restated his concern about the recommendation made by the officers to enclose the raw material bin, saying that he considered his recommendation to install a new dedicated biofilter and extraction system, provided the same benefit at a significantly reduced cost.

Mr Cudmore also provided further explanation for his view that targeted extraction (referred to as a point source extraction system or PSES in his statement) was the most appropriate option and if this was operating effectively then there would be no fugitive odours. He strongly disagreed with the need for building enclosure as he considered it was a costly option with little additional benefit over the targeted extraction. He also stated that he considered that there was the potential for health and safety concerns if the building was totally contained. Although he did acknowledge that his view in this matter may be different to other consultants.

³ Mr Cudmore’s Table 5 listed 12 recommended actions or sets of actions, almost all of which were recommended to be undertaken during the annual shut down of the site in July 2017.

In answer to questions, Mr Cudmore stated that he:

- did not consider that the external offal bin needed to have additional extraction when the lid was open;
- did not believe that the rendering plant building required ventilation to control odours in the event of a plant breakdown;
- considered that there were a number of locations within the rendering plant where additional extraction was required to reduce the potential for fugitive odours; and
- also indicated that he considered that there needs to be more emphasis on monitoring the effectiveness of the extraction system and biofilters and if the recommendations on flows in his assessment (Table 3) and other mitigation (Table 5) were implemented then there would be a significant reduction in off-site odour, to the point that he considered that the residual odour would be minor.

Despite further questions on this we were left unclear as exactly what this might mean for people off-site.

Mr Cudmore also indicated in response to a question that he did not consider that a FIDOL type assessment of odour was required.

Mr Kevin Bligh

Mr Bligh is a planner employed by Golders, for whom he has worked on several significant discharges to air from industrial activities. He addressed a number of matters, including the statutory assessment criteria and the Objectives and Policies of the operative Regional Council "One Plan". He had a particular focus on the term of the consent.

In answer to questions Mr Bligh made the following points:

- A minor odour effect is "something not offensive to a reasonable person".
- It is important that the consent is granted, and that it's not necessary to have prescriptive conditions as this can be left to an Odour Management Plan.
- The various "plans" provided for in the officer's recommended conditions of consent can be rationalised, particularly that requiring an Environmental Management Plan, which requires independent approval (and which AFFCO currently does not have).

Regarding term, despite saying that the common catchment expiry date should not be applied to discharges to air, Mr Bligh said that if a term of 25 years is not adopted, it would be appropriate to adopt an 18 year term in accordance with the common catchment expiry date of 1 July 2035.

Right of Reply

Ms Le Bas provided a brief right of reply. She said that enclosing the offal bin in a building, as recommended by the officers, would cost an estimated \$284,000 exclusive of GST and asserted that the costs of fully enclosing this area are out of proportion with the negligible

benefits of doing so, as discussed by Mr Cudmore. She also discussed other proposed conditions of consent, and cited case law that she submitted meant consent condition reviews could be used effectively for a site such as Imlay. An 18 year term is now sought.

3.2 The Submitters

Four submitters appeared at the hearing. Of these only Sharon Semple lived near the Imlay works site, and we were a little disappointed that other submitters who lived near the plant and who had originally sought to be heard did not appear. We understand that public speaking in what might appear to be a formal setting is intimidating for many people, but we would have welcomed and very much listened to what those people might have said. Indeed that was the case with Ms Semple, who did say she found the process “quite intimidating” but did appear and provide us with her valued perspective.

We also did not hear from any representative of Tupoho, the tangata whenua of the Whanganui River with mana whenua status in the local area. They supported the consent application in part, with their main objection being against the construction of a pipeline under the river and associated discharge that was proposed as part of the (then proposed) chemical wastewater treatment plant. They also requested changes to the conditions to address proper representation of all relevant iwi groups on the Community Liaison Group and to ensure proper engagement.

Ms Sharon Semple

Ms Semple lives at 34 Bignell Street, which is north of the AFFCO site. She could smell some odour from Open Country Dairy at times, but could distinguish that odour from those she associated with AFFCO. She described the worst of the odour from Imlay as being like “dead animals”, which generally starts about 4pm and can linger until 2am in the morning (which we observe coincides with the main processing period of the rendering plant). The odour was particularly offensive in early 2015, when she could not open windows or have barbecues or the like. Ms Semple was critical of both the Regional Council’s and particularly AFFCO’s response to complaints, because in her view there is no effective response.

She did not consider that there had been a significant change in the odours since the fellmongery closed.

Asked what decision she would like us to make Ms Semple said she did not want the plant closed down but wants to see AFFCO take much more responsibility and fully implement conditions of consent. She supported the continuation of the Community Liaison Group, but said its meetings needed to be much better publicised than just a notice in the newspaper.

Mrs Barbara Allan

Mrs Allan does not currently live near the Imlay works site but had lived in Castlecliff until recently. She supported developing a functional relationship between the community and AFFCO, who she acknowledged were a significant employer and investor in the region. She (along with Lynn and Graeme Pearson) supported granting the consent but with a term of

five years and with conditions that prompt AFFCO to make ongoing improvements to their processes to achieve zero emissions for odour as soon as possible. She highlighted information from the evidence and the application that she believed showed maintenance of the rendering plant had been neglected and compliance had been poor.

Mrs Lynn Pearson

Mrs Pearson highlighted how the district council and community are promoting Whanganui as a destination and that Castlecliff is in the process of revitalising itself. In her view, this conflicts with the odour issues coming from the site and says that locals will be less tolerant of sloppy practices. She also questioned whether AFFCO is doing its best to become a good corporate citizen, based on its track record to date.

Mr Graeme Pearson

Mr Pearson noted that the technology used in the processing of by-products is rapidly changing and granting a consent timeframe of 25 years would potentially disincentivise uptake of new technology. He provided commentary on how the aged product arriving from the Feilding plant could be more accurately assessed and monitored, and also gave suggestions for better communication between the company and the community.

3.3 The Officer Reports

There were three officer reports prepared under the provisions of s42A of the RMA. These had been circulated 15 working days prior to the commencement of the hearing, and were taken as read. We do not summarise them here, but rather focus on the additional comments made at the hearing.

Mr Pita Kinaston

Mr Kinaston is the Council's Team Leader of consents monitoring. His original report detailed the compliance history at Imlay during the term of the current consent. Formal enforcement action by the Council (usually in the form of infringement notices leading to "instant fines") dated back to October 2010. There was a particularly bad period in February 2015 when there were a series of odour complaints corroborated by Council officers that Mr Kinaston's manager, Mr Greg Bevin, told us led to the collection of evidence for a prosecution, but that the Council "did not quite get there". We understood from Mr Lambly that these incidents occurred because new processing equipment in the rendering plant kept breaking down, and that it was subsequently replaced. Mr Kinaston thought some of them may have due to rendering offal that had significantly deteriorated.

Mr Kinaston provided a supplementary report comparing compliance at AFFCO's Imlay plant with other similar industrial plants in the region. He said that AFFCO were "okay day to day" and did not have "an unusual level of non compliance for an industrial site", but that their location meant that when significant odours were generated, many complaints would be received. He pointed out that assessing odour can be difficult due to its transient effects, but noted that the Council now had a compliance officer based in Whanganui and this had often

led to a more rapid response to events (although that officer has a large area of hinterland to service).

Ms Deborah Ryan

Ms Ryan is an air quality specialist with extensive experience in evaluating and reporting on the effects of discharges to air from industrial sites. She had prepared a supplementary report that she spoke to at the hearing.

