

STATEMENT OF ENVIRONMENTAL EFFECTS AND PLANNING REPORT

DEVELOPMENT APPLICATION FOR RENDERING FISH IN THE EXISTING RENDERING PLANT COOTAMUNDRA ABATTOIR

Lot 1 DP 611755
Stodanbungal Road
Cootamundra

Prepared by
Australian Meat Group Pty Ltd
March 2020

Statement of Environment Effects and Planning Report

Project	Rendering of Fish in the Existing Rendering Plant
Address	Cootamundra Abattoir, Lot 1 D 611755 Stockinbingal Road
Prepared by	Jason Graham
Final	24 August 2020

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1.0 INTRODUCTION

The Australian Meat Group Pty Ltd has recently acquired the Cootamundra abattoir previously owned and operated by the Manildra Meat Company. The Cootamundra abattoir is located at Lot 1 DP 611755 Stockinbingal Road Cootamundra. The site is located approximately 2 kilometres to the north of the northern outskirts of the Cootamundra urban area.

The site contains a multi-species abattoir that processes lamb, cattle and goats. The existing livestock processing operations have the capacity of processing 4,000 small stock and 200 head of cattle per day.

The site has operated under different ownership as a livestock processing plant since about 1974. G.M. Scott Pty Ltd previously owned and operated the site prior to its takeover by the Manildra Group in 2014. The Australian Meat Group acquired the site earlier this year.

The plant has operated for many years and has the capacity to employ over 340 people. Due to high livestock prices and the loss of a contract to supply meat, Manildra shut down livestock processing operations in 2017 resulting in significant loss of employment in the local area.

On the 11th December 2019 Cootamundra Gundagai Regional Council issued development consent (DA 2019/103) to the Manildra Meat Company to undertake a short-term trial of three (3) months, of processing fish in the existing rendering plant on the site for the production of fish meal / oils that are able to be used in a range food production process such as the aquaculture industry (and most notably the salmonoid industry in Tasmania).

The fish rendering trial had the following objectives:

- It enabled an assessment to ascertain whether the plant and technologies they operate at the site will be able to accommodate this alternative feedstock and whether modifications will be required to the plant.
- It enabled a review of the implications that changes in seasons will have in terms of seasonal variations in fish species that are able to be caught and processed, and on site management and environmental controls during different seasons.
- It enabled an investigation of potential environmental impacts that may arise and identify potential mitigation measures.
- It enabled the formulation of a program for the monitoring, evaluation and reporting of the environmental impacts and effectiveness of mitigation strategies associated with the fish rendering trial.
- It enabled an assessment as to ascertain whether such a proposal will be financially viable in the longer term.

Under condition No. 3 of development consent DA 2019/103 the fish rendering trial was limited to a period of three (3) months from the date of the consent and therefore will expire on the 12th March 2020.

This Statement of Environmental Effects (SEE) has been prepared in support of a development application that will seek the continuation of fish rendering within the existing rendering plant on the site for the period not more than the calendar year 2021 or when livestock processing recommences onsite. Currently the site is planned to recommence livestock processing late 2021.

The rendering of fish on-site will only occur while the livestock processing facility under goes investment and upgrade. The ability to introduce an alternative feed stock into the rendering plant as proposed, while the livestock processing operations are being upgraded , has the potential to ensure the site is financially viable and maintain the employment of 20 direct employees and engage a significant number of service providers/contractors.

The development application has been made pursuant to the provisions of Part 2 of Schedule 3 of the Environmental Planning & Assessment (EP&A) Regulations. Under such an approach, the proposal would not be designated development (for which an EIS would be necessary); but rather such an application is required to demonstrate that the proposal will not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development as required by clause 35 of the Regulations and subject to the matters for consideration as listed under clause 36 of the Regulations.

Approval of this development application will ensure the overall site operations will be able to continue in a sustainable and environmentally acceptable manner in the short term until livestock processing recommences onsite.

This development application is made pursuant to Part 2 of Schedule 3 of the Environmental Planning & Assessment Act.

Cootamundra Gundagai Regional Council are the consent authority.

The existing livestock processing operations are subject to an Environment Protection Licence (EPL) (No. 3889) issued by the Environment Protection Authority under the Protection of the Environment Operations Act for a livestock processing activity involving the 'slaughtering and processing of animals' and 'rendering or fat extraction'. Following consultation (per. comm Jason Price EPA 25th February 2020), the EPA advise that the processing fish in the existing rendering plant will require the existing EPL to be reviewed. Under these circumstances the

development application will comprise integrated development for the purposes of Section 4.46 of the Environmental Planning & Assessment Act.

This Statement of Environmental Effects (SEE) has been prepared to address the relevant matters for consideration as listed under Section 4.15 of the Environmental Planning & Assessment Act and Part 2 of Schedule 3 of the Environmental Planning & Assessment Regulations.

The SEE is supported by expert assessments:

- An Odour Impact Assessment prepared by GHD (**Annexure 1**). This assessment report, which has had the benefit of sampling undertaken by The Odour Unit of emissions from the site following actual fish rendering activities taking place at the site both prior to and during the fish rendering trial period. This assessment demonstrates that :
 - Modelling demonstrates compliance with relevant EPA odour criteria for both the existing livestock processing options as well as the proposed fish rendering operation. In particular odour concentrations are predicted to decrease when transforming feedstock from livestock processing to fish rendering operations.
 - The impact assessment takes into account learnings from the previous trial period and identifies improvement areas to mitigate previous odour generation.
 - One of the areas identified for significant odour generation reduction was making some minor process equipment changes to allow the Rendering Plant to allow the process to operate in either High Temp or Low Temp configurations, which in the Low Temp configuration the odour generation will be significantly reduced. The outline of the benefit of this is captured in an expert report from TF Consultants (**Annexure 1a**)
 - The proposed fish rendering operation will not significantly increase the environmental impacts of the total development compared to existing operations.
- An environmental assessment for the continuation of fish rendering on a permanent basis on the on-site wastewater management system and irrigation area prepared by ProAnd & Associates (**Annexure 2**). The results of the three month trial indicate that ,the MEDLI modelling correctly predicted that there would be little effluent to be irrigated during periods of high evaporation (hot dry weather), and that oil and grease levels are as would be expected for waste-water from a fish rendering operation. Proand however recommended that:
 - The level of Oil and Grease in the wastewater continue to be monitored when samples are taken in compliance with the EPA monitoring conditions, and

- When Irrigation of wastewater is necessary the disposal be restricted to the pivot irrigation are in order to avoid disposal on land designated as being important in terms of biological diversity.

This assessment report concludes that the proposed fish rendering will significantly reduce the environmental impact from waste-water treatment, storage and irrigation compared to the normal livestock processing operations from the site.

An additional summary effluent report has been created by ProAnd & Associates (**Annexure 2a**) to show the mass balance of the rendering operation should it be operated in a Low Temp configuration. It concludes that while the Low Temp configuration has higher level of effluent concentration than High Temp processing, it is still less impacts than that of the normal livestock processing operations.

- An Environmental Noise Impact Assessment prepared by Benbow Environmental. It should be noted that the noise impact assessment was prepared in relation to an earlier proposal that involved both the rendering of fish as well as poultry. The rendering of poultry however no longer forms part of the proposal, as the proposal only involves the rendering of fish. The findings and recommendations of this noise impact assessment however still have relevance to this proposal and are included as part of the documents relied upon by the SEE. The noise impact assessment concludes that whilst the processing of off-site feedstock would not occur concurrently with existing meat processing operations, the existing freezers/refrigeration system at the site may operate simultaneously. This report concludes the noise impacts from this proposal will be less than the existing operations for both operational noise and offsite road traffic impacts. Furthermore, the noise impacts from the proposed development are predicted to comply with the criteria at all surrounding receptors for all operational and road traffic scenarios.
- A Transport Impact Assessment prepared by Ason Group. As with the Noise Impact Assessment, the Transport Impact Assessment was also prepared in relation to the earlier proposal that both the rendering of fish as well as poultry. The rendering of poultry however no longer forms part of the proposal, as the proposal only involves the rendering of fish. The findings and recommendations of this Transport Impact Assessment however still have relevance to this proposal and are included as part of the documents relied upon by the SEE. The Transport Impact Assessment concludes the proposal is supportable with respect to access, traffic and parking, and will have fewer impacts on the local traffic and transport environment than the normal meat processing operations at the site.

Following an assessment of the issues associated with this proposal for the processing of fish in the existing rendering plant at the Cootamundra Abattoir while normal livestock processing

operations are shut down, this SEE concludes that the proposal will not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development.

Council's approval is sought for the proposal.

2.0 THE SITE AND SURROUNDS

The subject site comprises Lot 1 DP 611755 Stockinbingal Road, Cootamundra. The abattoir processing operations occur over this lot, as well as other adjoining and surrounding parcels including Lot 2 DP 611755, Lots 204 and 205 DP 753601. The operations also include land used for the spray irrigation of wastewaters (as licensed by the EPA) including Lot 9 DP 813843, Lot 460 DP 753620 and Lot 2 DP 177873.

The site presently contains an industrial complex housing a livestock processing plant. The site comprises a series of industrial buildings of a range of heights and scale located generally within the south-western corner of the subject site. The existing rendering plant associated with this development application is situated to the south of the existing development (**Plate 1**). Lands to the east of the site contain a series of wastewater storage dams of a range of sizes and volumes. The northern part of the site comprises paddocks or yards used for the stocking of animals waiting for slaughter.

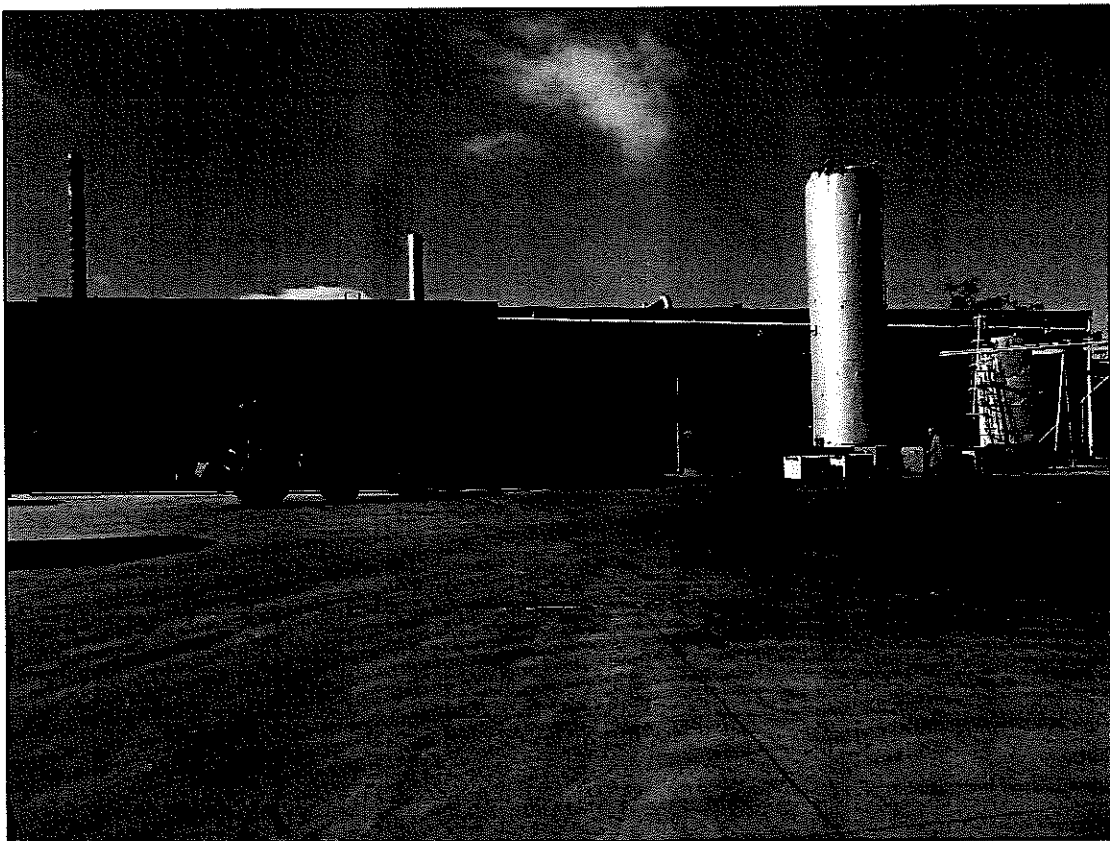


Plate 1: View of existing rendering plant building.

The site is located along Stockinbingal Road, a classified road, and located directly opposite Old Cootamundra Road. The site enjoys two vehicle entrances directly to Stockinbingal Road

which provide separate ingress and egress to and from the site. The site provides an estimated 300 spaces for on-site car parking.

The subject site is surrounded by rural properties with; a piggery situated to the north-west across Stockinbingal Road; rural properties used for cropping to the north, north-east and east of the site; and a greyhound kennel complex located to the south of the subject site.

The subject land is zoned RU1 Primary Production under the Cootamundra LEP 2013.

Figure 1 is a site locality plan.

Figure 2 is an aerial photograph over the subject site and surrounding locality.

Figure 3 is an aerial photograph over the subject site.





Figure 3: Aerial photograph over subject site.

3.0 THE PROPOSAL

3.1 THE EXISTING OPERATIONS

The existing livestock processing plant has the capacity to process 4000 small stock and 200 head of cattle per day. The operation would normally operate Monday to Friday and during seasonal livestock peaks across weekends as well.

The livestock are delivered to the undercover area to the north of the plant and shepherded into the processing building. Inside the processing building the livestock are stunned, slaughtered and bled out.

The carcasses are further processed for hide removal followed by eviscerating and trimming. The carcasses are then stored in the chilled carcasses store for load out. The edible meat is sent to the refrigerated processing plant for cooling, cutting and deboning. The cut meat products are packaged and stored in the blast freezer cold store for pick-up.

Figure 4 provides an overall flow diagram for the livestock processing operations at the site.

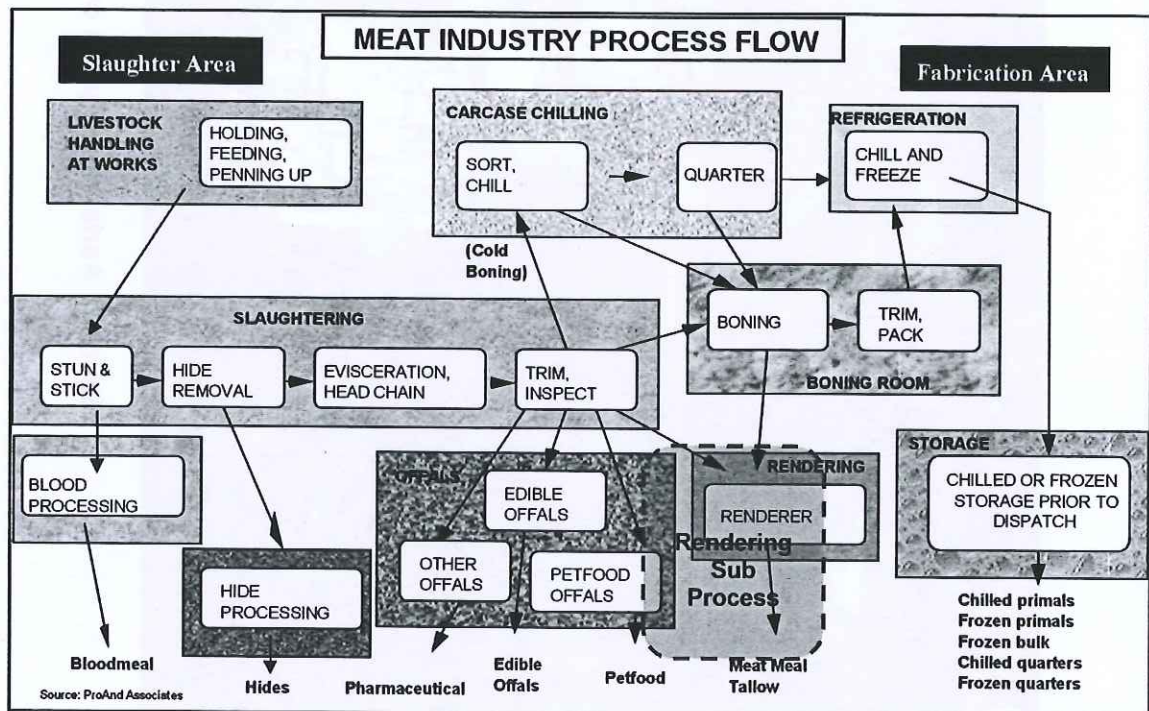


Figure 4: Integrated meat plant process flow diagram.