Ms Ryan made the point that the compliance record at Imlay shows that the plant can comply or largely comply with the condition of consent that requires no objectionable or offensive odour beyond the property boundary, but that is punctuated with periods of significant non-compliance, such as in early 2015. In relation to this she noted that odour from a plant like Imlay cannot be eliminated, as there will always be failures and events or incidents that can lead to odour beyond the boundary, and this is difficult and time consuming for the Council to assess objectively. In her view “there is no one thing or silver bullet to ensure that odour is adequately controlled” but that rather “there are a mix of measures and controls that cumulatively and incrementally reduce the risk of odour being experienced beyond the site”. Ms Ryan pointed out that the “best practicable option” approach to odour control is applicable under the One Plan.

Ms Ryan then discussed the main differences between herself and Mr Cudmore relating to the conditions of consent. We do not need to describe those here as we discuss them in Section 7.2 of this decision.

Ms Natasha Adsett

Ms Adsett spoke briefly to her report, saying that she still held to the eight year term recommended, and noting that any review of consent conditions is a difficult process for the Council.

The other matters covered in Ms Adsett’s report are discussed elsewhere in this decision.

4 Statutory Assessment

4.1 Assessment Criteria

There was no debate that the application is one for a discretionary activity under Rules 15-10 (which relates to the boiler) and 15-17 (which covers all unspecified discharges) of the MWRC operative One Plan.

Decisions on resource consent applications for discretionary activities are made under the criteria listed in Section 104(1) of the RMA. Subject to Part 2 of the Act, we must have regard to the following matters:

- a) any actual and potential effects on the environment of allowing the activity; and
- b) any relevant provisions of
 - i. a national environmental standard;
 - ii. other regulations;
 - iii. a national policy statement;
 - iv. a New Zealand coastal policy statement;
 - v. a regional policy statement or proposed regional policy statement;
 - vi. a plan or proposed plan; and
- c) any other matter the consent authority considers relevant and reasonably necessary to determine the application.

In relation to these matters and the present applications:

- We discuss Part 2 RMA matters briefly in Section 4.2 below.
- We see the actual and potential effects of the proposed air discharge as being the discharge of odour to air from activities on the Imlay site, and emissions from the gas fired boiler. We discuss these in Section 4.3 below.
- There are no relevant regulations.
- The relevant national environmental standard is the NES for Air Quality which we discuss in Section 4.4 below.
- There are no relevant National Policy Statements.
- The operative Regional Policy Statement and the relevant regional plan is the MWRC “One Plan” which we discuss in Section 4.5 below.
- We do not think there are any other particularly relevant matters in this instance.

As the proposed discharge is classified as a discretionary activity, under section 104B of the Act we can either grant or refuse the consent sought. If granted, we may impose conditions under s108 of the Act. In this case we have granted the consent with prescriptive conditions that, if fully implemented, we consider will avoid or mitigate the effects of the proposal.

4.2 Part 2 of the Act

Decisions on resource consent applications are made “subject to Part 2 of the Act”. However recent Court decisions, are to the effect that consideration of a resource consent application under s104 of the RMA does not permit general recourse to Part 2 unless the

relevant consideration of the planning provisions are invalid, incomplete or uncertain.⁴ This is not the case with the Operative One Plan, so we have carried out a very brief Part 2 evaluation here.

Section 5 of the RMA states its purpose and defines the sustainable management of natural and physical resources. In relation to s5 we note that granting the application will help the applicant and the community meet their social and economic needs, while the conditions on which consent is granted will avoid or mitigate the more significant adverse effects of the odour discharges to air from Imlay (provided those conditions are complied with).

There are no particularly relevant matters of national importance listed in Section 6 of the Act that we need to recognise and provide for in our decision.

The only Section 7 matter of much relevance is the effects of discharges on the maintenance and enhancement of amenity values, which is a matter we must have particular regard to. There was clear evidence that the exercise of the current consent has at times detracted strongly from local amenity values. Significant improvements in odour control at Imlay need to be made in order to reduce previous adverse effects and enhance amenity in the area.

In relation to Section 8 we heard no evidence that the present application was contrary to the Principles of the Treaty of Waitangi.

4.3 Actual and Potential Effects

The only significant discharges from the site are to air. The discharge from the WWTP is to the Whanganui trade waste system, and so this is treated with the District Council's wastewater treatment plant and is not discharged to land or water on the site.

There are two main types of air discharges from the site. These are odour from various onsite activities and combustion related discharges from the operation of the gas fired boiler.

4.3.1 Odour Emissions

There are a number of potential odour sources on site. Based on the evidence provided, it appears that most significant off-site odours have originated from the rendering plant, now that the fellmongery has closed, and therefore we have focused our discussion on it.

The odours from the rendering plant appear to be divided into three separate types: those from the external raw material bin and delivery to these bins; those from the "wet side" processing operations; and those from the "dry side" meal dryers. In addition there are the two biofilters which are the main treatment devices and discharge points for any odours collected from within the plant. We are not aware of any evidence that discharges from the

⁴ RJ Davidson Family Trust v Marlborough DC 2017 NZ High Court 52

biofilters have resulted in off-site odours but given their importance in treating the collected odours it is extremely important that they are operated correctly.

There is certainly a significant potential for odours to be generated from the raw material bin. Mr Lambly said that a truck would only take “a minute or two to empty” its load into the bin, which would be sufficient time for odours to be detected off-site if malodorous material were deposited, in the absence of any form of mitigation. It seems likely that the small truck that carries up to eight bins of offal generated on-site could take longer than this to empty.

One aspect of the collection of offal on the site did concern us. We were under the impression that once full, the slaughterhouse bins were unloaded immediately into the covered raw material bin. However that does not appear to be the case – rather these bins were emptied into a truck which holds approximately eight bins, which was left uncovered until it was full. It is only then that the truck transfers the offal to the rendering plant. We accept that while fresh there is little potential for the odour from this offal to become detectable and offensive off-site, but with a public path about 15m away, our understanding of the operating procedures did not seem to preclude this from happening. At the very least these bins, and the truck should have a temporary cover until the offal is transferred to the covered raw material bin.

There was a disagreement between the applicant, who proposed building a dedicated extraction system, with a standalone biofilter to treat any odour from the raw material bin and screw conveyor, and Ms Ryan, a reporting officer for the Regional Council, who recommended enclosing the raw material bin within a building with extraction. Our onsite observations, albeit with relatively little fresh offal in the bin was that there was little evidence of odour when the lid was closed. However as we were not present when a truck load of offal from off-site was deposited, we cannot be certain that this was always the case. Consequently we consider that it is appropriate that additional mitigation of some form is implemented, and we were persuaded by the evidence that a biofilter treating odour from the offal bin should suffice.

In terms of the odours from the rendering plant, there is a clear difference in character between those from the wet side and the dry side of the plant, with the former more “meaty” and the latter a warm dry cat food type odour. The philosophy that has been used to control odours is to have direct extraction points from all of the main sources. The AEE prepared by Golders, and the evidence of Mr Cudmore, made it clear that there were some issues with how this system had been operated, and in some cases extraction rates were insufficient.

While we know that there are a number of mitigation measures that still are to be implemented, it was clear from our site visit that there were fugitive odours from the rendering plant and we clearly detected odours from both the wet and dry side of the operation outside of the building. While the Applicant has provided a timetable for rectifying the extraction matters we are not convinced that this will prevent such odours being discharged via the building ventilation system. During questioning Mr Cudmore expressed a

strong view that collecting and treating these odours was not necessary and indeed may be counterproductive. We are not convinced on this matter as we know that other rendering plants operate under negative pressure without this type of fugitive emissions.

We consider appropriately operating biofilters represent the most appropriate type of treatment for rendering plant odours. Accordingly we were disappointed to see a fairly high level of disrepair on the pipes leading to the biofilters (such as poorly maintained seals) given their importance to odour control at the site. This is particularly the case given that the rendering plant can operate up to 20 hours per day, and as it starts processing offal at about midday, this will often be during the night when wind speeds can be at their lowest, which will mean that any significant odour discharges will not dissipate and remain in the ambient environment around the plant for a longer period.

When there are off-site odours detected, they often appear to be associated with plant breakdowns, and in fact we were informed by the Applicant that they expect breakdowns to occur on average a few times a month. Off-site odour issues have also been caused in the past by rendering older or poor quality product, as shown in the compliance history presented in Mr Kinaston's evidence. Therefore it appears to us that it is often the processing of the older material or material that has been in the plant for extended periods of time that results in odour complaints.

Consequently we are concerned that there does not appear to be any mechanism for removing material from the plant if there is a breakdown, or alternatively a mechanism to prevent odours escaping from the building if aged material is processed. We noted evidence on some of the screw conveyors of what appeared to have been temporary discharge points, which would allow material to be removed from the plant. We consider that incorporating permanent discharge points, or provision for such points within the plant would be good practice, given the frequency with which breakdowns occur.

The Wastewater Treatment Plant is likely to generate some odour, but as most of the material settled is fats and grease this is not likely to be the most significant odour source on the site, particularly compared with the rendering plant. However, we noted the uncovered bin that collects material from the WTPP contrashear, has potential for generating off-site odours that could be considered offensive, due to the intrinsic nature of the material being collected.

Given the nature of the odours that originate from the site and the proximity of the site to residential properties and public amenity such as the public path and cycleway that runs along the southern boundary of the site, there is the potential for odour to be detected off-site, and consequently there needs to be close attention to mitigation measures to minimise any effects. While those offered up by the Applicant, may appear adequate in this regard we consider that there are some areas where additional procedures should be implemented to reduce further any potential for off-site odour from these sources.

However we also consider, having reviewed the complaint records, that for the majority of time the rendering plant appears to be able to operate without generating off-site odours, and consequently it appears that for the majority of the time, the current extraction system seems to be appropriate if correctly maintained.

Combustion Emissions

In terms of the combustion related emissions, the Applicant assessed these using CALPUFF which is an appropriate dispersion model for this purpose. The assessment included cumulative effects from the Open Country Dairy plant, which is located immediately adjacent to the Imlay site. The application does not provide the predicted off-site concentrations for Imlay alone; however the cumulative concentrations are well below the relevant National Environmental Standards for Air Quality, so accordingly there is no potential for any form of adverse effects from these emissions.

4.4 The National Environmental Standard for Air Quality (the NES)

The NES for Air Quality is a regulation established under the RMA. Its primary purpose is to ensure that combustion related emissions from activities do not result in ambient air quality being impacted to the extent that the adverse health effects could be experienced by members of the public.

As noted above in this case the combustion related emissions from the entire site are well within the relevant NES standards and therefore combustion emissions from both Imlay and Open Country Dairy in combination are very unlikely to be resulting in any adverse health effects off-site.

4.5 Objectives and Policies of the One Plan

The relevant objectives and policies of the One Plan were listed by Ms Adsett in her s42A report. We do not see the need to repeat all those here, but we particularly note:

- Policy 7-2 sets out specific standards for the discharge of airborne contaminants. With regards to odour, the recommended standard is “a discharge must not cause any offensive or objectionable odour beyond the property boundary” to the extent that there is an adverse effect.
- Objective 8-1 and Policy 8-1 concern integrated management of the coastal environment. Of relevance is Policy 8-1(b), which seeks to recognise and manage the effects of land uses and freshwater-based activities (including discharges) on the Coastal Marine Area. This is of relevance in that discharge of odour to air by AFFCO has, in the past, discharged beyond the property boundary and has the opportunity to negatively impact on the recreational and amenity values of the CMA.
- Policy 12-5 is relevant when considering the consent duration for consents and Policy 12-6 provides additional guidance in regards to review conditions.
- Policy 15-2 provides guidance to the Regional Council in making decision on discharges to air. This policy is considered a directive policy stating the Regional

Council *must* have regard to a number of factors listed in paragraphs (a) through (h) when making decisions and setting consent conditions.

5 Other Relevant Sections of the RMA

There are two other sections of the RMA that are particularly relevant to our decision.

Section 104(2A) says that in making our decision we must “*have regard to the value of the investment of the existing consent holder*”. The plant has a capital value of some \$75 million, currently employs about 600 people (of whom some 80% reside in Whanganui) and according to Mr Edwards, directly contributes some \$60 million annually into the local economy. We discuss this matter further when discussing the term of the consent granted in Section 7.1 below.

Section 105(1) of the Act requires that we must, in addition to s104 considerations, have regard to:

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

In relation to s105(1) our assessment of actual and potential effects of the activity addresses the first two limbs of this section of the Act.

We heard no evidence in relation to alternative methods and sites of discharge, but we accept in relation to the third limb that well functioning biofilters are suitable for treating odour from activities such as rendering at Imlay, and that there is no realistic alternative to AFFCO discharging to air from the Imlay site.

6 Evaluation

As we have already signaled, we have significant concerns about the control of odour in several parts of the Imlay site, and in particular we are concerned about the control of odour emanating from the rendering plant, which is clearly the main on-site source of odour and which has led to significant off-site effects during the term of the previous consent.

Mr Lambly had detailed how the refurbishment of the rendering plant, which started in 2014, led to significant off site odour effects in early 2015 as there were problems such as in the commissioning of new machinery. On the other hand it is also clear that the rendering plant can operate for long periods without causing significant off-site odour effects. But what we saw in and around the plant – including the outdoors storage of offal from the Imlay slaughterhouse before it is transported to the rendering plant, ventilation systems within the

rendering plant that will result in fugitive emissions to air, and poor maintenance of other components of the odour treatment system - did not leave us confident that significant off-site odour effects from the operation of the rendering plant will not occur in the future.

In this context we were particularly concerned about the applicant's lack of actions to implement most of the recommendations in Mr Cudmore's AEE of March 2017, which was based on a survey carried out some five months earlier (November 2016) and which had not been fully implemented during the recommended timeframes. We had read the previous panel's decision in which they said in relation to the same matter 10 years ago:

The Committee is very concerned with this situation, especially since remedial actions recommended to AFFCO by Mr Cudmore as recently as January 2007 have not yet been implemented by the applicant. This lack of preventative maintenance appears to be responsible for some of the fugitive odours from the plant and calls into question AFFCO's ability to adequately control such odours in the future.

Much the same still applies today. We could replace the January 2007 date with March 2017, and it would still largely hold true. In our view AFFCO remains largely reactive to events that lead to sometimes significant off-site effects, rather than trying their best to avoid these events proactively. This is reinforced in the audits we saw from Aurecon, which identified issues with current practices and maintenance, and with recommendations that in some cases do not appear to us to have been fully implemented. Some of these were included in the audit undertaken by Golders in March 2017, which similarly remained largely unimplemented. In addition, the audit by Golders appears to have identified a number of faults with the system which previous audits do not appear to have identified.

We well understand that the rendering plant in particular involves a multi-step mechanical process, and that such plants can break down occasionally. However given this we were disappointed that measures had not been incorporated physically into the rendering plant or into its operating procedures which would go some way to mitigating the potential for what appear to be inevitable off-site impacts from these breakdowns. For example we consider with today's technology that it would be relatively simple to implement a process to warn the local community why there may be significant odour effects, and how long this may take to remedy. Or in fact to inform the Council that such an incident had occurred.