The eviscerated and trimmed products are sent to the rendering plant on the southern side of the site. Rendering is a process in which by-products from livestock processing are converted into tallow and / or protein meal. Solids commonly rendered include animal fat, bones and offal or gut material. Blood is frequently dried to produce a high-protein meal.

The rendering plant is a continuous “high temperature rendering process” (refer Figure 5). It has a typical raw material capacity of 6.5 tonnes of raw material per hour of processing. This provides a daily raw material capacity of 156 tonnes for normal livestock processing. Typical raw material to be rendered is 100 kgs per beef animal and 9 kgs per lamb.

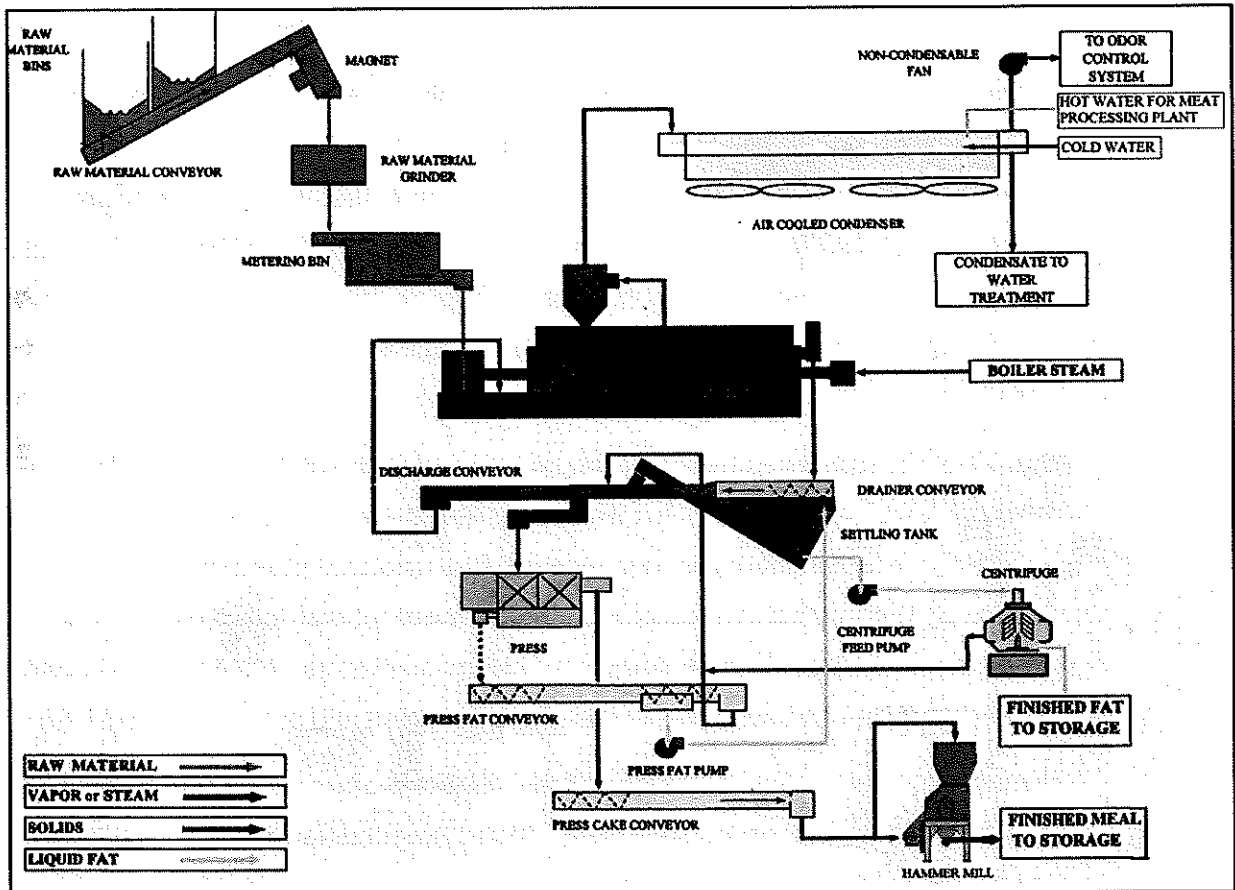


Figure 5: Rendering process flow diagram.

The rendering plant typically operates from 6:00 am through until 6:00 – 8:00 pm depending on daily volume of raw material and during weekends during seasonal livestock peaks. There are no restrictions on the hours of operation for the general operations of the site.

Unprocessed raw materials (offal, bones and fat) are tipped by truck into an open raw material bin located at the western end of the Rendering Building. The bin has steeply sloping sides with an incline screw conveyor at its base. The raw material is transferred by the screw conveyor (via a metal detector and chute) into a raw material grinder. The grinder breaks the raw materials into smaller particles to facilitate cooking and to permit lower cooking temperatures.

The crushed material is then transferred by screw conveyor to the cooker. In the continuous cooker the raw material is cooked and the moisture evaporated to a level that

produces meat meal with a content less than 10%. The moisture that is evaporated passes to a condenser where heat recovery occurs and hot water is produced for livestock processing and supplementary air cooling is available if required.

The solids stream from the continuous cooker passes to a drainage conveyor where free flowing tallow is drained into a settling tank. The solid material is conveyed to a press.

Further tallow is extracted by a screw press from the pressed cake in order to meet protein meal specifications of less than 15% fat content. The fat / oil pressed from the cake is strained and the fat passes to the tallow settling tank and the fines are recycled. Tallow from the drainer and screw press processes is collected and pumped to a heated holding tank from which it passes through a centrifuge to remove residual solids (which are returned to the cooking process). The clarified tallow is then pumped to heated storage tanks to await collection.

The "cake" is transferred by screw conveyor to a meat-meal grinding mill. This mill breaks down the 'cake' into finer particles which are then passed over a vibrating screen to further separate over-sized particles and ensure final product (meat-meal) is of a suitable standard. This process reduces the meal to meet market specifications prior to being transferred to a meat meal storage bin for sale to customers. Meat meal is usually sold in one (1) tonne bins or bags. Reject material is collected and put back through the process.

The protein meal and fat / oil products have distinct characteristics and as a result the raw material is always processed separately. Mixed raw materials result in significant reduced returns from sales.

3.2 THE FISH RENDERING PROPOSAL

3.2.1 Background to Fish Rendering Proposal

The site has operated as a livestock processing plant since about 1974 and under different ownership. The Manildra Group of Companies acquired the site in 2014. The plant has operated for many years and has the capacity to employ over 340 people. Due to high livestock prices during 2017 and the loss of supply contracts to a major supplier, the previous owner of the abattoir, the Manildra Meat Company, temporarily shut down livestock processing operations resulting in significant loss of employment in the local area.

Although the plant's general livestock operations are presently shut down, considerable expenses are involved in maintaining the site. Staff are required to be retained on the site to ensure the plant is maintained and able to operate in the future. In addition,

considerable insurance premiums are required to be paid for the site. In the absence of an operating plant, such ongoing expenses are clearly not financially sustainable.

The previous owner, Manildra, proposed to undertake a trial processing fish in the existing rendering plant located on the site to enable the production of fish meal/oils that can be used in a range of industries including in the food production process for the aquaculture industry (and most notably the salmonoid industry in Tasmania).

The processing of fish in the rendering plant would only occur while the normal livestock processing operations are shut down. Livestock processing was not permitted during the fish rendering trial.

The fish rendering trial had several objectives:

- It enabled an opportunity to ascertain whether the plant and technologies at the site would be able to accommodate this alternative feedstock and whether modifications will be required to the plant.
- It enabled a review of the implications that changes in seasons would have in terms of seasonal variations in fish species that are able to be caught and processed, and on site management and environmental controls during different seasons.
- It enabled an investigation of potential environmental impacts that may arise and identify potential mitigation measures.
- It enabled the formulation of a program for the monitoring, evaluation and reporting of the environmental impacts and effectiveness of mitigation strategies associated with the fish rendering trial.
- It enabled an opportunity to ascertain whether such a proposal will be financially viable in the longer term.

On the 11th December 2019 Cootamundra Gundagai Regional Council issued conditional development consent (DA 2019/103) to the Manildra Meat Group to undertake a short-term trial fish rendering trial for a period of three (3) months. This three (3) month period expires on the 12th March 2020.

The consent was granted subject to conditions. **Table 1** below outlines the consent conditions and provides comments on how these conditions have been complied with:

Table 1
Consent Conditions of DA 2019/103

<i>Condition</i>				<i>Comment</i>																								
<p>1. GEN Condition – Compliance with Council The Development being completed in accordance with plans and specifications stamped by Council listed in the table below and the Statement of Environmental Effects, except where varied by conditions of this consent.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Document Reference</th> <th style="width: 30%;">Description</th> <th style="width: 20%;">Author</th> <th style="width: 35%;">Date</th> </tr> </thead> <tbody> <tr> <td>14/40</td> <td>Statement of Environmental Effects</td> <td>Cowman Stoddart Pty Ltd</td> <td>November 2019</td> </tr> <tr> <td></td> <td>Fish Rendering: Odour Impact Assessment</td> <td>GHD</td> <td>November 2019</td> </tr> <tr> <td></td> <td>Environmental Impact of Wastewater Generated from Rendering Plant Processing Fish as Raw Material</td> <td>ProAnd Associates</td> <td>November 2019</td> </tr> <tr> <td>MMC001</td> <td>Manildra Group of Companies Safety Data Sheet – Mackerel Fish Meal</td> <td>Manildra Group</td> <td>15/08/2019</td> </tr> <tr> <td></td> <td>Section – 3 Control Through HACCP Part 6 Rendering (Quality Assurance Manual)</td> <td>Manildra Meat Company</td> <td>12/11/2019</td> </tr> </tbody> </table> <p>Reason: To confirm the details of the application as submitted by the applicant and as approved by Council.</p>				Document Reference	Description	Author	Date	14/40	Statement of Environmental Effects	Cowman Stoddart Pty Ltd	November 2019		Fish Rendering: Odour Impact Assessment	GHD	November 2019		Environmental Impact of Wastewater Generated from Rendering Plant Processing Fish as Raw Material	ProAnd Associates	November 2019	MMC001	Manildra Group of Companies Safety Data Sheet – Mackerel Fish Meal	Manildra Group	15/08/2019		Section – 3 Control Through HACCP Part 6 Rendering (Quality Assurance Manual)	Manildra Meat Company	12/11/2019	<p>This condition describes the documents that the approval relies on.</p>
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14/40	Statement of Environmental Effects	Cowman Stoddart Pty Ltd	November 2019																									
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	Section – 3 Control Through HACCP Part 6 Rendering (Quality Assurance Manual)	Manildra Meat Company	12/11/2019																									
<p>2. GEN Condition – Compliance with Legislation Regardless of consent the applicant is responsible for adhering to the requirements of State Legislation including (but not limited to) the <i>Protection of the Environment Operations Act</i> and <i>Dangerous Goods (Road and Rail Transport) Act</i>. Reason: This consent does not remove obligations imposed by State and Federal Legislation.</p>				<p>The Cootamundra Abattoir operates under EPL 3889 issued under the <i>Protection of the Environment Operations Act</i> by the EPA. Annexure 3 to this SEE is a revised MSDS confirming the finished fish meal product is classified as Non Dangerous Goods by the criteria of the <i>Australian Dangerous Goods Code (ADG)</i> for</p>																								

Table 1 (continued)

Condition	Comment
	transport by Road and Rail, Maritime Dangerous Goods Code (IMDG) for transport by Sea; and by the Air Transport Association (IATA). The product is stabilised using a BHA antioxidant. (<i>Renderguard 333</i>)
<p>3. GEN Condition – Time Limited Consent The approval is for a three-month period only to determine if the impacts of the proposal are able to ameliorated and managed. This consent shall cease to be operational three months after the date on which it is taken to have commenced. Reason: This consent does not authorise the development on an ongoing basis.</p>	At the time of preparing this SEE the rendering fish trial has been concluded for a period of months.
<p>4. GEN Condition – Render Fish Only During the time that this consent is in operation, fish are to be the only feedstock for the rendering plant. The processing of other animal by-products and the operation of the abattoir is not to occur during the period of this consent. Reason: To comply with odour limits and requirements of the NSW Environment Protection Authority.</p>	Site management confirm that only fish have been processed in the rendering plant during the trial period.
<p>5. GEN Condition – Operation of Facility This consent authorises the render of fish only, all other abattoir operations are suspended while this consent is in operation. The operations of the abattoirs and the rendering of fish are NOT to occur concurrently. Reason: The cumulative impact of the combined operations has not been assessed and the resultant impact on the environment cannot be predicted.</p>	Site management confirm that only fish have been processed in the rendering plant during the trial period. Livestock processing has not occurred during the trial period.
<p>6. GEN Condition – Hours of Operation During the time that this consent is in operation, plant operations are restricted to the hours of 12:00 am Monday to Saturday 11:59 pm. No operations to occur on Sundays and Public Holidays. Reason: To protect the amenity of the neighbourhood.</p>	Site management advise that they have complied with this condition during the fish rendering trial period.
<p>7. GEN Condition – Recommended Upgrades Prior to the commencement of this consent the applicant is to install, complete and commission, as recommended by the Statement of Environmental Effects and the GHD Odour Impact Assessment to improve operation and management of odour mitigation measures, the following:</p>	

Table 1 (continued)

<i>Condition</i>	<i>Comment</i>
<p>a) Establish a process to recycle the Oil and Grease (O&G) polisher waste-stream, which contains the highest O&G contamination level, back into the rendering cooking vessel.</p> <p>b) Design and install an in-duct spray humidification system that will condition the inlet process air prior to biofiltration.</p>	<p>A process has been established to recycle oil and grease polished waste stream back into the rendering cooking vessel.</p> <p>The steam injection humidification system has been recommissioned to satisfy this condition.</p>
<p>c) Install an upgraded weather station to enable long term logging of (at a minimum) wind speed, wind direction, temperature and relative humidity in 30-minute (or finer) increments.</p> <p>d) Replace the biofilter fan to ensure that fugitive emissions do not result from the rendering building during the receival process.</p> <p>Reason: To protect the amenity of the neighbourhood.</p>	<p>An upgraded weather system has been installed.</p> <p>A biofilter fan has been purchased and installed</p>
<p>8. GEN Condition – Odour Report</p> <p>The applicant shall submit an odour report for the biofilter operation following the biofilter fan upgrade and installation of the in-duct spray humidification system. The testing and sampling which form the basis of the report shall be conducted when process is at capacity.</p> <p>Reason: To protect the receiving environmental and monitor the effectiveness of odour mitigation measures.</p>	<p>An odour report is attached to the GHD expert report that was completed after the new bio filter fan was operational (Ektimo report)</p>
<p>9. GEN Condition – Temperature Control of Feedstock</p> <p>Fish stock is to be maintained under temperature control until processing, and any actions taken to maintain temperature are to be recorded.</p> <p>A record of temperature of raw material deliveries is required to be kept for each truckload that delivers to the site upon delivery and at unloading.</p> <p>Reason: To protect the amenity of the neighbourhood.</p>	<p>Site management confirm that fish stock have been maintained below the temperature control parameter of 15°C.</p>
<p>10. GEN Condition – Waste Disposal</p> <p>Prior to the commencement of this consent the applicant is to provide to Council a waste management plans that include contingencies in the event that fish on site cannot be processed for whatever reason.</p> <p>Reason: To ensure that waste control and disposal measures are adequate for the development.</p> <p><u>Note:</u> Council's Cootamundra landfill facility does not have capacity to accept mass disposal of fish into the animal pit.</p>	<p>A Waste Management Plan has been submitted to Council (Annexure 4).</p>

Table 1 (continued)