We were also surprised that the investigation of odour complaints was being undertaken by members of staff who arguably are unlikely to be able to judge the presence or not of odours off-site given their day to day work in that type of odour. While this is not uncommon in industry we do not consider that it represents good practice, and conditions of consent require such investigations be carried out independently.

Similarly we saw examples of poor maintenance – such as around some of the seals in the main pipe leading to the biofilter – and poor practice, notably leaving offal bins outside before the truck is fully loaded before taking them to the offal bin. It also surprised us that in the last seven years or so that despite acceptance criteria applying, no offal transported from

Feilding had not been processed at Imlay. We cannot imagine that every single load of that offal could be processed without potentially significant off-site effects. For example we understood Mr Lambly to say that off-site odour issues in 2107 were due to a lower kill at Feilding meaning that some offal had deteriorated significantly before it was transported to and processed at Imlay. In our view processing poor quality offal at Imlay is not good practice, particularly given the plant's proximity to nearby urban areas.

For these reasons, along with its poor history of compliance over the last 10 years, we do not agree with Mr Edwards' assertion that AFFCO Imlay takes environmental compliance very seriously. If it did its compliance record over the past 10 years would be much better. It needs to do much better in the future, and to act proactively to manage odour sources on the Imlay site. As we now discuss this is part of the reason we have granted consent for a term expiring on 1 July 2025, and imposed prescriptive conditions of consent.

7 Term and Conditions

7.1 Term

The applicant had originally sought a term of 25 years, but in the right of reply Ms Le Bas sought a term of between 18 and 25 years. The 18 year term would coincide with the second common catchment expiry date of 1 July 2035, although Mr Bligh had criticised the common expiry date in his original evidence as being intended to apply to water takes and discharges rather than discharges to air.

Ms Adsett, in her officer's report recommended a term expiring on 1 July 2025, which is the next common catchment expiry date in the Whanganui catchment. She said this would be consistent with Policy 12 (b) of the One Plan. We note that of the nearby significant discharges to air, only Tasman Tannery, about 500m to the west has this expiry date, and initially we did not see much value in the same term being given to AFFCO, given that the odour sources are quite separated. We also largely agreed with Mr Bligh that the common catchment expiry date should not be applied to discharges to air, and in this context we were bemused that he then advocated an 18 year term to coincide with just such a date. Ms Le Bas sought the same 18 year term of consent in her right of reply.

In her right of reply Ms Le Bas cited cases⁵ that she considered showed that a review condition under s128 of the Act can be effectively used to remedy poor environmental compliance by a consent holder. While we accept that can be the case, a s128 review places a strong onus on the consent authority to prove adverse effects are occurring. That is particularly difficult for a discharge of odour to air where any evaluation of off-site effects inevitably involves a significant element of subjectivity. For this reason we do not accept that a review of consent conditions is an efficient or expeditious way of dealing with any future poor compliance by AFFCO with the conditions of consent we have imposed. We

⁵ Notably *Winstone Aggregates v Auckland Regional Council* 2006 RMA 780/03

have however included conditions that enable the Council to require further mitigation actions by AFFCO should significant off-site odour effects occur during the term of the consent.

Section 104(2A) of the Act directs us to consider the value of the existing investment on the site in our decision. We were mindful of Mr Edwards' assertion that "a term of eight years cannot provide an adequately secure investment horizon to enable AFFCO ... to make long term strategic decisions requiring millions of dollars to manage the ageing plant and commit to ongoing investments in routine maintenance, monitoring and upgrades." We observe however that almost the same comment was made to the 2007 hearing by an AFFCO employee, Mr McColl who said "a reduction in the consent term for the permit from the 20y to 5y (as proposed by a Council officer) would not provide an adequately secure investment horizon to enable AFFCO ... to make long term strategic decisions relating to the management of the plant, or relating to long term investments in routine maintenance, monitoring or upgrades". In 2007 a 10 year term was granted, and this did not appear to have any effect on the level of investment in the site, notably with AFFCO significantly upgrading equipment within the rendering plant and opening a fellmongery on the Imlay site.

On the other hand what was abundantly clear to us is that going through a re consenting process forces AFFCO to examine its recent compliance record, and seek independent advice from an experienced practitioner like Mr Cudmore as to what steps can be taken to improve compliance. However in both 2007 and 2017 the company chose to largely ignore that advice, up at least until the time of the hearings. We were disappointed by this and consider it poor practice by AFFCO. As we have already observed, this indicates that AFFCO Imlay takes a largely reactive, rather than proactive, approach to compliance on-site, and this is shown by its at times poor compliance history over the last 10 years. Both Mr Edwards at this hearing and Mr McColl at the last hearing said a longer consent term is necessary to ensure future investment in activities such as maintenance and upgrades. Without much better maintenance and a number of on-site upgrades and a proactive approach to environmental compliance, we doubt environmental performance will improve substantially. There is a balance here. If AFFCO seek greater security through a longer consent duration, then we would have expected them to have demonstrated a more proactive approach to managing odour and a much better level of compliance with the current consent. In our view AFFCO cannot neglect these matters and then expect a long term consent to be granted.

Policy 12-5(b) of the One Plan would allow us to set an expiry date on the second common catchment expiry date as sought by the applicant, but only if four criteria are generally met. We do not consider that the current activities on the Imlay site could be reasonably described as "being carried out in accordance with a recognised code of practice, environmental standard or good practice guideline", even if those words are read generously.

There are however at least two matters in Policy 12-5(c) that would lead us to granting a shorter consent duration than sought by the applicant. These are that “the activity has effects that are unpredictable and potentially serious for the locality where it is undertaken and a precautionary approach is necessary” and (particularly) “in the case of existing activities whether the consent holder has a good or poor compliance history in relation to environmental effects for the same activity”. Not only does AFFCO have a mediocre compliance history but it has repeatedly been at best tardy to implement significant steps recommended by engineers who specialise in odour control from industrial sites to ensure that effects do not reoccur.

What might have led us to grant a more generous term was if AFFCO had embraced and responded positively to Mr Cudmore’s recommendations. However, just as in 2007, it had not done so. It also appeared to us that little had been done to implement the recommendations in the independent audits carried out by Aurecon on several occasions during the last 10 years.

For these reasons we have granted a term that expires on the common catchment expiry date of 1 July 2025. We did consider a 10 year term, but given that AFFCO itself had argued that the common catchment expiry date should be used as a basis for setting the term of the consent (albeit for a period of 18 years), that is the approach we have adopted here.

7.2 Conditions of Consent

We have comprehensively reviewed the conditions of consent proposed by the officers at the hearing, and commented on subsequently by the applicant. As already noted we have drafted some very prescriptive conditions over and above those recommended by the officers or put forward by the applicant. Among the main matters we have decided are:

- There will be a requirement for an overall Environmental Management Plan with an Odour Management Plan, which must be certified by the Council, as part of this. We have not required continuation of an externally audited Environmental Management System, and the once proposed Odour Contingency Plan is now part of the Odour Management Plan.
- Any investigation of odour complaints made to AFFCO must be carried out by independent persons, not by a staff member of the company (see new Condition 7). These independent persons are to be certified as suitable to carry out this role by the MWRC. There are thresholds as to when complaints must be investigated by such an independent person (see Condition 27). Monthly odour surveys around the property boundary are also now required (Condition 29).
- If there are persistent and verified objectionable or offensive odour effects due to the operation of the rendering plant, new Condition 10 would enable the MWRC to require the rendering plant to be shut down until appropriate mitigation measures have been implemented, The company must then report on and implement longer term mitigation measures (Condition 11).