Condition	Comment
<p>11. GEN Condition – Truck Washing</p> <p>All trucks used for the transport of feedstock are to be washed out on site. The truck wash area onsite shall be bunded and wash water directed to the effluent system, away from the stormwater system.</p> <p>Reason: To ensure that stormwater is not contaminated.</p>	<p>All trucks used for the transport of feedstock are washed out on site in a designated hard stand area immediately in front of the rendering plant. This area is graded to dedicated waste drains. The wastewater is collected in a sump within the drain system and pumped into the wastewater treatment system. As this area is graded to this drainage system there is no need for the area to be bunded as the objective of the condition is still achieved. As this area is an operating driveway area, bunding the area could create occupation health and safety concerns for other vehicles (such as forklifts) using this area.</p>
<p>12. GEN Condition – Bunding of Processing Material</p> <p>Processed material shall be stored in covered bunded areas sized to contain a spill of 150% of the material in the bunded areas.</p> <p>Reason: To ensure that pollution does not occur in the event of a spill on site.</p>	<p>Site management advise that the storage area is currently bunded and also drains into a basement area under the raw bin which ensures sufficient capacity to meet the requirement of this condition.</p>
<p>13. GEN Condition – Complaints Management System</p> <p>Upon commencement of this consent the applicant shall implement a complaints management system, which shall be published on their website. Contact details for complaints will be provided on the website and on the gate to the premises.</p> <p>Reason: To ensure that complaints are followed through, rectification measures implemented and the community informed of rectification actions.</p>	<p>A Complaints Management System has been implemented.</p> <p>A sign has been erected at the site entrance with contact details for complaints.</p> <p>The new landowners do not have an active website for this site as of yet.</p>
<p>14. GEN Condition – Records</p> <p>A record shall be kept during the fish rendering consent period of any complaints received from the general public including:</p> <ul style="list-style-type: none"> a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; 	<p>A record of complaints from the general public is kept at the premises.</p>

Table 1 (continued)

Condition	Comment
<p>e) the action taken in relation to the complaint, including any follow-up contact with the complainant; and</p> <p>f) if no action was taken the reasons why no actions was taken.</p> <p>Records of will be made available to Council Officers and the NSW Environment Protection Authority on request.</p> <p>Reason: To ensure the amenity of the neighbourhood is protected.</p>	
<p>15. GEN Condition – Irrigation areas</p> <p>The applicant is to map and record the regime of irrigating effluent to land to ensure that soil capability, capacity and stability is not impacted and to ensure that areas of terrestrial biodiversity are avoided.</p> <p>Reason: To ensure the amenity of the receiving environment is maintained and the activity is managed in a sustainable manner.</p>	<p>Site management advise that the area of terrestrial biodiversity is fenced off and no irrigation occurs within this area of the site.</p>
<p>16. GEN Condition – Monitoring</p> <p>Regular oil and grease analysis is to be conducted on wastewater samples taken at the EPA designated monitoring points and at the discharges from the anaerobic and aerated ponds, as part of the normal sampling program.</p> <p>Reason: To ensure that the receiving environment is not subject to pollution.</p>	<p>Oil and grease sampling and analysis is conducted on wastewater samples taken from the EPA monitoring points and at discharges from the anaerobic and aerated ponds, as part of the normal sampling program.</p>
<p>17. GEN Condition – Monitoring and Reporting</p> <p>An Environmental Audit Report will be prepared and submitted to Council and the EPA at the completion of the fish rendering trial period which will:</p> <p>a) Detail the results of temperature monitoring of raw material delivered to the site, and if there are occurrences where fish temperatures rise above 15°C actions taken by the company to remedy these occurrences.</p> <p>b) Detail the results of monitoring of effluent quality as required by the sites EPL and including oil and grease analysis as recommended by ProAnd.</p> <p>c) Detail compliance with any development consent conditions issued by Council.</p> <p>d) Detail compliance with the requirements of the EPL during the fish rendering trial period.</p> <p>e) Detail any complaints received in relation to the site operations and actions take to remedy complaints.</p> <p>Reason: To ensure the environmental impacts of the activity are monitored and mitigated.</p>	<p>See report attached as Annexure 7</p>

3.2.2 The Current Proposal

The Australian Meat Group acquired the site from the Manildra Group earlier this year.

The Australian Meat Group is a leading Melbourne based company created specifically to service the hospitality industry throughout Australia. With more than twenty years of experience in the industry, the Australian Meat Group prides itself with expertise in all categories of Beef, Veal, Lamb, Pork, Small goods and Poultry production.

The Australian Meat Group intends to recommence livestock processing at the Cootamundra Abattoir when the beef processing area has been upgraded. It is planned to recommence Livestock processing late 2021.

Until such time as livestock processing is able to recommence however, the Australian Meat Group would like to continue with fish rendering operations at the Cootamundra Abattoir site. As with the trial approval however the processing of fish in the rendering plant would only occur while the normal livestock processing operations are shut down. Livestock processing would not be permitted during fish rendering operations and when Livestock processing recommences no further fish rendering would occur onsite.

Transportation of Fish

As during the trial, fish material would continue to be loaded directly from the fishing boat or processing facility into semi-trailers. The fish product is refrigerated on the fishing boat or processing facility and loaded into heavy vehicles for delivery to the subject site.

These heavy vehicles will then haul the fish material to the Cootamundra Abattoir. It is estimated that around 100 tonnes of fish would be loaded on a daily basis (ie. per 24 hours) to be processed on the subject site. Three (3) delivery trucks (with double trailers) will deliver fish to the subject site.

The fish are refrigerated at capture and loaded onto the transport vehicle in a chilled condition. In this regard ice is not used to hold the raw material at temperature within the trucks. The truck trailers are loaded with refrigerated product and the large thermal momentum of the load, combined with the double skinned trailer keeps the product in a chilled fresh condition for the period between loading and rendering.

Since the fish material to be rendered is refrigerated immediately after capture and / or processing and transported overnight to Cootamundra it is preferred that rendering take place within 3 days of capture and before the product reaches a temperature greater than 15°C in the rendering raw material bin.

Loading of Fish at the Rendering Plant

During the fish rendering trial undertaken by Manildra it was found that raw fish material can be maintained at a suitable temperature (ie. below 15°C) within the trucks that are waiting to be unloaded, even following hot weather. Time-temperature parameters were monitored during the trial period and at no time during the trial period have fish material exceeded the temperature parameter of 15°C.

If the processing of fish is delayed for any reason (for example while awaiting earlier delivery trucks to be unloaded) and there is a likelihood of the temperature of the fish rising above 15°C, such material is placed into bins and placed into active refrigeration until such time as it can be processed. Manildra's experience during the fish rendering trial, however, was that even during hot weather, they did not experience temperatures of fish rising above 15°C in trucks awaiting to be unloaded.

It is proposed that if material is unable to be processed within 24 hours of delivery that it will be placed in bins and refrigerated.

Washing Down of Trucks

The discharge from vehicle wash-down is minimal as the load discharges without leaving any significant material in the trailer. The trailer is washed down immediately within the designated hard stand area immediately in front of the rendering plant where all drains are dedicated trade waste drains. The wash-down water is collected in a sump within this drain system and pumped into the waste-water treatment system. Any spillages are cleaned up immediately.

Solid Wastes

Given the nature of the use, solid wastes will not be generated by the process. Over-coarse material from the screening processes will be fed back through the cooking process.

Contingencies

A Waste Management Plan has previously been formulated for the site in accordance with condition No. 10 of development approval DA 2019/103 for the fish rendering trial and is included as **Annexure 4** to this SEE.

In terms of contingencies, such as plant break downs or loss of power the following measures have been adopted in the Waste Management Plan for the site:

- If there is a plant breakdown, any raw material that has been loaded into the raw material bin will be removed either manually or mechanically (by excavator) into bins and placed into refrigeration.

- Material that has left the receival bin and has commenced being processed will be removed and placed in bins and will be refrigerated.
- During a plant breakdown, any material being processed within the cooker will be left in the cooker as this is a sealed vessel.
- If there is a power breakdown, the site does have a generator that can be connected to the refrigeration unit to maintain refrigeration during any breakdown or power loss.
- Given the contingency measures already available particularly the ability to refrigerate fish on site following arrival at the site if need be, the potential for fish to decay to a point that they are unable to be processed in the rendering plant is highly unlikely and remote. However, if any fish are found to be unsuitable ("*unsuitable material*") for processing for whatever reason, such as if material has decomposed either during transportation or while parked at the site, such material will be placed immediately into covered bins and refrigerated on site.

Such refrigerated unsuitable material could then be fed as a 'shandy' in small proportions over an extended period of time with suitable material in the rendering plant.

Alternatively, if required, the refrigerated unsuitable material can be transported for disposal to a landfill that is able to take the material. In this regard Council previously advised that Cootamundra's landfill facility does not have the capacity to accept mass disposal of fish into the landfill's animal pit.

It should be noted however that as this material will be refrigerated, it is possible for smaller amounts of the unsuitable material to be transported to a landfill over an extended period of time, while the remainder of the unsuitable material is kept refrigerated on site. In this way the amount of material that would be required to be disposed by landfill at any one time can be minimised. As a result, there would be no need for the Cootamundra landfill to be required to accept the mass disposal of fish at the one time.

If, however the Cootamundra land fill is unable to accept smaller amounts of unsuitable material then the refrigerated unsuitable material can be transported for disposal to other landfills in the region. For instance, the Gregadoo Waste Management Centre located within the Wagga Wagga local government area would be able to accept the receipt of such unsuitable material under these circumstances (confirmed per. Comm. Geoff Pym, Gregadoo Waste Management Centre Manager 23rd January 2020). This situation would be assisted with the ability to refrigerate the

unsuitable material and then transport smaller loads to reduce the amount that is required to be disposed at any one time.

Biosecurity Risks associated with Transportation

Aquatic biosecurity seeks to protect the economy, human health and the environment from problems associated with aquatic pests, diseases and saltwater weeds.

As outlined above no waste-water from either the transportation or processing of fish will be allowed to enter local watercourses. All wash down waters from trucks and waste waters from processing are treated through the effluent management system on the site.

In terms of biosecurity of transporting of fish along roadways, it should be noted that such a risk is somewhat limited given the fish that are transported to the site are marine pelagic fish and the areas that the fish are transported are primary freshwater locations. As a result, the potential pests, diseases and weeds from a marine environment spreading into a freshwater habitat are limited.

Notwithstanding the above the Australian Meat Group accept that they have a duty and responsibility for managing biosecurity risks that they know about or could reasonably be expected to know about. In terms of managing biosecurity risks during the transportation of fish from the coast to the subject land Australian Meat Group will:

- Report sightings of suspected aquatic pests and disease to the NSW DPI.
- Report any observations of sick or unwell fish in production to NSW DPI.
- Assist in reducing the potential for spread of pests and diseases by ensuring truck contractors ensure their vehicles are clean before leaving the coast.
- If there is a truck accident that results in a spill of fish on the way to the subject land Manildra will ensure that all fish are collected and removed from the accident site; are not permitted to enter local waterways; and transported to landfill for disposal as quickly as possible.

Processing of Fish

Upon arrival at the subject site, the fish would be placed directly into the render receivables inlet, which is a metal bin located inside the rendering building. A roller door is opened to allow the raw material to be tipped directly into the bin. The door is then closed. This process is expected to take approximately 30 minutes and would occur a maximum of three to four times in a 24 hour period. Any truck not unloaded, the integrity of raw materials in the truck will be monitored and when required be maintained by refrigeration.

Once the raw material is placed into the render receivables inlet the rendering process as described in Section 3.1 is undertaken.

The rendering of fish will only be undertaken while the normal livestock processing operations are shut down.

Minor modifications have been recently undertaken within the existing rendering plant to accommodate the learnings from the Fish Trial Period to mitigate odour issues to maintain the amenity of the neighbourhood. Apart from those measures which have been implemented in accordance with the condition 7 of Council's development consent for the fish rendering trial, further minor changes have occurred within the process with the upgrade of the decanters within the process (there was always 2 decanters in the rendering plant, they have been upgraded), upgrade of the Separator (again always had a separator in the rendering plant) and the addition of a small Render vessel to pre heat the raw material prior to mechanical separation through the decanters. These upgrades allow the Rendering plant to operate as previously in a "High Temp configuration" or operate in a "Low temp Configuration". The benefits of this change are captured in the expert report **Annexure 1a**.

The process involves simply processing a different raw material to that which has been historically processed on site. The rendering plant is capable of processing approximately 4-5 tonnes of fish per hour. On this basis it is estimated that a maximum daily volume from fish rendering would be equivalent to about 108 tonnes per day.

Odour Mitigation Measures undertaken to date

During the recent fish rendering trial undertaken from the site, the previous landowner, Manildra, identified the following potential causes of odour emanating from the effluent management system during these activities:

- ***Effluent management system***
 - Fat / scum build up on the aerobic pond;
 - Sumps, including three sumps close to the rendering plant; one within proximity of the beef boning area; and the main sump prior to the anaerobic pond;
 - Cooker condensate vaporising effluent in the sump behind the rendering plant;
 - Trade waste drains in front of the rendering plant (truck unloading / wash down area).

As a result, Manildra undertook process and site modifications and improvements to mitigate the generation of odours emanating from the effluent management system including:

- **Anaerobic Pond**

- An excavator was used to remove solids that were built up upon the infeed and outfeeds of the anaerobic pond. These solids were causing effluent to bypass the anaerobic pond across the top of crust allowing fats to directly enter the aerobic pond (7/7/19 – Cost \$1500.00).
- Commenced dosing the effluent system with a bio-stimulant to break down fats in the aerobic pond and reduce odours in the sumps (18/7/19 – Cost \$700.00 dosing pump, and \$25,000.00 – 3 month supply of bio-stimulant).
- The main sump between above the anaerobic pond was covered (23/7/19 – Cost \$1300.00).
- Altered the infeed to the anaerobic pond to enable effluent to enter the pond under the crust (4/8/19).
- Installed timers on the aerators on the aerobic pond to prevent them operating early morning and late afternoon (7/8/19 – Cost \$500.00).
- All sumps covered (with exception of sump with cooker condensate) (7/8/19).
- Cooker condensate removed from last sump, and this sump was covered (4/9/19 – Cost \$1500.00).
- Increased dosing of bio-stimulant into the main sump behind the rendering plant and aerobic pond (12/9/19).
- Odour sampling undertaken by The Odour Unit (12/9/19 – \$8400). The initial results of this sampling were passed onto GHD for analysis (2/10/19).
- A sump truck was used to vacuum remaining scum off the aerobic pond (29/9/19 – \$1100.00).
- Replace an aerator on the aerobic pond with a larger unit and reposition both units more centrally within the pond and increase aeration operation to every day (from previously every other day) (15/10/19).
- Turn timing system off aerators and operate 24/7 (29/10/19).
- On-site reviewing effluent and effluent management system by ProAnd (12 – 13/11/19 – Cost \$8400.00).

- Manildra costs to date on undertaking improvements to effluent management system – \$59,000.00.

Manildra also identified the following potential causes of odour emanated from the Biofilter which treats emissions from the rendering plant:

- **Biofilter**

- The condition of the media within the bed;
- Point source from extraction operations;
- Biofilter operations (temperature, humidity, residence time);
- Fugitive odours escaping through the rendering building and not through the biofilter.

As a result, Manildra undertook process and site modifications and improvements to mitigate the generation of odours emanating from the biofilter including:

- The Odour Unit were engaged to review and undertake sampling of emissions from the biofilter operation (17/7/2019 – Cost \$10,080.00).
- Following initial advice from The Odour Unit the depth of the media within the biofilter was increased by 200 mm to 300 mm (24/7/19 – Cost \$8000.00)
- The Odour Unit issue report on the biofilter confirming point source extraction, temperature and humidity acceptable, however media needs to be changed and increased in depth to eliminate odours (7/8/19).
- All ducting on the infeed side of the biofilter was sealed (10/9/19).
- Removed all media from biofilter, placed a new false floor within biofilter and refilled with new media. Increasing depth of media to 1.3 m (26/10/19 – Cost \$17,700.00).
- The height of the biofilter was increased with additional blockwork to enable an increase in media depth (1/11/19 – Cost \$6850.00).
- Additional media inserted into biofilter, increasing depth of media to 1.5 m (13/11/19 – Cost \$8400.00).
- Additional odour sampling to validate biofilter operation following improvements (21/11/19 – Cost \$5600.00).
- Changed attachment to biofilter infeed cover to ensure robust and on-going seal (26/11/19 – Cost \$3500.00).
- Acquired new biofilter fan (\$30,000).

- Manildra cost to date on improvements to Biofilter – \$90,130.00.

Further odour mitigation measures undertaken by Australian Meat Group after the completion of the Trial period

- ***Expert odour mitigation advise***

- Technical Director – Air Quality from GHD onsite reviewing operations (cost \$3200)

- ***Effluent Management System***

- Installed extraction system from main sump attached to Rendering building so that all odour processed through Biofilter (Cost \$2500)
- Installed water trap in effluent line in truck unloading area (Cost \$1000)
- Engaged company “Hydro Flow” to undertake fortnightly review of the effluent system; and
- Adjusting the pH and introducing a new active bacteria into the anaerobic pond to enhance its odour minimisation functionality

- ***Biofilter***

- Engaged Ektimo to assess biofilter/new fan performance (Cost \$6000)
- Main condenser plant disassembled all ducting checked (Cost \$3500)
- Complete internal inspection of Biofilter ducting (Cost \$1500)
- Added 120m² media to the bio filter bed increasing the depth to 1.4m (Cost \$12000)
- Post shut down, major repair and maintenance program on rendering building cladding to eliminate any holes related to service penetrations or corrosion, and the removal of the large passive vents to increase negative pressure within the rendering plant building (Cost \$7500)

- ***Finished Product Handling/Storage***

It has been identified that the finished bulk bags of Fish meal and external oil storage tanks may have been a source of odour, particularly when EPA identified odour at the boundary that was of a “cooked fish nature”, not raw fish or effluent (rotten odour)

- Post shut down, fit extraction fan to Fishmeal storage area to duct odours into biofilter catchment (Cost \$5000)
- Post shut down, replace mesh gates on Fishmeal storage area with rapid roller doors and ensure cladding is sealed to mitigate any fugitive odour emissions from that area (Cost \$25,000)

- Post shut down, duct all vents for outside oil storage tanks back into the rendering building so that all odour is captured through the bio filter, previously these tanks were venting to atmosphere, and are believed to be the source of the odour complaints prior to shut down. (Cost \$1500)
- Enclose bulk bags of fishmeal with a barrier plastic bag for load out to mitigate fugitive odours during loadout (Cost \$1500 per week)
- **Minor change to allow “Low Temp” process**
 - Post Shut down, install small Render vessel and upgrade/replace existing decanters and separator to allow process to switch between “high temp” and “Low temp” rendering. Low temp process reduces odour generation by 20% as compared to High temp process (Cost \$700000)

Since taking ownership of the site in late February 2020 Australian Meat Group has spent in excess of \$775,000 to mitigate odour issues, the most significant changes have yet to be proven effective as they have been carried out since the plant has shut down.

Monitoring the Effectiveness of Environmental Mitigation Measures

The proposal incorporates a range of environmental mitigation measures which are discussed further in this SEE. These measures have:

- evolved through the fish rendering trial that have taken place at the site. As a result of these activities a range of measures have been implemented to minimise environmental impacts at the site and these as described above.
- been identified through the expert consultant assessments that support this revised SEE and including:
 - Taking into account all of the changes that have occurred since the shut down of production in June, the GHD Report (**Annexure 1**) demonstrates that the proposed fish rendering operations are not predicted to increase the environmental impacts of the total development compared to the existing approved operations. Therefore, from an air quality perspective the GHD Report supports the transition of the current fish rendering approval. In addition to the changes already made GHD recommended that:
 - Establish a fulltime “odour monitor” for the first two weeks of recommencement of processing to monitor and record both onsite and offsite for any odours emanating from the process, the single focus of the role is to monitor odour across different weather and locations to ensure the

mitigations in place are effective, and the quick identification of any potential issues

- Based upon the results of the three month trail, the Proand Reports (**Annexure 2 & 2a**) confirms that the MEDLI modelling correctly predicted that there would be little effluent to be irrigated during periods of high evaporation (hot dry weather), and that oil and grease levels are as would be expected for waste-water from a fish rendering operation. Proand recommended that:
 - The level of Oil and Grease in the wastewater continue to be monitored when samples are taken in compliance with the EPA monitoring conditions, and
 - When Irrigation of wastewater is necessary the disposal be restricted to the pivot irrigation area in order to avoid disposal on land designated as being important in terms of biological diversity.
- The SEE includes the following monitoring requirements for the proposed continuation of fish rendering:
 - Time-temperature parameters will need to continue to be monitored. A record of temperature of raw material deliveries is required to be kept for each truckload that delivers to the site upon delivery and at unloading. If the processing of fish is delayed for any reason (for example while awaiting earlier delivery trucks to be unloaded) and there is a likelihood of the temperature of the fish rising above 15°C, such material is required to be placed into bins and placed into active refrigeration until such time as it can be processed.
 - Under the EPL for the subject site, Manildra are required to monitor effluent quality at various discharge points in accordance with the “*Manildra Cootamundra Environmental Monitoring Plan*” and which forms part of the sites EPL. In accordance with the recommendations of the ProAnd Report it is recommended that oil and grease analysis continue to be conducted on wastewater samples taken at the EPA designated monitoring points.
 - A record will continue to be kept of any complaints received from the general public including:
 - a) the date and time of the complaint;
 - b) the method by which the complaint was made;
 - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
 - d) the nature of the complaint;

- e) the action taken in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken the reasons why no action was taken.

The record of complaints will be made available to Council staff and the officers of the EPA upon request.

- An Environmental Audit Report will continue to be prepared and submitted to Council and the EPA after 4 months of processing after recommencement which will:
 - Detail the results of monitoring of effluent quality as required by the sites EPL and including oil and grease analysis as recommended by ProAnd.
 - Detail compliance with any development consent conditions issued by Council.
 - Detail compliance with the requirements of the EPL during the fish rendering trial period.
 - Detail any complaints received in relation to the site operations and actions taken to remedy complaints.

4.0 LEGISLATIVE REQUIREMENTS

4.1 STATE LEGISLATION

4.1.1 Environmental Planning & Assessment (EP&A) Act and Regulations

4.1.1.1 *Matters for Consideration*

Section 4.15(1) of the Environmental Planning & Assessment Act 1979 outlines those matters that a consent authority must take into consideration when it considers and determines a development application. Section 4.15(1) stipulates:

4.15 Evaluation

(1) *Matters for consideration-general In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:*

(a) *the provisions of:*

- (i) *any environmental planning instrument, and*
- (ii) *any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the draft instrument has been deferred indefinitely or has not been approved), and*
- (iii) *any development control plan, and*
- (iiia) *any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
- (iv) *the regulations (to the extent that they prescribe matters for the purposes of this paragraph),*
- (v) *any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),*

that apply to the land to which the development application relates,

- (b) *the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
- (c) *the suitability of the site for the development,*
- (d) *any submissions made in accordance with this Act or the regulations,*
- (e) *the public interest.*

The above matters are addressed in detail in Section 5.0 of this SEE.

4.1.1.2 State Significant and Regional Development

Section 4.36 to the Environmental Planning & Assessment Act 1979, and the introduction of *State Environmental Planning Policy (State & Regional Development (the "State & Regional Development SEPP))*, concern the assessment of state significant development (SSD). Pursuant to Section 4.36 of the Act, development that is declared to be SSD is referred within the State and Regional Development SEPP. The Minister for Planning is the consent authority for SSD. The provisions of the State and Regional SEPP as they apply to this proposal are addressed in Section 5.1.1.1.

Regional Developments, for which the Joint Regional Planning Panels are the consent authority, are listed in Schedule 7 of the *State Environmental Planning Policy (State & Regional Development) 2011*. The proposal does not trigger any of the criteria listed within Schedule 7.

Cootamundra Gundagai Regional Council is the consent authority for this proposal.

4.1.1.3 Integrated Development

Pursuant to Section 4.46 of the Act, Integrated Development is development that, in order for it to be carried out, requires development consent and one or more of the following approvals:

Table 2
Integrated Development – Section 4.46 EP&A Act

Act	Section	Approval
<i>Fisheries Management Act 1994</i>	s 144	Aquaculture permit.
	s 201	Permit to carry out dredging or reclamation work.
	s 205	Permit to cut, remove, damage or destroy marine vegetation on public water land or an aquaculture lease, or on the foreshore of any such land or leases
	s 219	Permit to (a) set a net, netting or other material, or (b) construct or alter a dam, floodgate, causeway or weir, or (c) otherwise create an obstruction, across or within a bay, inlet, river or creek, or across or around a flat.
<i>Heritage Act 1977</i>	s 58	Approval in respect of the doing or carrying out of an act, matter or thing referred to in s 57(1).
<i>Mine Subsidence Compensation Act 1961</i>	s 15	Approval to alter or erect improvements within a mine subsidence district or to subdivide land therein.
<i>Mining Act 1992</i>	ss 63, 64	Grant of mining lease.
<i>National Parks and Wildlife Act 1974</i>	s 90	Consent to knowingly destroy, deface or damage or knowingly cause or permit the destruction or defacement of or damage to, a relic or Aboriginal place.
<i>Petroleum (Onshore) Act 1991</i>	s 9	Grant of production lease.

Table 2 (continued)

<i>Act</i>	<i>Section</i>	<i>Approval</i>
<i>Protection of the Environment Operations Act 1997</i>	ss 43(a), 47 and 55	Environment protection licence to authorise carrying out of scheduled development work at any premises.
	ss 43 (b), 48 and 55	Environment protection licence to authorise carrying out of scheduled activities at any premises (excluding any activity described as a "waste activity" but including any activity described as a "waste facility").
	ss 43 (d), 55 and 122	Environment protection licences to control carrying out of non-scheduled activities for the purposes of regulating water pollution resulting from the activity.
<i>Roads Act 1993</i>	s 138	Consent to (a) erect a structure or carry out a work in, on or over a public road; or (b) dig up or disturb the surface of a public road; or (c) remove or interfere with a structure, work or tree on a public road; or (d) pump water into a public road from any land adjoining the road; or (e) connect a road (whether public or private) to a classified road.
<i>Rural Fires Act 1997</i>	s 100B	Authorisation under section 100B in respect of bush fire safety of subdivision of land that could lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes.
<i>Water Management Act 2000</i>	ss 89, 90, 91	Water use approval, water management work approval or activity approval under Part 3 of Chapter 3.

The existing operations on the site are subject to an Environment Protection Licence (EPL) (No. 3889) issued by the Environment Protection Authority under the Protection of the Environment Operations Act for a "livestock processing industry" involving "rendering or fat extraction" and 'slaughtering or processing animals".

Following consultation with staff from the EPA (per. comm Jason Price EPA 25th February 2020), the EPA advise that the processing fish in the existing rendering plant will require the existing EPL to be reviewed.

Under these circumstances the development application will comprise integrated development for the purposes of Section 4.46 of the Environmental Planning & Assessment Act.

4.1.1.4 Schedule 3 Environmental Planning & Assessment Regulations

Schedule 3 of the EP&A Regulations lists those activities that comprise 'designated development' for the purposes of the EP&A Act. Designated developments are those activities for which an Environmental Impact Assessment is required to accompany any development application.

Part 2, and in particular clauses 35 and 36, of Schedule 3 however deals specifically with alternations and additions to development and reads:

Part 2 Are alterations or additions designated development?

35 *Is there a significant increase in the environmental impacts of the total development?*

Development involving alterations or additions to development (whether existing or approved) is not designated development if, in the opinion of the consent authority, the alterations or additions do not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development.

Note. Development referred to in this clause is not designated development for the purposes of section 4.10 of the Act. This means that section 8.8 of the Act (Appeal by an objector) will not extend to any such development even if it is State significant development.

36 *Factors to be taken into consideration*

In forming its opinion as to whether or not development is designated development, a consent authority is to consider:

- (a) the impact of the existing development having regard to factors including:
 - (i) previous environmental management performance, including compliance with the conditions of any consents, licences, leases or authorisations by a public authority and compliance with any relevant codes of practice, and*
 - (ii) rehabilitation or restoration of any disturbed land, and*
 - (iii) the number and nature of all past changes and their cumulative effects, and**
- (b) the likely impact of the proposed alterations or additions having regard to factors including:
 - (i) the scale, character or nature of the proposal in relation to the development, and*
 - (ii) the existing vegetation, air, noise and water quality, scenic character and special features of the land on which the development is or is to be carried out and the surrounding locality, and*
 - (iii) the degree to which the potential environmental impacts can be predicted with adequate certainty, and*
 - (iv) the capacity of the receiving environment to accommodate changes in environmental impacts, and**
- (c) any proposals:
 - (i) to mitigate the environmental impacts and manage any residual risk, and*
 - (ii) to facilitate compliance with relevant standards, codes of practice or guidelines published by the Department or other public authorities.**

An assessment of the matters for consideration as listed under Part 2 of Schedule 3 of the EP&A Regulations is provided in Section 6.0 of this report.

4.1.2 Biodiversity Conservation Act 2016

This legislation as of the 25th August 2017 has replaced the *Threatened Species Conservation Act 1995* and *Native Vegetation Conservation Act* and addresses certain matters in respect of threatened species and their habitats.

This bill came into effect on the 25th August 2017 and replaces the *Threatened Species Conservation Act 1995*, the *Nature Conservation Trust Act 2001* and the provisions relating to animals and plants in the *National Parks and Wildlife Act 1974*. The *Local Land Services Amendment Bill 2016* is cognate with this bill and replaces the *Native Vegetation Act 2003*. The purpose of this legislation is to conserve and protect biodiversity values including threatened species, populations and ecological communities of animals and plants. The *Biodiversity Conservation Bill 2016* establishes a framework and scientific method for measuring the impact of proposed developments on biodiversity values and subsequent tools to avoid, minimise and offset any identified impacts. This requires certain matters in respect of biodiversity values and vegetation clearing to be addressed by proposed developments.

The Land of Biodiversity Value mapping prepared by the NSW Office of Environment & Heritage does not identify any land of biodiversity value on the subject site. The proposal involves the use of an existing rendering plant. No further works are proposed by this application. No vegetation disturbance is envisaged by this proposal.

As will be discussed in Section 5.1.1.2 of this SEE, mapping that supports the Cootamundra Local Environmental Plan 2013 identifies areas within the overall subject site as containing areas of terrestrial biodiversity significance.

The wastewater assessment undertaken by Proand in support of this SEE addresses this matter. The Proand Report identifies that the pivot irrigation site located on Lot 53 DP 1258388 is not affected by the terrestrial biodiversity mapping that supports the LEP. The Proand Report recommends that when irrigation of wastewater is necessary the disposal be restricted to the pivot irrigation area on Lot 53 DP 1258388 in order to avoid disposal on land designated as being important in terms of biological diversity.

Under these circumstances the proposal does not raise any issues with respect to the provision of this legislation.

4.1.3 Local Land Services Act 2013

The Local Land Services Amendment Bill 2016 repeals the Native Vegetation Conservation Act 2003 (NVC). Division 5A Land Management (native vegetation) of the Local Land Services Act 2013 pertains to the clearance of native vegetation. Under Section 600 of this legislation clearing that is permitted by a development consent issued under the Environmental Planning & Assessment Act is authorised for the purposes of this legislation. No clearing is proposed by this development application. Under these circumstances the provisions of this legislation will not apply to this proposal.

4.1.4 Water Management Act

The Water Management Act 2000 (WMA) is the main piece of water legislation for NSW ensuring that water is provided for the environment and more secure access to water users. A controlled activity approval under the WMA is required for certain types of developments and activities that are carried out in or near a river, lake or estuary. The WMA replaces the Rivers and Foreshores Improvements Act.