- We have not required the raw materials receipt bin to be enclosed within a building directly as part of this suite of consent conditions; rather it is to be vented to a biofilter as recommended by Mr Cudmore. However, it remains an option for the Council to require such a building to be installed under Condition 11 if there are future significant off-site odour effects attributable to the receipt or processing of offal by the company. It is our hope that Conditions 10 and 11 will incentivise the applicant to take a more proactive approach to odour mitigation in and around the rendering plant.
- These matters aside the conditions are refined from, but not substantially different from those put forward by the officers and commented on by the applicant.

8 Decision

To grant APP-2005011098.01 to AFFCO New Zealand for a term expiring on 1 July 2025 subject to the following conditions:

For the purpose of this consent the following definitions apply:

Air Discharge Permit: the term 'Air Discharge Permit' encompasses the following:

ATH-2007010926.01 - Discharge Permit to discharge odour to air: The discharge of odour to air associated with activities occurring at the AFFCO site, Imlay Place – Whanganui.

ATH-2017201595.00 - Discharge Permit to discharge contaminants to air: The discharge of contaminants to air associated with the operation of gas fired boilers located at the AFFCO site, Imlay Place – Whanganui.

Site: The term 'site' refers to the AFFCO - Imlay plant on land legally described as Lot 1 DP 500721 at approximate map reference NZTopo50: BL32:729-757 and as shown on Map LOC - 0000063717 (attached to these Conditions)

CLG – Community Liaison Group

EMP – Environmental Management Plan

OMP – Odour Management Plan

MWRC – Manawatu-Wanganui Regional Council

AEE – Assessment of Environmental Effects prepared by Golders dated March 2017

LTRP – Low Temperature Rendering Plant

SCADA – Supervisory control and data acquisition

Advice Notes relating to all conditions of this consent:

ADVICE NOTE: Any reports required by this permit can be sent to the MWRC via email compliance.shared@horizons.govt.nz –OR- by mail, addressed to: C/- The Regulatory Manager, MWRC, Private Bag 11025, Manawatu Mail Centre, Palmerston North 4442.

ADVICE NOTE: The Consents Monitoring Team can be contacted 24 hours 7 days a week by free phone 0508 800 800.

ADVICE NOTE: For the purpose of this consent the definition of 'working day' is the same as recorded in section 2 of the Resource Management Act 1991.

ADVICE NOTE: Where written feedback is required it can either be provided in the form of an email or a written letter.

ADVICE NOTE: Any variance from the location, design concepts and parameters, implementation and / or operation may require a new resource consent or a change of consent conditions pursuant to section 127 of the Resource Management Act 1991.

1. The activities authorised by this Air Discharge Permit shall be restricted to the discharge of contaminants to air, including odour, from the site. The discharges to air covered by this Air Discharge Permit are those associated with the following processes:
 - a. Animal slaughter;
 - b. By-product rendering;
 - c. Truck washing;
 - d. The primary wastewater treatment plant;
 - e. The holding of livestock in yards;
 - f. Other emission producing activities such as ventilation; and
 - g. The combustion of natural gas by three module steam boilers with a combined net heat output of 10.5 mw producing carbon monoxide, oxides of nitrogen and trace levels of particulate matter

2. The Permit Holder must undertake the activity in general accordance with the Resource Consent Application and AEE, including all accompanying plans and documents first lodged with the MWRC on **10 March 2017** and subsequent further information supplied **on 4 October 2017** by Email responding to the further information request dated **12 September 2017** together with any subsequent information or updates presented at the hearing **31 October 2017**.

Where there may be inconsistencies between information provided by the applicant and conditions of the resource consent, the conditions of the resource consent will apply.

3. The Permit Holder must undertake and complete the schedule of works as detailed in the titled **AFFCO Imlay Mitigation Table** provided to MWRC on the 16 November 2017 and attached to these conditions as **Schedule 1**. A written update on the progress of these works shall be provided to MWRC within six months of the commencement of this consent and thereafter an update to the schedule shall be included in the Annual Report required under **Condition 35**.

In the updates the Permit Holder shall:

- a. Indicate which works have been completed;
- b. Indicate why particular works have not been completed in the stated time periods;
- c. Provide new timeframes for implementation of works.

ADVICE NOTE: Unnecessary, avoidable or protracted delays in the implementation of any of the works may be considered a trigger for the initiation of enforcement action.

4. The Permit Holder must develop an Environmental Management Plan (**EMP**) that sets out a framework for the plans and processes for ensuring compliance with conditions of this permit, particularly **Condition 6**, regarding odour.

The EMP must include:

- a. Specific information, procedures and practices relating to the overall operation of the site;
 - b. Methods to facilitate achieving compliance with the conditions of this permit;
 - c. Methods to minimise the potential for offsite odour effects; and
 - d. Procedures to deal with complaints to ensure compliance with conditions 24-27.
5. The Permit Holder must develop an Odour Management Plan (OMP) to identify all systems and procedures that the Consent Holder has in place to reduce the risk of odours that could result in adverse effects beyond the site boundary. As a minimum, the OMP shall include chapters on the following, which must address but not be limited to the subsequent items:
 - a. Odour control system which includes:
 - i. A summary of all on-site odour sources.
 - ii. Details of the odour extraction, cooling and biofilter systems that target the main odour sources including their layout, their key design and operation parameters.
 - iii. A list of key compliance limits & guidelines for design and operational parameters associated with the extraction, cooling and biofilter systems including but not limited to the following:
 1. Recommended odour extraction, flows, vacuums as set out in Table 3: Concentrated odour source extraction – Recommended design flows as detailed in the Resource Consent Application and AEE dated 10 March 2017.
 2. The normal operating ranges for the Waste Heat Evaporator vacuum pump draught (kPa), stickwater level within the evaporator (% of maximum), final stickwater concentration (% of solids); non-condensable gas temperature; and waste heat evaporator vapour temperature.
 3. Airflow rate, temperature and pressures of airstreams within the inlet ducts to site biofilters.

- iv. Specific monitoring methods, work procedures/practices and maintenance that aim to ensure effective operation of the odour extraction, cooling and biofilter systems including but not limited to:
 - 1. Visual monitoring for fugitive odours (steam) associated with the rendering building in accordance with **Condition 20**
 - 2. Annual monitoring of biofilter flow rates and vacuums at extraction points in accordance with **Conditions 17** and **31** respectively.
- v. Specific procedures and frequencies for the collation, archiving and reporting of odour control system monitoring data (continuous and manually recorded) including but not limited to inlet air to biofilters, condensate temperature, biofilter temperature, bed back-pressure, pH and moisture content to ensure the system meets the standards set in **Conditions 15, 16 and 20**.
- vi. Procedures for responding to and recording odour complaints, reporting maintenance of associated complaint records and reporting information back to MWRC on complaints, investigations, actions and any relevant developments at the site that can impact on odour emissions, as required by **Conditions 26, 27** and **28**
- vii. A log recording any maintenance undertaken, any periods of malfunction, the reasons for malfunction and the remedial action taken to ensure the malfunction does not reoccur. The log must also note any notifications made to the Regulatory Manager of the MWRC under **Condition 21**. The log shall be made available to the Consents Monitoring staff of the MWRC on request and as part of the Annual reporting requirements in **Condition 35**. The log shall be maintained for the term of these Air Discharge Permits.
- viii. Procedures for annual review of the odour control systems and the OMP itself including updates to the OMP recommended from the review or as a result of process changes at the site.
- ix. A procedure to ensure the stockyards are cleaned, at a minimum, daily on those days on which animals are held for processing, and recorded in order to meet **Condition 12**.
- x. Details of the methods to be used for ambient odour monitoring as per **Condition 29**.