Section 91 of the WMA specifies that:

- “(1) There are two kinds of activity approvals, namely, controlled activity approvals and aquifer interference approvals.*
- (2) A controlled activity approval confers a right on its holder to carry out a specified controlled activity at a specified location in, on or under waterfront land.”*

Under the WMA, a controlled activity is defined as:

- “(a) the erection of a building or the carrying out of a work (within the meaning of the Environmental Planning and Assessment Act 1979), or*
- (b) the removal of material (whether or not extractive material) or vegetation from land, whether by way of excavation or otherwise, or*
- (c) the deposition of material (whether or not extractive material) on land, whether by way of landfill operations or otherwise, or*
- (d) the carrying out of any other activity that affects the quantity or flow of water in a water source.”*

For the purposes of the WMA, “waterfront land” means:

- (a) the bed of any river, together with any land lying between the bed of the river and a line drawn parallel to, and the prescribed distance inland of, the highest bank of the river, or*
- (a1) the bed of any lake, together with any land lying between the bed of the lake and a line drawn parallel to, and the prescribed distance inland of, the shore of the lake, or*

- (a2) the bed of any estuary, together with any land lying between the bed of the estuary and a line drawn parallel to, and the prescribed distance inland of, the mean high-water mark of the estuary, or
- (b) if the regulations so provide, the bed of the coastal waters of the State, and any land lying between the shoreline of the coastal waters and a line drawn parallel to, and the prescribed distance inland of, the mean high-water mark of the coastal waters,

The WMA outlines that a "river" includes:

- (a) any watercourse, whether perennial or intermittent and whether comprising a natural channel or a natural channel artificially improved, and
 - (b) any tributary, branch or other watercourse into or from which a watercourse referred to in paragraph (a) flows, and
 - (c) anything declared by the regulations to be a river,
- whether or not it also forms part of a lake or estuary but does not include anything declared by the regulations not to be a river.

Mapping supporting the Cootamundra LEP 2013 does not show any watercourses flowing within the site.

The 1:25,000 topographic map for Cootamundra (8528-N) (2017 Edition) identifies intermittent watercourses flowing within the vicinity of the northern and southern boundaries of the subject land (refer Figure 6).

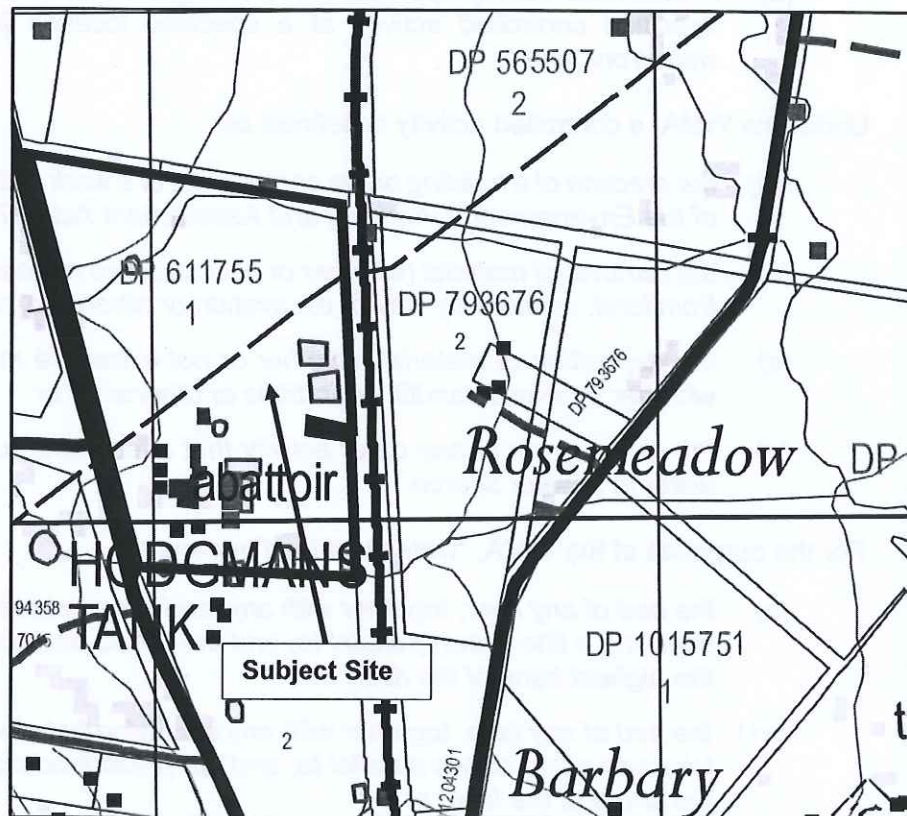


Figure 6: Intermittent Watercourses
Extract 1:25,000 Cootamundra Topographic Map 8528-N

As the proposal only seeks a to process fish in the existing rendering plant on the site, and does not propose any physical works on site, the proposal will not trigger the need to obtain a controlled activity approval under this legislation.

4.1.5 Rural Fires Act

Under the provisions of Section 100B of the Rural Fires Act 1997, authorisation is required with respect to bushfire safety for subdivision of land that is identified as bushfire prone and that could either be lawfully be used for residential or rural residential purposes or development of land for special fire protection purposes.

The subject site is not mapped as bushfire prone land by the NSW RFS and the proposal does not involve subdivision or development of land for special fire protection purposes. Therefore, the provisions of this legislation do not apply to the proposal.

4.1.6 Protection of the Environment Operations (POEO) Act

The existing operations on the site are subject to an Environment Protection Licence (EPL) (No. 3889) issued by the Environment Protection Authority under the Protection of the Environment Operations Act for a "livestock processing industry" involving "rendering or fat extraction" and 'slaughtering or processing animals".

EPL No. 3889 imposes a range of requirements in terms of the operations of the existing operations on the site and including:

- Monitoring locations for discharges to the air and water including application of treated effluent to the land.
- Limits on pollution of water, waste generation and odours.
- Operating conditions in terms of:
 - The carrying out of activities in a competent manner;
 - The maintenance of plant and machinery;
 - Dust minimisation;
 - The application of effluent to land.
- Monitoring and recording requirements.
- Recording of pollution complaints and the need for a telephone complaints line.
- Reporting requirements.

Following consultation with staff from the EPA (per. comm Jason Price EPA 25th February 2020), the EPA advise that the on-going processing of fish in the existing rendering plant will require the existing EPL to be reviewed.

Under these circumstances the development application will also comprise integrated development for the purposes of Section 4.46 of the Environmental Planning & Assessment Act.

5.0 ASSESSMENT

5.1 SECTION 79C(1)(A) – ENVIRONMENTAL PLANNING PROVISIONS

5.1.1 Environmental Planning Instruments

5.1.1.1 State Environmental Planning Policies (SEPPs)

SEPP No.33 – Hazardous and Offensive Development

The objectives of SEPP No. 33 are set out in clause 2 of the SEPP and include:

- (a) to amend the definitions of hazardous and offensive industries where used in environmental planning instruments, and
- (b) to render ineffective a provision of any environmental planning instrument that prohibits development for the purpose of a storage facility on the ground that the facility is hazardous or offensive if it is not a hazardous or offensive storage establishment as defined in this Policy, and
- (c) to require development consent for hazardous or offensive development proposed to be carried out in the Western Division, and
- (d) to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account, and
- (e) to ensure that in considering any application to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and to impose conditions to reduce or minimise any adverse impact, and
- (f) to require the advertising of applications to carry out any such development.

Annexure 3 to this SEE is a revised Safety Data Sheet for the “Mackerel Fish Meal” product. This revised Safety Date Sheet confirms that the material is”

*“Classified as Non-Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG) for transport by Road and Rail, Maritime Dangerous Goods Code (IMDG) for transport by Sea; and by the Air Transport Association (IATA). The product is stabilised using a BHA antioxidant. (Renderguard 333) **NON-DANGEROUS GOODS.**”*

Given the potential air and water quality impacts associated with the proposed operations the proposal could be defined for the purposes of this SEPP as a “*potentially offensive industry*”. A “potential offensive industry” is defined for the purposes of the SEPP as meaning:

“means a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to

reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality:

(a) to human health, life or property, or

(b) to the biophysical environment,

and includes a hazardous industry and a hazardous storage establishment.

The SEPP also includes a definition of "offensive industry" as follows:

"offensive industry" means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality."

The existing rendering plant operations incorporate measures that reduce the potential impact of the operation on the locality in a manner than would ensure that the proposal would not have a significant adverse impact in the locality or on the existing or likely future development on the land or other land in the locality. The current proposal involves the processing of a different feedstock, fish, into the existing rendering plant. The short-term trial period enabled a review of the adequacy of the existing measures to mitigate the impacts of this proposal, and as a result a range of measures have been implemented to reduce impacts to the local community.

The proposal would therefore not be defined as an offensive industry for the purposes of this SEPP.

Part 3 of the SEPP relates to potentially hazardous or potentially offensive development.

The following clauses are detailed in this part of the SEPP with relevant comments:

11 Development to which Part 3 applies

(1) This Part applies to:

(a) development for the purposes of a potentially hazardous industry, and

(b) development for the purposes of a potentially offensive industry, and

(c) development notified, for the purposes of this Part, by the Director in the Gazette as being a potentially hazardous or potentially offensive development.

(2) This Part does not apply to development the subject of a development application made before the date on which this Policy takes effect.

Comment

As outlined above the proposal could be described as a “potentially offensive industry”.

12 *Preparation of preliminary hazard analysis (PHA)*

A person who proposes to make a development application to carry out development for the purposes of a potentially hazardous industry must prepare (or cause to be prepared) a preliminary hazard analysis in accordance with the current circulars or guidelines published by the Department of Planning and submit the analysis with the development application.

Comment

The proposal does not constitute a potentially hazardous industry for the purposes of this SEPP. A PHA is therefore not required for this proposal.

13 *Matters for consideration by consent authorities*

In determining an application to carry out development to which this Part applies, the consent authority must consider (in addition to any other matters specified in the Act or in an environmental planning instrument applying to the development):

- (a) current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development, and*
- (b) whether any public authority should be consulted concerning any environmental and land use safety requirements with which the development should comply, and*
- (c) in the case of development for the purpose of a potentially hazardous industry—a preliminary hazard analysis prepared by or on behalf of the applicant, and*
- (d) any feasible alternatives to the carrying out of the development and the reasons for choosing the development the subject of the application (including any feasible alternatives for the location of the development and the reasons for choosing the location the subject of the application), and*
- (e) any likely future use of the land surrounding the development.*

Comment

A review of the Department of Planning “*Applying SEPP 33 - Hazardous and Offensive Development Application Guidelines*” has been undertaken in the preparation of the development application. These guidelines outline that the key consideration in the assessment of potentially offensive industry is that the consent authority is satisfied there are adequate safeguards to ensure emissions from a facility can be controlled to a level at which they are not significant. These aspects are further addressed in this SEE.

The existing site is licensed (EPL 3889) under the Protection of the Environment Operations Act by the EPA. Consultation with the EPA indicates that a change in

feedstock (fish) to the existing rendering plant does not require the existing EPL to be reviewed.

The proposal does not comprise a potentially hazardous industry therefore a PHA is not required for this proposal.

The subject site is an existing livestock processing site and contains an existing rendering plant used as part of the existing operations that occur at the site. The background to the undertaking of the proposal is discussed in Section 1.0 above.

14 Advertising of applications

Pursuant to section 30 (4) of the Act, the provisions of sections 84, 85, 86, 87 (1) and 90 of the Act apply to and in respect of development to which this Part applies in the same way as those provisions apply to and in respect of designated development.

Comment

Council will need to consider whether the provisions of this clause apply to this proposal.

State Environmental Planning Policy (Infrastructure) 2007

This SEPP aims to facilitate the effective delivery of infrastructure across the state and that appropriate agencies are made aware of and are given an opportunity to make representations in respect of certain development, including traffic generating developments. Division 17 relates to Road and Traffic infrastructure while Schedule 3 of the SEPP outlines traffic generating development which requires referral to Roads and Maritime Services (RMS). The proposal does not involve an increase in floor area of development, rather it involves a change in the feedstock to the existing rendering plant. Under these circumstances the proposal would not trigger the criteria in this Schedule that would warrant the development application being referred to the RMS, and therefore the provisions of this SEPP would not apply to this proposal.

SEPP State and Regional Development 2011

The aims of this SEPP are:

- a) *To identify development that is State significant development,*
- b) *To identify development that is State significant infrastructure and critical State significant infrastructure,*
- c) *To confer functions on joint regional planning panels to determine development applications.*

Schedules 1 and 2 of the SEPP outline those developments that are considered state significant development for the purposes of the SEPP. The proposal does not trigger any

of the criteria listed within these schedules. The project is therefore not a state significant development.

The SEPP also makes provisions for Regional Development for which the Joint Regional Planning Panel are the consent authority. The SEPP stipulates that development referred to within Schedule 7 of the SEPP are Regional Development. The proposal is not one of the activities listed within Schedule 7 of the SEPP and therefore does not constitute Regional Development.

The consent authority for this development application therefore is Cootamundra Gundagai Regional Council.

5.1.1.2 Local Environmental Planning Provisions

Zones and Zone Objectives

Under the provisions of Cootamundra Local Environmental Plan 2013 the subject land is zoned RU1 Primary Production (see **Figure 7**).

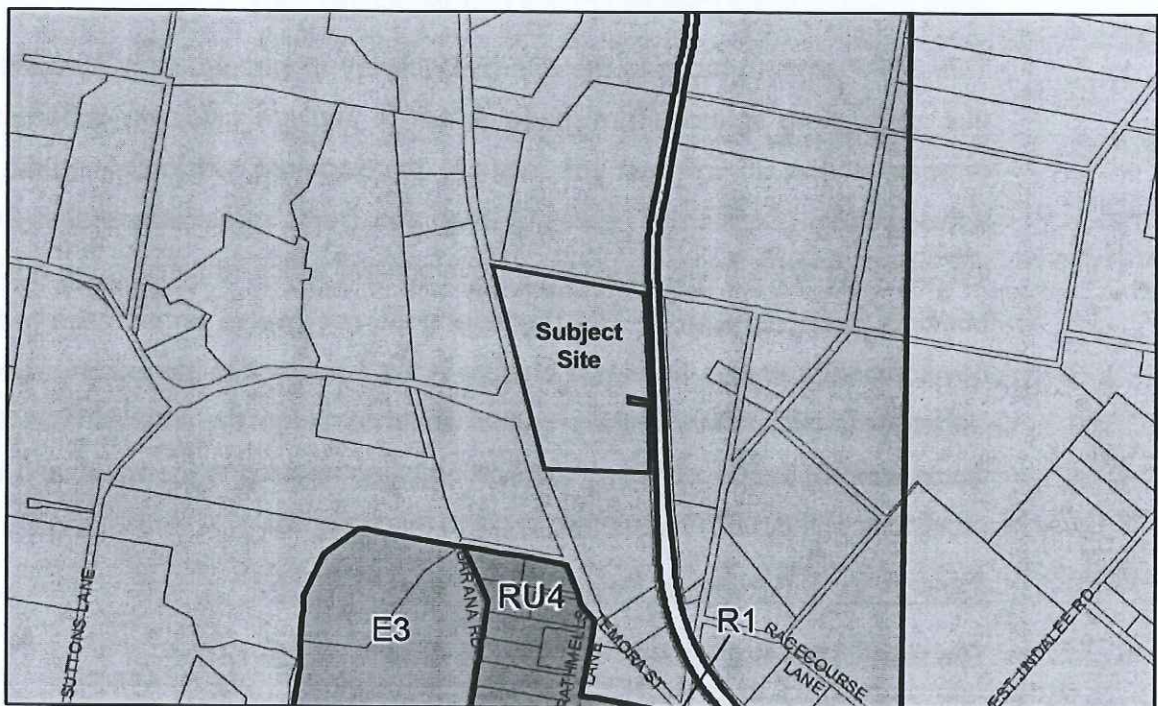


Figure 7: Zoning under Cootamundra LEP 2013.