- b. Odour contingency measures which identify:
 - i. How to deal with raw material received by the LTRP which does not meet the requirements of **Condition 13**.
 - ii. How to deal with any mechanical breakdowns including the removal of all material trapped within the LTRP when breakdowns are longer than eight hours.
 - iii. The process for notifying the MWRC Consents Monitoring Team in order to meet **Condition 21**.
 - iv. Any other measures that will minimise adverse effects on the environment likely as a result of incidents that may breach this consent
- c. Rendering procedures which include:
 - i. Specific management controls on raw material quality and raw material preservation, including (but not limited to) a procedure for recording raw material quality and compliance with the requirements of **Condition 13**.
 - ii. Implementing the odour contingency procedures within the OMP in instances where the material is not of acceptable quality.
 - iii. A process to ensure compliance with **Condition 12** regarding the cleaning of rendering facilities including a daily log confirming cleaning has taken place.
 - iv. A monitoring programme of key process criteria, including provision for a daily log to record the matters set out in **Conditions 16 and 19**.
 - v. Provision to record the process operating temperatures for the rendering and drying equipment as per **Condition 20**.

The EMP and the OMP shall be provided to the Regulatory Manager of the MWRC by **1 February 2018** for technical certification and thereafter within **five (5) working days** of any content within the EMP changing.

The Permit Holder must comply with the certified EMP and OMP at all times.

- 6. The Permit Holder shall ensure there is no discharge to air of odour, or particulate matter (including meal dust from any vent) that is objectionable to the extent that it causes an adverse effect at or beyond the boundary of the AFFCO Imlay site.

ADVICE NOTE: When assessing compliance with this condition, an MWRC officer will consider the Frequency, Intensity, Duration, Offensiveness and Location of the odour (i.e. the FIDOL factors) in determining the adverse effect of objectionable odours.

7. The Permit Holder shall engage an independent person who shall be available, as far as practicable, within 30 minutes of receiving notification from either the Permit Holder or MWRC, to investigate odour complaints, and within 24 hours, to provide a written report to the Permit Holder and MWRC on whether the complaint is a confirmed odour complaint and whether that odour was considered to have an offensive or objectionable effect beyond the site boundary by the independent person. The Permit Holder shall be responsible for paying all costs associated with the independent person's investigation and report.

The Permit Holder shall ensure that the independent person meets the AS/NZS 4323.3:2001, and its successors, requirement for an odour panelist and provide evidence of this to MWRC.

ADVICE NOTE: When assessing compliance with this condition, the independent person will consider the Frequency, Intensity, Duration, Offensiveness and Location of the odour (i.e. the FIDOL factors) in determining the adverse effect of objectionable odours.

8. If MWRC confirms that validated offensive or objectionable odours have occurred, then the Permit Holder must as soon as practicable investigate the potential source and provide a report to MWRC (within 24 hours of its investigation) of what caused the odour and what remedial action has been undertaken to stop the odour and prevent it from reoccurring. Where a permanent remedial action cannot be implemented immediately, the report shall provide a timeframe for implementation, and detail what measures will be implemented in the interim to minimise the potential for offensive or objectionable odours to occur.

This action will be added to the schedule of works required by **Condition 3** and any updated schedule provided in the annual reporting.

9. If validated offensive or objectionable odour effects attributed to any part of the LTRP operation persist continuously or are present intermittently for more than twenty four (24) hours, then MWRC may issue a written notice to the Permit Holder requiring the LTRP to cease operating. The LTRP plant shall not resume operating until MWRC is satisfied that appropriate mitigation measures have been implemented to ensure that off-site offensive or objectionable odours will not occur if the plant resumes operating, and MWRC advises the consent holder in writing of that.

10. If directed in writing by MWRC following one or more validated offensive or objectionable odour complaints, the Permit Holder must commission a report by an appropriately qualified independent person, to review the efficacy of odour management at the Site, including but not limited to:
 - a. The point source extraction;
 - b. The biofilter system;
 - c. The need to fully enclose the raw materials receipt area;
 - d. The need to operate the ltrp building under negative pressure;
 - e. The need to place covers on the slaughterhouse offal bins; and
 - f. The need to have a cover on the skip collecting solids removed by the kontrashear.

The Permit Holder must provide that report to MWRC within twenty (20) working days of receipt of the written direction from MWRC.

The Permit Holder must implement any recommendations contained within the report as soon as practicable but no later than three months after receiving the report.

In the event that it is not practicable to implement a particular recommendation within three months, the Permit Holder may seek an extension from MWRC to the three month timeframe for that particular recommendation. These recommended actions will be added to the schedule of works required by **Condition 3** and any updated schedule provided in the annual reporting.

11. The Permit Holder shall ensure that the stockyards are thoroughly cleaned of animal waste as follows:
 - a. As a minimum at the end of each day that the stockyards have been used; and
 - b. Whenever the stockyards have been used and there is more than an hour until they are used again.
12. All equipment processing areas used for the receipt and processing of animal matter in the rendering operations shall be cleaned thoroughly (by way of water blasting or pressure hose) as follows:
 - a. At least one occasion every day on which processing occurs; and
 - b. At the cessation of the daily processing operation.

These areas shall be kept free of accumulated or deposited material.

13. All raw material to be processed on site must meet the following criteria:
- a. All soft offal shall be processed within six hours of kill, unless it has been stabilised by one of the following methods:
 - i. Stored material is cooled to a temperature of 20 degrees celsius or lower as soon as practicable but no later than six hours after the kill of the animal from which it is derived; or
 - ii. Stored material is treated with acid to ensure a ph of 4.5 or less; or
 - iii. any equivalent stabilisation method to (a) and (b) above which has been given technical approval by the Regulatory Manager of MWRC in which case stabilised soft offal shall be processed within **twenty-four (24) hours** of receipt; and
 - b. hard offal shall be processed within **forty-eight (48) hours** of receipt.
 - c. Where hard and soft offal have been mixed the material must be processed with 24 hours of receipt.

If raw material does not meet the above requirements, it must not be processed on site and contingency measures set out in the EMP must be implemented by the Permit Holder to dispose of this material in an approved off-site facility.

14. The Permit Holder shall ensure that the pre-cooled inlet air to all biofilters (except for the external raw material bin biofilter) shall be maintained at a temperature not exceeding 35 degrees Celsius (35°C) for 95% of the time as recorded via Supervisory control and data acquisition (SCADA), with a maximum temperature not exceeding 40°C. Furthermore, all condensate from the condensers shall be discharged via a covered drain and maintained at a temperature not exceeding 40 degrees Celsius (40°C). Measurements shall be kept in accordance with **Condition 30**.

15. The biofilters shall be maintained to the following standards:
- a. Media moisture content shall be maintained at 50 to 65% dry weight basis throughout its depth;
 - b. The ph shall be greater than or equal to 5 in the top 2/3rd layer of the biofilter media;
 - c. The static pressure (back pressure) of the biofilters determined in the inlet duct, shall not, under normal moisture conditions, exceed 150 mm/wg;
 - d. A maximum biofilter loading rate of 35 cubic metres of gas per hour per cubic meter of bed media;
 - e. A minimum bed depth of 0.7m and 0.6m for the main and dryer biofilters respectively;
 - f. A maximum back-pressure across the bed media of 50mm water gauge pressure; and
 - g. The biofilters must remain weed free.
16. The Permit Holder shall undertake monitoring and inspection for all biofilters as follows:
- a. The back-pressure within the inlet duct to each bio-filter shall be continuously recorded;
 - b. Daily manual back-pressure checks, visual inspection for moisture content, leakage and odour discharge;
 - c. Moisture content and ph shall be monitored and recorded at least once a month from the commencement of this consent;
 - d. Monthly inspection and recording of biofilter condition i.e. Weeds, compaction, pugging or fissures, commencing from the date of commencement of this permit; and
 - e. Annual measurements of the biofilter inlet flows combined with vacuum monitoring results for duct connections to equipment.

All findings shall be recorded and detailed in a log.

17. The biofilter operation and maintenance logs shall be made available to the Regulatory Manager of MWRC or MWRC officers on request at any time. The operation and maintenance logs must also be supplied as part of the annual report required by **Condition 35**.

18. The Permit Holder shall operate and maintain a point source emission extraction system to extract all gaseous and vapour emissions from point sources of odour to the odour control system i.e. condensers, heat exchangers and biofilters as detailed in the Resource Consent Application and AEE dated 10 March 2017 as follows:
- a. On the wet-side of the rendering process, sources shall include the internal raw bin, pre-cooker, transfer conveyors, decanters, decanter tank, separator tank, wastewater drains and separators.
 - b. The external raw material bin, its enclosed discharge sump chamber and discharge conveyor shall be connected and air extracted to a small biofilter by **30 April 2018** and remain covered at all times apart from when open for deliveries.
 - c. On the dry side of the LTRP the sources shall include the meal dryer exhausts, meal storage bins and the filtered building ventilation air.

Extraction rates from all enclosed point sources shall be sufficient to ensure a vacuum is maintained within the enclosure system, with a minimum vacuum of 100 Pascal gauge.

19. The Permit Holder must:
- a. visually check for any leaks of steamy odorous vapours from all enclosed process equipment and conveyors in rendering on a daily basis on days when the plant operates; and
 - b. Advise the MWRC Consents Monitoring Team of any maintenance work which may result in odour release to the atmosphere at least **twelve (12) hours prior** to the works commencing; and
 - c. Keep a log of the above checks details in (a) and (b).

Any remedial actions are to be undertaken in accordance with the procedures set out in the OMP required by **Condition 5**. Results of these checks and remedial actions shall be logged daily. Logs shall be made available to the Regulatory Manager of MWRC or MWRC officers on request at any time. The log must also be supplied as part of the annual report required by **Condition 35**.

20. The process operating temperatures for the rendering and drying equipment shall meet the following standards:
- a. The rendering vessels shall be operated at the lowest temperature practicable, and in any event shall not be operated above 100°C; and
 - b. The meat and bone meal dryers shall be operated at the lowest temperature practicable, which is consistent with MAF (or any future replacement regulatory body with relevant functions) sterilisation requirements, and to prevent burning of meal.

The temperature of the rendering vessels and dryers shall be continuously monitored and recorded. These records shall show the correct time and date. The records shall be made available to the Regulatory Manager of MWRC or of MWRC officers on request at any time. The records must also be supplied as part of the annual report required by **Condition 35**.

21. In the event of any incident at the Site or complaint received by the Permit Holder that has or could have resulted in a condition or conditions of this consent being breached, the Permit Holder shall:
- a. Notify the Regulatory Manager or consent monitoring staff at MWRC **within two (2) hours** of the Permit Holder becoming aware of the incident mechanical breakdown or complaint and advise what action is being taken to respond to the situation; and
 - b. Forward a report to the Regulatory Manager of MWRC. The report must detail the cause, if known, of the mechanical breakdown or complaint and what actions the Permit Holder has undertaken in response. The report must be received within **five (5) Working Days** of MWRC being notified under (a).
22. The Permit Holder shall provide co-ordination and administrative support for the Community Liaison Group (CLG) including a dedicated contact point at the site, provision of a meeting point and overseeing any administration associated with the group. The general purpose of the CLG shall be for the Consent Holder to inform the CLG of:
- a. The odour generating activities being undertaken within the Imlay site;
 - b. The current odour management processes and procedures being used for those activities; and
 - c. Any proposed alterations to those activities, processes or procedures.

23. The Permit Holder shall invite all persons who submitted on the notified air discharge applications in 2017, an iwi representative from each of Tupoho, Ngā Tāngata Tiaki o Whanganui and Tama Ūpoko, and one representative from each of MWRC and Whanganui District Council to join the CLG. The CLG must also be open to any other person who wishes to join.

The information provided to the CLG shall include a copy of the Complaints Register for the period since the last meeting.

Meetings of the CLG shall be held **annually in March** and upon receiving a written request for a meeting from the MWRC or by request of a CLG member. A CLG meeting shall be convened by the consent holder within **four (4) weeks** of any such request being received from the MWRC or CLG member.

24. The permit holder must provide a 24 hour contact name and number for receipt of complaints. This contact must be provided to:
- a. All members of the CLG; and
 - b. Published in the White Pages of the Whanganui Telephone Book; and
 - c. Published in newspapers circulating in Whanganui every three months following the commencement of this Air Discharge Permit; and
 - d. Must be clearly posted at the site entrance which faces a publicly accessible road together with details of the Permit Holder's website established pursuant to **Condition 25**.

The telephone number shall be attended on a 24 hour basis by a person when the site is operating and additionally a suitably qualified and experienced person shall be available to respond to and investigate all complaints received on a 24 hour basis.

25. The Permit Holder, shall establish and make available a webpage, be it on its own website or externally hosted, which provides the following information:
- a. A 24 hour contact name and phone number for receipt of complaints;
 - b. An email address for lodging complaints with the permit holder;
 - c. A copy of this consent and approved management plans and links to any external documents or references in these consents (except where restricted by copyright);
 - d. A copy of any consents related to other operational activities on the site;
 - e. A copy of the latest annual report required by this permit; and
 - f. A copy of a plan showing the location of all consented operational activities on the site.

26. The Permit Holder shall maintain a Complaints Register for any complaints received including any complaints either received or directly referred to the Permit Holder by Whanganui District Council or MWRC. For each complaint received the Consent Holder shall record:
- a. The name and address of the complainant (if given);
 - b. The location where the complaint occurred;
 - c. The date and time that the odour was encountered or if that information is not given, the date and time that the complaint was received;
 - d. The wind speed and direction at the affco Imlay site when the odour was encountered; and
 - e. A description (if given) of any odour character, strength and persistence; and copies of any feedback given as per **Condition 27**.
27. For each complaint received the Permit Holder shall:
- a. Investigate the odour complaint as quickly as possible and no later than 30 minutes of receiving the complaint;
 - b. If the source of the odour is identified as being within the site undertake remediation or mitigation measures designed to stop the odour, and prevent or minimise the risk of the odour reoccurring as soon as practicable;
 - c. Provide an initial response to the complainant within 24 hours of any complaint being received.
 - d. Provide written feedback, within five working days of receiving a complaint, to the complainant regarding whether or not the source of the odour was identified and what actions were undertaken by the permit holder in order to ensure the incident does not reoccur. Copies of the written feedback provided to the complainant shall be included in the complaints register. Copies of the complaint record and response shall be provided to the regulatory manager of mwrc within **five (5) working days** of the complaint being received.

ADVICE NOTE: For the purposes of this condition the person investigating the complaint shall be the independent person identified in **Condition 7** except where that person is not available in which case it shall be investigated by an employee of AFFCO who does not normally work in operational areas of the Imlay plant, and who has been assessed as having a normal sense of smell.

28. A copy of the Complaints Register shall be provided to MWRC upon request. The Complaints Register for the year ending 30 April shall be provided to the Regulatory Manager of MWRC as part of the annual reporting required by **Condition 35**.

29. The Permit Holder shall carry out monthly odour surveys around the boundary of the site, and shall record whether any odour attributable to AFFCO is discernible or not at each location. Monitoring shall occur when the rendering plant is fully operational. These boundary surveys shall be undertaken by the independent person identified in **Condition 7**. The methods and reporting shall be set out in the environmental management plan required by **Condition 4** that is certified by MWRC.