The objectives of the RU1 zone are:

Zone RU1 Primary Production

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*

- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To protect and conserve deposits of extractive materials and allow their extraction by limited development where appropriate.*
- *To protect and conserve native and other vegetation in order to preserve scenic amenity and to minimise land degradation.*

It is our view that the proposal is consistent with the above zone objectives as:

- The proposal seeks to process fish in the existing rendering plant on the site. This proposal will enable the overall site operations to operate in a financially sustainable manner on a short-term basis. Under these circumstances the proposal encourages an existing primary industry enterprise to operate on an ongoing sustainable manner.
- The proposal involves the use of an existing rendering plant within an existing Abattoir that processes livestock. The proposal will therefore not have any impact on the natural resource base and in particular, agricultural land in the locality.
- The proposal does not involve the fragmentation or alienation of existing agricultural land.
- Lands adjoining the subject site are also zoned RU1, however, there are lands zoned RU4 Primary Product Small Lots and E3 Environmental Management located approximately 370 m and 470 m respectively from the subject site. The operations provide measures to mitigate the impacts of the existing operations on the surrounding locality. As a result of the recently approved short-term fish rendering trial mitigation measures have been identified and implemented to mitigate adverse impacts on the surrounding locality.
- The proposal will have no impacts on extractive industry operations or materials.
- The proposal will have no impact on native vegetation. As the proposal involves the use of an existing rendering plant, and no alterations or additions are proposed to this plant by this proposal, the proposal will also not result in any adverse impacts on the scenic amenity of the locality. The SEE is supported by an environment assessment of the effect of the proposal will have on the effluent management system for the site including irrigation areas which demonstrates the proposal will have less impact on the irrigation areas when compared to the existing livestock processing operations.

The following developments are listed as permissible within the RU1 zone:

*Airstrips; Animal boarding or training establishments; Aquaculture; Backpackers' accommodation; Bed and breakfast accommodation; Business identification signs; Cellar door premises; Dwelling houses; Dual occupancies (attached); Environmental facilities; Extractive industries; Farm buildings; Farm stay accommodation; Forestry; Helipads; Home-based child care; Home businesses; Home industries; Intensive livestock agriculture; Intensive plant agriculture; Open cut mining; Recreation facilities (outdoor); Roads; Roadside stalls; **Rural industries**; Rural workers' dwellings; Secondary dwellings; Truck depots; Veterinary hospitals; Water storage facilities*

Rural industries (highlighted in **bold** above) are defined for the purposes of the LEP as meaning:

rural industry means the handling, treating, production, processing, storage or packing of animal or plant agricultural products for commercial purposes, and includes any of the following:

- (a) *agricultural produce industries,*
- (b) ***livestock processing industries,***
- (c) *composting facilities and works (including the production of mushroom substrate),*
- (d) *sawmill or log processing works,*
- (e) *stock and sale yards,*
- (f) *the regular servicing or repairing of plant or equipment used for the purposes of a rural enterprise.*

Note. Rural industries are not a type of industry—see the definition of that term in this Dictionary.

“**Livestock processing industries**” (highlighted in **bold** above) are defined for the purposes of the LEP as meaning:

*livestock processing industry means a building or place used for the commercial production of products derived from the slaughter of animals (including poultry) or the processing of skins or wool of animals and includes abattoirs, knackerries, tanneries, wool scours and **rendering plants**.*

Note. Livestock processing industries are a type of rural industry—see the definition of that term in this Dictionary.

The existing use of the site, as well as the proposed continued processing of fish in the existing rendering plant as proposed by this application, comprise a livestock processing industry, which is included as a rural industry and therefore permissible within the RU1 zone that applies to the site under the LEP subject to consent.

The Cootamundra LEP 2013 also has a number of specific provisions that may have relevance. The implications that these provisions have in relation to this proposal are discussed in **Table 3** below.

Table 3

Cootamundra LEP 2013 Provisions

CLEP 2013 Clause	Provisions	Comments
<p>Clause 5.10 Heritage conservation</p>	<p>Note. Heritage items (if any) are listed and described in Schedule 5. Heritage conservation areas (if any) are shown on the Heritage Map as well as being described in Schedule 5.</p> <p>(1) Objectives The objectives of this clause are as follows: (a) to conserve the environmental heritage of Cootamundra, (b) to conserve the heritage significance of heritage items and heritage conservation areas, including associated fabric, settings and views, (c) to conserve archaeological sites, (d) to conserve Aboriginal objects and Aboriginal places of heritage significance.</p> <p>(2) Requirement for consent Development consent is required for any of the following: (a) demolishing or moving any of the following or altering the exterior of any of the following (including, in the case of a building, making changes to its detail, fabric, finish or appearance): (i) a heritage item, (ii) an Aboriginal object, (iii) a building, work, relic or tree within a heritage conservation area, (b) altering a heritage item that is a building by making structural changes to its interior or by making changes to anything inside the item that is specified in Schedule 5 in relation to the item, (c) disturbing or excavating an archaeological site while knowing, or having reasonable cause to suspect, that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed, (d) disturbing or excavating an Aboriginal place of heritage significance, (e) erecting a building on land:</p>	<p>A review of Sheet HER_002 which supports the LEP confirms that the subject site is not a heritage item; that it is not located within a heritage conservation area; and that there are no nominated heritage items or conservation areas within the vicinity of the subject site.</p> <p>The proposal involves the continued use of fish as an alternative feedstock in the existing rendering plant on the site. No extensions or additions are proposed to the existing building.</p> <p>Given these circumstances it is our view the provisions of this clause do not apply to this proposal.</p>

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
5.10 continued	<p>(i) on which a heritage item is located or that is within a heritage conservation area, or</p> <p>(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance,</p> <p>(f) subdividing land:</p> <p>(i) on which a heritage item is located or that is within a heritage conservation area, or</p> <p>(ii) on which an Aboriginal object is located or that is within an Aboriginal place of heritage significance.</p> <p>(3) When consent not required However, development consent under this clause is not required if:</p> <p>(a) the applicant has notified the consent authority of the proposed development and the consent authority has advised the applicant in writing before any work is carried out that it is satisfied that the proposed development:</p> <p>(i) is of a minor nature or is for the maintenance of the heritage item, Aboriginal object, Aboriginal place of heritage significance or archaeological site or a building, work, relic, tree or place within the heritage conservation area, and</p> <p>(ii) would not adversely affect the heritage significance of the heritage item, Aboriginal object, Aboriginal place, archaeological site or heritage conservation area, or</p> <p>(b) the development is in a cemetery or burial ground and the proposed development:</p> <p>(i) is the creation of a new grave or monument, or excavation or disturbance of land for the purpose of conserving or repairing monuments or grave markers, and</p> <p>(ii) would not cause disturbance to human remains, relics, Aboriginal objects in the form of grave goods, or to an Aboriginal place of heritage significance, or</p>	

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
5.10 continued	<p>(c) the development is limited to the removal of a tree or other vegetation that the Council is satisfied is a risk to human life or property, or</p> <p>(d) the development is exempt development.</p> <p>(4) <i>Effect of proposed development on heritage significance.</i> The consent authority must, before granting consent under this clause in respect of a heritage item or heritage conservation area, consider the effect of the proposed development on the heritage significance of the item or area concerned. This subclause applies regardless of whether a heritage management document is prepared under subclause (5) or a heritage conservation management plan is submitted under subclause (6).</p> <p>(5) <i>Heritage assessment</i> The consent authority may, before granting consent to any development: (a) on land on which a heritage item is located, or (b) on land that is within a heritage conservation area, or (c) on land that is within the vicinity of land referred to in paragraph (a) or (b), require a heritage management document to be prepared that assesses the extent to which the carrying out of the proposed development would affect the heritage significance of the heritage item or heritage conservation area concerned.</p> <p>(6) <i>Heritage conservation management plans</i> The consent authority may require, after considering the heritage significance of a heritage item and the extent of change proposed to it, the submission of a heritage conservation management plan before granting consent under this clause.</p> <p>(7) <i>Archaeological sites</i> The consent authority must, before granting consent under this clause to the carrying out of development on an archaeological site (other than land listed on the State Heritage Register or to which an interim heritage order under the Heritage Act 1977 applies):</p>	

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
5.10 continued	<p>(a) notify the Heritage Council of its intention to grant consent, and (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.</p> <p>(8) Aboriginal places of heritage significance The consent authority must, before granting consent under this clause to the carrying out of development in an Aboriginal place of heritage significance:</p> <p>(a) consider the effect of the proposed development on the heritage significance of the place and any Aboriginal object known or reasonably likely to be located at the place by means of an adequate investigation and assessment (which may involve consideration of a heritage impact statement), and</p> <p>(b) notify the local Aboriginal communities, in writing or in such other manner as may be appropriate, about the application and take into consideration any response received within 28 days after the notice is sent.</p> <p>(9) Demolition of nominated State heritage items The consent authority must, before granting consent under this clause for the demolition of a nominated State heritage item:</p> <p>(a) notify the Heritage Council about the application, and (b) take into consideration any response received from the Heritage Council within 28 days after the notice is sent.</p> <p>(10) Conservation incentives The consent authority may grant consent to development for any purpose of a building that is a heritage item or of the land on which such a building is erected, or for any purpose on an Aboriginal place of heritage significance, even though development for that purpose would otherwise not be allowed by this Plan, if the consent authority is satisfied that:</p> <p>(a) the conservation of the heritage item or Aboriginal place of heritage significance is facilitated by the granting of consent, and</p>	

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
5.10 continued	<p>(b) the proposed development is in accordance with a heritage management document that has been approved by the consent authority, and</p> <p>(c) the consent to the proposed development would require that all necessary conservation work identified in the heritage management document is carried out, and</p> <p>(d) the proposed development would not adversely affect the heritage significance of the heritage item, including its setting, or the heritage significance of the Aboriginal place of heritage significance, and</p> <p>(e) the proposed development would not have any significant adverse effect on the amenity of the surrounding area.</p>	
Clause 5.18 Intensive livestock agriculture	<p>(1) The objectives of this clause are:</p> <p>(a) to ensure appropriate environmental assessment of development for the purpose of intensive livestock agriculture that is permitted with consent under this Plan, and</p> <p>(b) to provide for certain capacity thresholds below which development consent is not required for that development subject to certain restrictions as to location.</p> <p>(2) This clause applies if development for the purpose of intensive livestock agriculture is permitted with consent under this Plan.</p> <p>(3) In determining whether or not to grant development consent under this Plan to development for the purpose of intensive livestock agriculture, the consent authority must take the following into consideration:</p> <p>(a) the adequacy of the information provided in the statement of environmental effects or (if the development is designated development) the environmental impact statement accompanying the development application,</p> <p>(b) the potential for odours to adversely impact on the amenity of residences or other land uses within the vicinity of the site,</p> <p>(c) the potential for the pollution of surface water and ground water,</p>	This proposal does not involve intensive livestock agriculture therefore the provisions of this clause do not apply to this proposal.

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
5.18 continued	<p>(d) the potential for the degradation of soils,</p> <p>(e) the measures proposed to mitigate any potential adverse impacts,</p> <p>(f) the suitability of the site in the circumstances,</p> <p>(g) whether the applicant has indicated an intention to comply with relevant industry codes of practice for the health and welfare of animals,</p> <p>(h) the consistency of the proposal with, and any reasons for departing from, the environmental planning and assessment aspects of any guidelines for the establishment and operation of relevant types of intensive livestock agriculture published, and made available to the consent authority, by the Department of Primary Industries (within the Department of Industry) and approved by the Planning Secretary.</p> <p>(4) Despite any other provision of this Plan, development for the purpose of intensive livestock agriculture may be carried out without development consent if:</p> <p>(a) the development is of a type specified in subclause (5), and</p> <p>(b) the consent authority is satisfied that the development will not be located:</p> <p>(i) in an environmentally sensitive area, or</p> <p>(ii) within 100 metres of a natural watercourse, or</p> <p>(iii) in a drinking water catchment, or</p> <p>(iv) within 500 metres of any dwelling that is not associated with the development, or a residential zone, or</p> <p>(v) if the development is a poultry farm—within 500 metres of another poultry farm.</p> <p>(5) The following types of development are specified for the purposes of subclause (4):</p> <p>(a) a cattle feedlot having a capacity to accommodate fewer than 50 head of cattle,</p>	

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
5.18 continued	<p>(b) a goat feedlot having a capacity to accommodate fewer than 200 goats,</p> <p>(c) a sheep feedlot having a capacity to accommodate fewer than 200 sheep,</p> <p>(d) a pig farm having a capacity to accommodate fewer than 20 breeding sows, or fewer than 200 pigs (of which fewer than 20 may be breeding sows),</p> <p>(e) a dairy (restricted) having a capacity to accommodate fewer than 50 dairy cows,</p> <p>(f) a poultry farm having a capacity to accommodate fewer than 1,000 birds for meat or egg production (or both).</p> <p>(6) For the avoidance of doubt, subclause (4) does not apply to development that is prohibited or that may be carried out without development consent under this or any other environmental planning instrument.</p> <p>(7) In this clause: environmentally sensitive area has the same meaning as in clause 1.5 of State Environmental Planning Policy (Exempt and Complying Development Codes) 2008. residential zone means Zone RU4 Primary Production Small Lots, Zone RU5 Village, Zone RU6 Transition, Zone R1 General Residential, Zone R2 Low Density Residential, Zone R3 Medium Density Residential, Zone R4 High Density Residential, Zone R5 Large Lot Residential, Zone B4 Mixed Use, Zone B6 Enterprise Corridor, Zone E3 Environmental Management or Zone E4 Environmental Living.</p>	
Clause 6.1 Earthworks	<p>(1) The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.</p> <p>(2) Development consent is required for earthworks unless: (a) the earthworks are exempt development under this Plan or another applicable environmental planning instrument, or</p>	<p>The proposal involves the continued use of fish as a feedstock used in an existing rendering plant. No extensions or additions are proposed to the existing building. The proposal does not involve the undertaking of any earthworks. Given these circumstances it is our view the provisions of this clause do not apply to this proposal.</p>

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
6.1 continued	<p>(b) the earthworks are ancillary to development that is permitted without consent under this Plan or to development for which development consent has been given.</p> <p>(3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters:</p> <p>(a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,</p> <p>(b) the effect of the development on the likely future use or redevelopment of the land,</p> <p>(c) the quality of the fill or the soil to be excavated, or both,</p> <p>(d) the effect of the development on the existing and likely amenity of adjoining properties,</p> <p>(e) the source of any fill material and the destination of any excavated material,</p> <p>(f) the likelihood of disturbing relics,</p> <p>(g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,</p> <p>(h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</p> <p>Note. The National Parks and Wildlife Act 1974, particularly section 86, deals with harming Aboriginal objects.</p>	
Clause 6.2 Flood planning	<p>(1) The objectives of this clause are as follows:</p> <p>(a) to minimise the flood risk to life and property associated with the use of land,</p> <p>(b) to allow development on land that is compatible with the land's flood hazard, taking into account projected changes as a result of climate change,</p>	<p>A review of Sheet FLD_002 of the LEP confirms that the subject land is not identified as a Flood Planning Area. The provisions of this clause therefore do not apply to this proposal.</p>

Table 3 (continued)

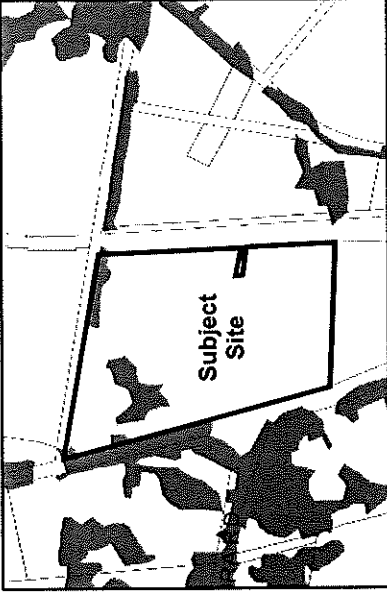
CLEP 2013 Clause	Provisions	Comments
6.2 continued	<p>(4) A word or expression used in this clause has the same meaning as it has in the Floodplain Development Manual (ISBN 0 7347 5476 0) published by the NSW Government in April 2005, unless it is otherwise defined in this clause.</p> <p>(5) In this clause: land at or below the flood planning level means land at or below the level of a 1:100 ARI (average recurrent interval) flood event plus 0.5 metre freeboard.</p>	
Clause 6.3 Terrestrial biodiversity	<p>(1) The objective of this clause is to maintain terrestrial biodiversity by:</p> <ul style="list-style-type: none"> (a) protecting native fauna and flora, and (b) protecting the ecological processes necessary for their continued existence, and (c) encouraging the conservation and recovery of native fauna and flora and their habitats. <p>(2) This clause applies to land identified as "Biodiversity" on the Terrestrial Biodiversity Map.</p> <p>(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:</p> <ul style="list-style-type: none"> (a) whether the development is likely to have: <ul style="list-style-type: none"> (i) any adverse impact on the condition, ecological value and significance of the fauna and flora on the land, and (ii) any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and (iii) any potential to fragment, disturb or diminish the biodiversity structure, function and composition of the land, and (iv) any adverse impact on the habitat elements providing connectivity on the land, and (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development. 	<p>A review of Sheet BIO_002 of the LEP indicates that there are patches of land identified a 'biodiversity' land for the purposes of this clause (Figure 8).</p>  <p>Figure 8: Terrestrial Biodiversity Map Extract Sheet BIO_002 Cootamundra LEP 2013.</p> <p>The proposal involves processing fish in an existing rendering plant. No extension or additions are proposed to the existing building.</p>