The outcome of each monthly odour survey shall be recorded. The Permit Holder shall investigate the cause of any significant odour (intensity greater than two on the VDI 3940 intensity scale) detected during each survey, and implement any necessary remedial action within 48 hours of its detection.

A record of each monthly odour survey and any remediation carried out shall be reported in the annual report required by **Condition 35**.

30. The Permit Holder shall measure and record temperatures as specified in **Condition 15** including from the condensers associated with odour control systems and log via the rendering plant SCADA system. Electronic records of temperature versus time and data shall be made available to the Regulatory Manager of MWRC or MWRC Officers on request.
31. The Permit Holder shall, annually **prior to 30 March**, undertake an annual audit of the rendering plant's odour control systems that considers the effectiveness of the extraction, cooling and biofilter system and its overall performance in regards to controlling odour emissions. The audit should utilise all monitoring data (manual and continuous, complaint records, any independent odour assessments) as well as include downwind odour assessments of the operational rendering plant and ancillary activities. The audit should assess the state of the odour extraction, cooling and biofilter system and taken appropriate measurements and sample for analysis required to confirm the status these systems against their design and required operating parameters. Any analysis of samples shall be undertaken by an appropriately qualified testing laboratory and sampling undertaken as specified in the OMP. Accepted methods shall be used for measurement of media properties that are certified by the Regulatory Manager of MWRC.

The audit shall be undertaken by person(s) who is independent, appropriately qualified and experienced in the operation and maintenance of air extraction, cooling and biofilter systems.

The results of the assessment, including a summary of the findings, details of any action(s) to be taken to improve the efficiency of the overall odour control system, and a timetable for those actions to be undertaken; must be submitted to the Regulatory Manager of MWRC as part of the annual report in **Condition 35**. Any remedial actions must be implemented in a timeframe of 6 weeks or less, where practicable, and the Permit Holder must demonstrate the works have been completed within these timeframe in the annual report.

In the event that it is not practicable to implement a particular recommendation within 6 weeks, the Permit Holder may seek an extension from MWRC to the 6 week timeframe for that particular recommendation.

32. The Permit Holder shall, annually **prior to 30 March**, measure and record the vacuum (pressure) at all enclosed equipment items that are extracted by the odour control systems as follows:
- a. Pressure shall be measured in the head space of the equipment items that are targeted by the extraction systems. The measurements shall be undertaken by an independent appropriately qualified and experienced person following industry best practice for measurements of this type.
 - b. The Permit Holder shall prepare a report on the findings and critically analyse the results (including a comparison with historical data) and if required, make recommendations as to the adequacy of the extraction rates, whether pressures are sufficiently negative and whether additional sealing/enclosing of any rendering plant process area is needed to ensure adequate extraction and compliance with conditions of this consent.

This report must be submitted Regulatory Manager of MWRC as part of the annual reporting required by **Condition 35**.

33. The gas combustion units on the boiler shall be tuned and tested, **prior to 30 April annually**, to maintain efficient combustion of fuel. A report summarising boiler test results shall be supplied to the Regulatory Manager of MWRC as part of the annual report in **Condition 35**.
34. The Permit Holder shall monitor the quality of raw material that is processed in the rendering plant to ensure compliance with **Condition 13**. The following parameters for all raw materials received at the rendering plant shall be logged.
- a. Type, quantity and source of raw materials received in each load;
 - b. Temperature, ph, visual appearance and odour of soft offal held in receiving bins;
 - c. Approximate age of raw materials upon receipt and the expected time before processing;
 - d. Details of any stabilisation, where required; and
 - e. Acceptance or rejection of material and if rejected where and when its disposal occurs.

The log shall be made available to the Regulatory Manager of MWRC or MWRC officers on request at any time. The log must also be supplied as part of the annual report required by **Condition 35**.

35. The Permit Holder shall prepare an Annual Report summarising performance in relation to the discharges allowed under this resource consent. The Annual Report shall be provided to the Regulatory Manager of MWRC by **1 June** each year from the commencement of this consent. The report shall cover the period **1 May – 30 April**. The purpose of this report is to provide an overview of the monitoring and all reporting work undertaken, compliance performance, and any environmental issues that have arisen from air discharges authorised by this consent.

The Annual Report shall include but not be limited to:

- a. An update of any actions undertaken in accordance with **Condition 3**;
- b. A summary of all biofilter performance, maintenance and monitoring as collated in the log required by **Condition 16** and the annual assessment required by **Condition 31**;
- c. A copy of the log required by **Condition 19** regarding daily site checks;
- d. A copy of the process operating temperatures for the rendering and drying equipment log as required in **Condition 20**;
- e. A summary of any notifications made to MWRC in accordance with **Condition 28**;
- f. A copy of any notes recorded during the annual meeting of the CLG under **Condition 22**;
- g. A summary of monthly odour surveys received and the outcome of any investigations and responses required by **Condition 29**;
- h. Reporting undertaken as part of **Condition 32** regarding the vacuum (pressure) at all enclosed equipment items;
- i. Records all instrument calibrations carried out on the rendering plant cooling and odour control equipment;
- j. Any other relevant information; and
- k. From **1 June 2019** onwards, a summary of the breaches identified in the previous year's annual report along with evidence of undertaking the remedial work proposed within the timeline stated.

The Permit Holder shall finalise the report with a summary of breaches and a clear timeline in how these will be addressed. All timelines should be a term of 9 months or less in order, where practicable, for the remedies to be addressed in the following years annual report (as per (k) above).

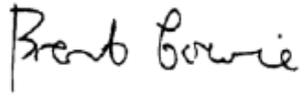
In the event that it is not practicable to implement a particular recommendation within 9 months, the Permit Holder may seek an extension from the MWRC to the 9 month timeframe for that particular recommendation

36. The MWRC, under section 128 of the Act, may initiate a review of all conditions of these Air Discharge Permits Annually in the month of July for the term of these Air Discharge Permits.

- a. The review shall be for the purpose of:
 - i. Reviewing the effectiveness of these conditions in avoiding or mitigating any adverse effects on the environment;
 - ii. Reviewing the adequacy of the monitoring and reporting required by these air discharge permits;
 - iii. Reviewing the frequency of the clg meetings;
 - iv. Reviewing the findings of audit reports required under **Condition 31**;
 - v. To review the effectiveness of the conditions of resource consents relating to odour control, in the event of validated offensive or objectionable odour;
 - i. Reviewing the effectiveness of odour extraction, cooling and biofilter treatment systems at controlling odour discharges to levels that cause less than minor effects beyond the site boundary;
 - vi. Reviewing the requirement to operate the rendering plant building under negative pressure by extracting the process air within that building and treating it in a biofilter;
- b. The review of conditions shall allow for:
 - i. The deletion or amendment to any conditions of these Air Discharge Permits; and
 - ii. The addition of new conditions as necessary to avoid, remedy or mitigate any adverse effects on the environment; and
 - iii. The implementing of any recommendations of the annual report required under **Condition 35**.
 - iv. If necessary and appropriate, the adoption of best practicable options to avoid, remedy or mitigate any adverse effects on the environment.

In the case of repeated non-compliances or breaches of consent limits, to review the conditions, with the aim of introducing new or revised conditions that will effectively and efficiently seek to manage environmental effects.

37. The resource consent will expire on **1 July 2025**.



Dr. Brent Cowie
Chair



Cr. Rachel Keedwell
Hearing Commissioner



Mr. Andrew Curtis
Hearing Commissioner