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
6.3 continued	<p>(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:</p> <p>(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or</p> <p>(b) if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited and will be managed to minimise that impact, or</p> <p>(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.</p>	<p>The rendering plant is not situated within those parts of the site that are mapped as biodiversity land for the purposes of this clause. Given these circumstances the proposal will not have any adverse impact on vegetation or habitat on the land.</p> <p>The proposal is supported by an environmental assessment of the wastewater generated by the proposal and how it is to be treated and disposed prepared by ProAnd (Annexure 2).</p> <p>This report demonstrates that the environmental impacts on soil and groundwater from the proposed fish rendering trial will be considerably lower than that associated with the normal livestock processing operations.</p> <p>Furthermore this report details that when treated waste water from the rendering of fish is required to be carried out that it can be spray irrigated using the existing pivot irrigator which is situated on Lot 53 DP 1258388 on land that is not identified by the Terrestrial biodiversity mapping that supports the LEP.</p> <p>Under these circumstances the irrigation of waste waters associated with this proposal will have fewer potential impacts on terrestrial biodiversity within the irrigation areas of the site, when compared to normal livestock processing operations that could occur from the site.</p>

Table 3 (continued)

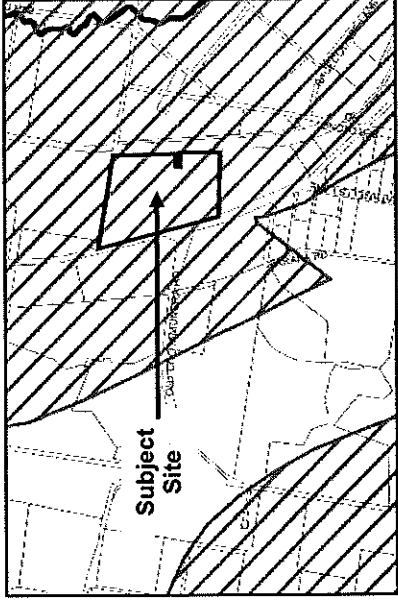
CLEP 2013 Clause	Provisions	Comments
<p>Clause 6.4 Groundwater vulnerability</p>	<p>(1) The objectives of this clause are as follows: (a) to maintain the hydrological functions of key groundwater systems, (b) to protect vulnerable groundwater resources from depletion and contamination as a result of development.</p> <p>(2) This clause applies to land identified as "Groundwater Vulnerable" on the Groundwater Vulnerability Map.</p> <p>(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider the following: (a) the likelihood of groundwater contamination from the development (including from any on-site storage or disposal of solid or liquid waste and chemicals), (b) any adverse impacts the development may have on groundwater dependent ecosystems, (c) the cumulative impact the development may have on groundwater (including impacts on nearby groundwater extraction for a potable water supply or stock water supply), (d) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</p> <p>(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that: (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.</p>	<p>A review of Sheet CL1_002 of the LEP identifies that the subject land is situated within an area that is subject to "groundwater vulnerability" for the purposes of this clause (Figure 9).</p>  <p>Figure 9: Groundwater Vulnerability Map Extract Sheet CL1_002 Cootamundra LEP 2013. The proposal is supported by an environmental assessment of the wastewater generated by the proposal and how it is to be treated and disposed prepared by ProAnd and Associates (Annexure 2). Section 6.2.4.4 of this report addresses this issue specifically and in summary states: "The treatment and storage ponds and the irrigation area for the integrated Meat Processing plant lie within an area defined in the Cootamundra Local Environmental Plan 2013 - Groundwater Vulnerability Map as being subject to "Groundwater Vulnerability" (see Figure)</p>

Table 3 (continued)

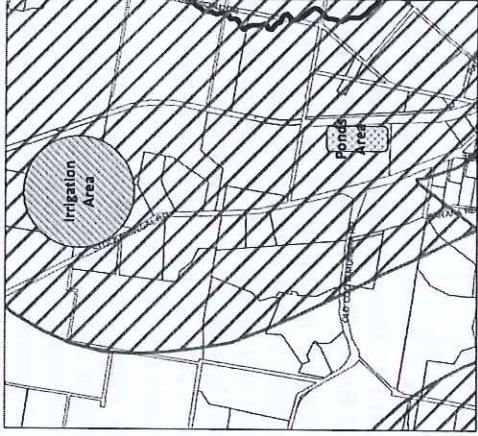
CLEP 2013 Clause	Provisions	Comments
6.4 continued		<p>Figure 22 - Ponds & Irrigation Located in "Groundwater Vulnerability" Area</p>  <p>In order to address groundwater vulnerability it is appropriate to consider:</p> <ul style="list-style-type: none"> o The likelihood of groundwater contamination from the development (including from any on-site storage or disposal of solid or liquid waste and chemicals), o Any adverse impacts the development may have on groundwater dependent ecosystems, o The cumulative impact the development may have on groundwater (including impacts on nearby groundwater extraction for a potable water supply or stock water supply).

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
6.4 continued		<p>o Any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</p> <p>A comprehensive Environmental Management System (EMS) (see Section 5.8) has been established at the Cootamundra plant designed to avoid, minimise and mitigate impacts of the ongoing operations of the plant. This documentation addresses management of waste-water treatment, irrigation and groundwater contamination; storage of liquids and chemicals and outlines procedures to minimise and mitigate the impacts of operating the Integrated Meat Processing Plant.</p> <p>From the previous paragraphs in this report it can be seen that:</p> <ul style="list-style-type: none"> • While there is no overflow the MEDLI modelling predicts that there will be some seepage from the treatment and storage ponds (see Figure 10 & Figure 11) and it is for this reason that piezometer monitoring points have been established in the pond area as included in EPA License 3889, and in the EMS documentation (see Section 5.8), in order to monitor and if necessary address any impacts on groundwater. <p>The MEDLI modelling predicts that the nutrient balance in the irrigation areas over the long term will result in depletion of nitrogen and some accumulation of phosphorous in the soil on which the</p>

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
6.4 continued		<p>irrigation is applied (see Figure 16 & Figure 17). It is for this reason that soil monitoring points have been established in the irrigation area as included in EPA License 3889, and in the EMS documentation (see Section 5.8), in order to monitor and if necessary address any impacts on soil and subsequently on groundwater.</p> <ul style="list-style-type: none"> The root zone salinity and impact on crop yield are predicted for the 50 years modelled in the MEDLI output (see Figure 18 & Figure 19) and show that while the root zone salinity varies there is no impact on crop yield. Any build-up of salinity will be identified in the soil monitoring conducted in accordance with EPA License 3889, and in the EMS documentation. The MEDLI modelling predicts that over the 50 year modelling period that there is some small increase (<0.4mg/l for Integrated Meat Processing and <0.04 for Independent Rendering) in groundwater nitrate 1000m from the irrigation site with the impact from Independent Rendering being only 10% of Integrated Meat Processing. The MEDLI modelling predicts a very small impact on groundwater, however the EPA License 3889, and the EMS documentation (see Section 5.8), include piezometer monitoring points to monitor nutrient levels in groundwater.

Table 3 (continued)

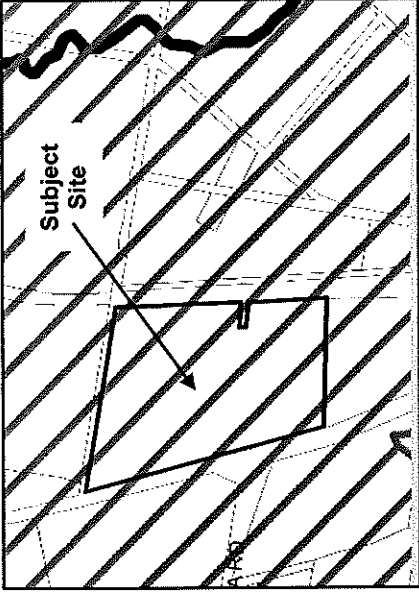
CLEP 2013 Clause	Provisions	Comments
6.4 continued		<p>While the modelling predicts what would have happened to the site based on weather conditions over the last 50 years it does not predict future weather conditions which may impact particularly on rainfall runoff and evaporation conditions. The model also does not take into account any supplementary fertilising of the irrigation site but it does predict nitrogen depletion which would mean that a nitrogenous fertiliser would need to be applied to optimise crop yields. In these circumstances it is appropriate to monitor soil and groundwater conditions over time to ensure that appropriate management and rectification can be applied when required.</p>
<p>Clause 6.5 Riparian land and watercourses</p>	<p>(1) The objective of this clause is to protect and maintain the following:</p> <ul style="list-style-type: none"> (a) water quality within watercourses, (b) the stability of the bed and banks of watercourses, (c) aquatic and riparian habitats, (d) ecological processes within watercourses and riparian areas. <p>(2) This clause applies to all of the following:</p> <ul style="list-style-type: none"> (a) land identified as "Watercourse" on the Watercourses Map, (b) all land that is within 40 metres of the top of the bank of each watercourse on land identified as "Watercourse" on that map. <p>(3) Before determining a development application for development on land to which this clause applies, the consent authority must consider:</p> <ul style="list-style-type: none"> (a) whether or not the development is likely to have any adverse impact on the following: <ul style="list-style-type: none"> (i) the water quality and flows within the watercourse, (ii) aquatic and riparian species, habitats and ecosystems of the watercourse, 	<p>A review of Sheet CL1_002 of the LEP also identifies a watercourse to the west of the subject site (Figure 10).</p>  <p>Figure 10: Watercourses Map – Extract Sheet CL1_002 Cootamundra LEP 2013.</p>

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
6.5 continued	<p>(iii) the stability of the bed and banks of the watercourse, (iv) the free passage of fish and other aquatic organisms within or along the watercourse, (v) any future rehabilitation of the watercourse and riparian areas, and whether or not the development is likely to increase water extraction from the watercourse, and (b) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development. (4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that: (a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or (b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or (c) if that impact cannot be minimised—the development will be managed to mitigate that impact.</p>	<p>The watercourse shown in Figure 10 above is situated more than 40 metres from the site. Under these circumstances the provisions of this clause do not apply to this application. The SEE is supported by an environmental assessment of the wastewater generated by the proposal and how it is to be treated and disposed prepared by ProAnd and Associates (Annexure 2). The Proand Report finds that "it can be concluded from the industry-based data, the MEDLI modelling based on operating plant results and the three month trial period that the Independent Fish Rendering Plant will significantly reduce the environmental impact from waste-water treatment storage and irrigation compared to Integrated Meat Processing as operated under EPA License 3889".</p>
Clause 6.6 Salinity	<p>(1) The objective of this clause is to provide for the appropriate management of land that is subject to salinity and the minimisation and mitigation of adverse impacts from development that contributes to salinity. (2) This clause applies to land identified as "Dryland Salinity" on the Natural Resources Land Map. (3) Before determining a development application for development on land to which this clause applies, the consent authority must consider the following: (a) whether the development is likely to have any adverse impact on salinity processes on the land, (b) whether salinity is likely to have an impact on the development, (c) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.</p>	<p>A review of Sheet NRL_002 of the LEP confirms that the subject site is not identified as land being subject to "dryland salinity". The provisions of this clause therefore do not apply to this proposal.</p>

Table 3 (continued)

CLEP 2013 Clause	Provisions	Comments
6.6 continued	<p>(4) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:</p> <p>(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or</p> <p>(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or</p> <p>(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.</p>	
Clause 6.7 Highly erodible soils	<p>(1) The objective of this clause is to provide for the appropriate management of land that has highly erodible soil or has the potential to be affected by the process of soil erosion.</p> <p>(2) This clause applies to land identified as "High Soil Erodibility" on the Natural Resources Land Map.</p> <p>(3) Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:</p> <p>(a) the development is designed, sited and will be managed to avoid any significant adverse environmental impact on soil erosion processes, or</p> <p>(b) if that impact cannot be reasonably avoided—the development is designed, sited and will be managed to minimise that impact, or</p> <p>(c) if that impact cannot be minimised—the development will be managed to mitigate that impact.</p>	<p>A review of Sheet NRL_002 of the LEP also confirms that the subject site is not identified as land being subject to "highly erodible soil. The provisions of this clause therefore do not apply to this proposal.</p>

5.1.1.3 Development Control Plans (DCP) and Policies

The proposed development is affected by the provisions of the Cootamundra Development Control Plan (DCP) 2013. The Cootamundra DCP 2013 is divided into a series of chapters which outline controls in detail.

Having regard to this proposal, the following chapters of the Cootamundra DCP 2013 are considered to have relevance to this application:

- Chapter 1 – General Information;
- Chapter 5 – Car Parking and Vehicle Access;
- Chapter 6 – Environmental Management

Chapter 1: General Information

This chapter of the DCP essentially details Council's expectations for the level of information that should support a development application; and the Council's notification requirements for applications.

This proposal seeks approval the processing of fish in the existing rendering plant on the subject site. No significant alterations or additions are proposed to the existing rendering plant building or the plant within the building. Under these circumstances the application is not supported by building or landscaping plans.

Chapter 5: Car Parking and Vehicle Access

The stated objectives of this chapter of the DCP are:

1. *To provide guidelines for the provision of parking associated with new development.*
2. *To ensure that new development provides sufficient car parking to serve the needs of that development.*

This chapter of the DCP does not provide specific parking requirement for livestock processing industries but provides a general requirement for 'factories' of 1.3 spaces per 100 m² of GFA.

This proposal seeks approval for the continued use of fish as feedstock in the existing rendering plant on the subject site. No alterations or additions are proposed to the existing rendering plant building or the plant within the building. The proposal therefore does not involve an increase in gross floor area of the existing building or structures on site which would generate a demand for additional parking under this DCP. Furthermore, the proposal does not involve an intensification or increase in activity on site that would result in an increase in demand for on-site car parking.

Chapter 6: Environmental Management

This section of the DCP sets out provisions relating to:

- Bushfire prone land;
- Flood prone land;
- Potentially contaminated land;
- Buffers to primary industry and infrastructure.

The subject land is not identified as either bushfire or flood prone land. Under these circumstances these provisions of this chapter do not apply to this proposal.

The site is an existing livestock processing industry. The proposal does not seek to change the use of the site to another use. Under these circumstances issues pertaining to contaminated land do not arise with this proposal.

The provisions relating to buffers to primary industry and infrastructure relate to the siting of rural dwellings and tourist accommodation within proximity of extractive industries; and the siting of renewable energy generating facilities. These provisions are therefore not relevant to this proposal.

5.2 PRESCRIBED MATTERS UNDER THE REGULATIONS

Clause 92 of the Environmental Planning & Assessment Regulations sets out those additional matters that a consent authority must take into account when determining a development application.

Clause 92 reads:

92 *What additional matters must a consent authority take into consideration in determining a development application? (cf clause 66 of EP&A Regulation 1994)*

(1) *For the purposes of section 79C(1)(a)(iv) of the Act, the following matters are prescribed as matters to be taken into consideration by a consent authority in determining a development application:*

(a) *in the case of a development application for the carrying out of development:*

(i) *in a local government area referred to in the Table to this clause, and*

(ii) *on land to which the Government Coastal Policy applies,*

the provisions of that Policy,

(b) *in the case of a development application for the demolition of a building, the provisions of AS 2601.*

NSW Coastal Policy

The subject site is not identified by mapping supporting the NSW Coastal Policy as being affected by the provisions of the Policy.

Demolition of a Building

The proposal does not involve any demolition works.

5.3 THE LIKELY IMPACTS OF THE DEVELOPMENT, INCLUDING ENVIRONMENTAL IMPACTS ON BOTH NATURAL AND BUILT ENVIRONMENTS, AND SOCIAL AND ECONOMIC IMPACTS IN THE LOCALITY

5.3.1 Environmental Impacts

5.3.1.1 Flora and Fauna

The Land of Biodiversity Value mapping prepared by the NSW Office of Environment & Heritage does not identify any land of biodiversity value on the subject site.

As evident from **Figure 8** above in **Table 3**, a review of Sheet BIO_002 of the Cootamundra LEP 2013 indicates that there are patches of land identified as 'biodiversity' land for the purposes of clause 6.3 of the LEP located within the subject site.

The proposal involves processing fish in an existing rendering plant on the site. No extensions or additions are proposed to the existing building. Furthermore, the rendering plant is not situated within part of the site mapped as biodiversity land for the purposes clause 6.3 of the LEP. No works are proposed by this application in those parts of the site so afflicted.

The proposal is supported by an environmental assessment of the wastewater generated by the proposal and how it is to be treated and disposed prepared by ProAnd (**Annexure 2 & 2a**). These reports demonstrates that the environmental impacts on soil and groundwater from the proposed fish rendering trial will be lower than that associated with the normal meat processing operations. Under these circumstances, according to wastewater assessment undertaken by ProAnd, the irrigation of waste waters associated with this proposal will have fewer potential impacts on terrestrial biodiversity particularly within the irrigation areas, when compared to normal livestock processing operations that occur from the site.

Furthermore this report details that when treated waste water from the rendering of fish is required to be carried out that it can be spray irrigated using the existing pivot irrigator which is situated on Lot 53 DP 1258388 on land that is not identified by the terrestrial biodiversity mapping that supports the LEP.

Under these circumstances the irrigation of waste waters associated with this proposal will have fewer potential impacts on terrestrial biodiversity within the irrigation areas of the site, when compared to normal livestock processing operations that could occur from the site.

Given these circumstances the proposal will not have any adverse flora and fauna impacts.

5.3.1.2 Water Quality Impacts

The revised SEE is supported by a report titled “*Environmental Impact of Waste-water generated from Rendering Plant Processing – Fish as Raw Material – Application to Obtain Permanent Approval to Conduct Fish Rendering Operations Following Approval to Conduct a 3 Month Trial Period*” and a second report “*Impact of conversion from High Temperature to Low Temperature Rendering*” prepared by ProAnd Associates Australia Pty Ltd (“ProAnd”) (“the ProAnd Reports”) (Annexure 2 & 2a) . The following is a summary of the main findings from the ProAnd Reports.

Fish Rendering Waste-water Sources

According to the ProAnd Report, when processing raw fish material in the rendering plant, the waste-water sources produced at the subject site are outlined in **Table 4**.

Table 4
Fish Rendering Wastewater Sources

Source	HIGH TEMP RENDERING Estimated Daily Volume (Litre)	LOW TEMP RENDERING Estimated Daily Volume (Litre)	Characteristics	Comment
Trailer Drainage	4,000	4,000	Less than 10°C, high BOD content, low solids, low oil & grease, low pathogen, low odour	Estimated to be 6 trailers per day at approx. 700 litres drainage per trailer
Raw Material Bin Drainage	4,000	4,000	Less than 15°C, high BOD content, medium solids, low oil & grease, low pathogen, low odour	Estimated on pump times
Size Reduction Drainage	0	0	Ambient, very high BOD content, very high solids, low oil & grease, medium pathogen, low odour	The plant will recycled this stream back into the cooker so that there is no waste to the waste-water stream
Condensate	72,000	24,000	Hot >90°C, Very low BOD, very low oil & grease, very low pathogen, low odour	Estimated based on Error! Reference source not found.
Stick-water	0	53,000	High temperature, high organic load, high oil and grease, high solids, high phosphorous, low pathogen, low odour	Stick-water is only produced in the Low Temperature Rendering system.
Tallow Processing	0	4,000	High temperature, high oil and grease, high solids, high	The plant will recycled this stream back into the cooker so

Statement of Environmental Effects and Planning Report
 Australian Meat Group Pty Ltd
 Lot 1 DP 611755, Stockinbingal Road, Cootamundra

			<i>phosphorous, low pathogen, low odour</i>	<i>that there is limited waste to the waste-water stream</i>
<i>General plant and truck wash-down</i>	85,000	85,000	<i>Ambient, medium BOD content, medium solids, low oil & grease, some pathogen, low odour</i>	<i>Estimated from recent water purchase records from Goldenfields Water minus 15% for in-plant evaporation</i>
TOTAL	165,000	174,000		

Comparison Based on Industry Data

Table 5 below provides a comparison by ProAnd of hydraulic and wastewater loads after screening for normal livestock processing and fish rendering based on industry figures.

Table 5
Comparison of Wastewater Loads
Integrated Meat Processing vs Independent Fish Rendering (High & Low Temp)

Waste-water Volume Mlitre/Annum	Integrated Meat Processing	Independent Rendering A	Low Temperature Stickwater B	Condensate Reduction C	Total Output after conversion from High Temperature to Low Temperature Rendering (A+B-C)	Comparison of Low Temperature Rendering vs Meat Processing
	220	50	15.9	14.4		
	Tonnes/annum	Tonnes/annum	Tonnes/annum	Tonnes/annum	Tonnes/annum	Percent
BOD	289	69	221	13	277	96%
COD	578	138	441	25	554	96%
O&G	90	25	47	1	70	78%
TN	39	6	20	6	20	51%
TP	6	1	2	0	3	44%

On the above basis, according to the ProAnd Report the total annual waste-water discharge for fish rendering would be in the region of 51 ML/annum, comprising only some 23% of waste-water volume discharged during normal livestock processing operations (220ML/annum).

According to the ProAnd Report, it can be observed from Table 5 above that, contamination discharges from fish rendering are all less than the levels that would be expected from the normal livestock processing operation.

Oil & Grease (O&G) levels for fish rendering are expected to be 78% of the discharge levels associated with normal livestock processing, however fish O&G comprises lipids that according to the ProAnd Report are lighter (shorter organic chains), more volatile and more susceptible to a higher rate of oxidation than land based animal lipids. Odour problems can occur if significant levels of fish O&G passes from the Anaerobic to the Aerobic treatment pond. O&G levels tested during the trial period indicate no issues with O&G levels and the ongoing fortnightly monitoring by third party experts "Hydro Flow" ensures the full function of the water treatment process and no issues are therefore

expected to arise. The ProAnd Report recommends that this parameter be continued to be monitored.

Pathogen levels in the wastewater when operating on fish raw material will also be much lower than during livestock processing operation due to:

- Essentially elimination of gut microbes as the fish will be rendered whole, whereas sheep and cattle are eviscerated and the red and white offal is cleaned and washed.
- Raw material is chilled whereas the majority of waste-water from meat processing is utilised on the slaughter-floor when the product is at body heat.
- The fish rendering waste-water will be significantly hotter than during meat processing due to the higher proportion of essentially sterile condensate in the waste-water stream.

In relation to best practice, the ProAnd Report indicates that the Australian Meat Group operations could benefit from further implementation of water reuse and recycle practices, however this is likely to only be viable when the livestock processing plant is operating.

With best practise in mind, Australian Meat Group has instigated the adoption of either a DAF or Evaporative condenser system, to remove majority of the effluent loading from the waste water, this will reduce the effluent loading to similar or better than the High Temp model outputs and the solids removed through this process will be put back into the rendering plant, therefore no waste will be created. It is planned this will be in operation before the end of 2020, but as requires a small building (50m²) to enclose it etc it will be subject to DA approval. And as the existing effluent outputs (without DAF or Evaporative condenser system inclusion) are projected to be less than the integrated meat processing it is not included in this application.

MEDLI modelling

Simulation modelling was performed by ProAnd using "*The Model for Effluent Disposal Using Land Irrigation*" (MEDLI), a Windows® program for designing effluent re-use schemes. MEDLI models the complex dynamics of an effluent irrigation system on a daily time-step, using historical climate data to determine the wet weather storage and irrigation area requirements for a specific location.

Pond System Performance

According to the ProAnd Report modelling of the pond performance for the livestock processing operation shows that with an inflow of 220 ML/annum there is no overflow from the pond system. From a wastewater inflow of 220 ML/annum there is a rain catch of

33 ML/annum, an evaporation loss of 80 ML/annum and an irrigation volume of 168 ML/annum.

Modelling of the pond performance for the fish rendering proposal demonstrates that with an inflow of 51 ML/annum there is no overflow from the pond system. From a wastewater inflow of 51 ML/annum there is a rain catch of 33 ML/annum, an evaporation loss of 75 ML/annum and an irrigation volume of 7 ML/annum.

ProAnd conclude that with the fish rendering proposal, both the inflow and rain on the ponds will almost all be evaporated due to the large surface area of the pond system.

Compared to livestock processing operation, the fish rendering proposal for all practical purposes eliminates the need for irrigation.

The modelling indicates that the discharge to irrigation from the treatment and storage ponds for the fish rendering proposal is negligible (N – 20,000 kg/annum; P – 3000 kg/annum) compared to the livestock processing operation (N – 39,000 kg/annum; P – 6,000 kg/annum). While the principal destination for phosphorous from the fish rendering proposal is predicted to be seepage, the model likely under predicts the loss to sludge. However, the seepage prediction according to ProAnd indicates the need to monitor groundwater in the vicinity of the pond system.

Land Performance

According to the ProAnd Report, the conclusion from the soil nutrient modelling is that while nitrogen depletion rates are similar (around minus 50 kg N/ha/year), fish rendering will have a significantly reduced phosphorous impact in the irrigation area.

Modelling over the 50-year climate data period shows that there is only a limited impact on root zone salinity over the period and at no stage does the salinity level impact on the crop yield for either the livestock processing or fish rendering operations.

Groundwater

As detailed in Section 5.1.1.2 the ponds and irrigation areas for the operation lie within an area defined in the Cootamundra LEP 2013 – Groundwater Vulnerability Map as being subject to “Groundwater Vulnerability” (refer **Figure 9**).

It is clear from the body of the ProAnd Report, and the summary MEDLI modelling results provided in **Table 6**, that the environmental impact on soil and groundwater from the Independent Fish Rendering Plant is considerably lower than the impacts from livestock processing.

Table 6
Reduced Impact of Independent Fish Rendering vs Integrated Meat Processing

Parameter	Units	Integrated Meat Plant	Independent Rendering	% Impact Reduction
Hydraulic Load on Treatment Ponds	ML/Annum	220	50	77%
Treated Effluent Discharge to Irrigation Area	ML/Annum	168	7	96%
Nitrogen Depletion in Irrigation Area	kg/ha/year	55	56	
Phosphorous Accumulation in Irrigation Area	kg/ha/year	13.95	0.35	97%
Nitrate in Groundwater 1000m from Irrigation Area after 50 years operation	mg/l	0.4	0.04	90%

However, groundwater vulnerability is recognised in the current EPA License 3889 which provides for:

- Four effluent quality and quantity monitoring points;
- Six soil monitoring points; and
- Eight groundwater monitoring points.

These monitoring points have been established to determine impacts on soil and groundwater assuming the livestock processing plant is operating.

As a result of this modelling and compliance with EPA License 3889 and the Manildra Cootamundra EMS the ProAnd Report considers the site can be managed to avoid or mitigate any significant adverse environmental impact on groundwater regardless of whether the livestock processing or fish rendering plant is operating.

Responses to Specific Issues Previously raised by Council

The following are responses by ProAnd to specific issues previously raised by Council in relation to the earlier trial proposal as they relate to wastewater issues.

1. ***Volumes, quality of and contents in the wastewater; i.e. sludge, oil, pathogens, BOD, nutrients etc and how the existing onsite effluent system will be able to manage the change of materials.***

ProAnd Response

“This report comprehensively address the volumes and content of the wastewater streams and the management, treatment and disposal by irrigation.

In summary

- *The waste streams from fish rendering (see Table 1) are relatively low volume and less contaminated compared to meat processing;*
- *The wastewater loads before treatment are estimated for fish rendering operation to be between 44% and 96% of the loads occurring during meat processing (see Table 5); and*

- *The nutrient impact on irrigation areas when conducting fish rendering is extremely small with nitrogen being deficient and phosphorous accumulation for fish rendering being 0.35kg/ha/yr, less than 3% of the 13.95kg/ha/yr expected to be accumulated during meat processing (see Table 3)*

2. Wastewater treatment, disposal and irrigation application and testing regimes to limit impact on groundwater, soils, livestock, pastures and runoff to surface waters;

ProAnd Response

"This review recommends that all monitoring currently required by EPA License 3889 continue and that O&G levels be included in the waste-water analysis regime in order to assist to minimise the risk of odour from the Aerated pond."

3. How will the raw product be maintained at temperature, and what will be the impact on odour and the amount of wastewater generated.

ProAnd Response

"The raw product is refrigerated at capture and loaded onto the transport vehicle in a chilled condition. Since the fish to be rendered at Cootamundra will be refrigerated in sea water immediately after capture and transported overnight to Cootamundra it is preferred that rendering take place within 3 days of capture and before the product reaches a temperature greater than 15°C in the rendering raw material bin. Time-temperature parameters should be monitored during the trial period and a contingency plan should be developed to provide interventions if parameters are ever expected to be exceeded."

4. Washing out of vehicles in terms of how, where, water volumes, materials contained in wash water, treatment and disposal methods.

ProAnd Response

"The discharge from vehicle wash-down is minimal as the load discharges without leaving any significant material in the trailer. The trailer is washed-down immediately following discharge and the waste-water is collected in a sump and pumped into the waste-water treatment system."

5. If temperature in trucks is to be maintained by ice, where does that come from, how does it get into the trucks (assuming they are full of fish), where does the wastewater go.

ProAnd Response

"Ice is not used to hold the raw material at temperature. The truck trailers are loaded with refrigerated product (between 2-3°C) and the large thermal momentum of the load, combined with the double skinned trailer keeps the product in a chilled fresh condition for the period between loading and rendering. The small volume of waste-water from all transport discharges (drainage and truck wash) passes into the waste-water treatment system."

ProAnd concludes in relation to this proposal:

The results of the three month trial indicate that the MEDLI modelling correctly predicted that there would be little effluent to be irrigated during periods of high evaporation (hot dry weather), and that oil and grease levels are as would be expected for waste-water from a fish rendering operation. It would however be recommended that:

- The level of Oil and Grease in the wastewater continue to be monitored when samples are taken in compliance with the EPA monitoring conditions, and
- When Irrigation of wastewater is necessary the disposal be restricted to the pivot irrigation are in order to avoid disposal on land designated as being important in terms of biological diversity.

As a result of this modelling and compliance with EPA License 3889 and the Cootamundra plant EMS it is considered that the waste-water treatment and disposal at the site can be managed to avoid or mitigate any significant adverse environmental impact on groundwater.

5.3.2 Amenity Impacts

5.3.2.1 Odour Impacts

The SEE is supported by a report titled "Fish Rendering : Odour Impact Assessment" prepared by GHD Pty Ltd ("the GHD Report") (**Annexure 1**). The following is a summary of the main findings from the GHD Report.

Nearby Sensitive Receptors

The Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016) (known as 'the Approved Methods') define a sensitive receptor as "a location where people are likely to work or reside; this may include a dwelling, school, hospital, office or public recreational area".

The site is proximate to a number of rural homesteads and other sensitive receptors. The nearest sensitive receptors are according to GHD located between 115 to over 600 metres from the nearest site odour sources. The sensitive receptors are labelled on **Figure 11**.

As part of their previous assessment for the site, Stephenson Environmental Management Australia noted receptor R1 (receptor R7 in SEMA) contains greyhound kennels. As outlined in the earlier SEE that supported the fish rendering trial development application, receptor R1 has no residence or business operating on it. The owners have some animals on the property (greyhounds and sheep) and normally check up on the animals between 7:00 – 8:00 am and between 5:00 – 6:00 pm daily; not on site for more than 30 minutes during those time periods. Therefore, according to GHD, receptor R1 is not a location "where people are likely to work or reside" and has not been considered to be a sensitive receptor with relevance to odour criteria.

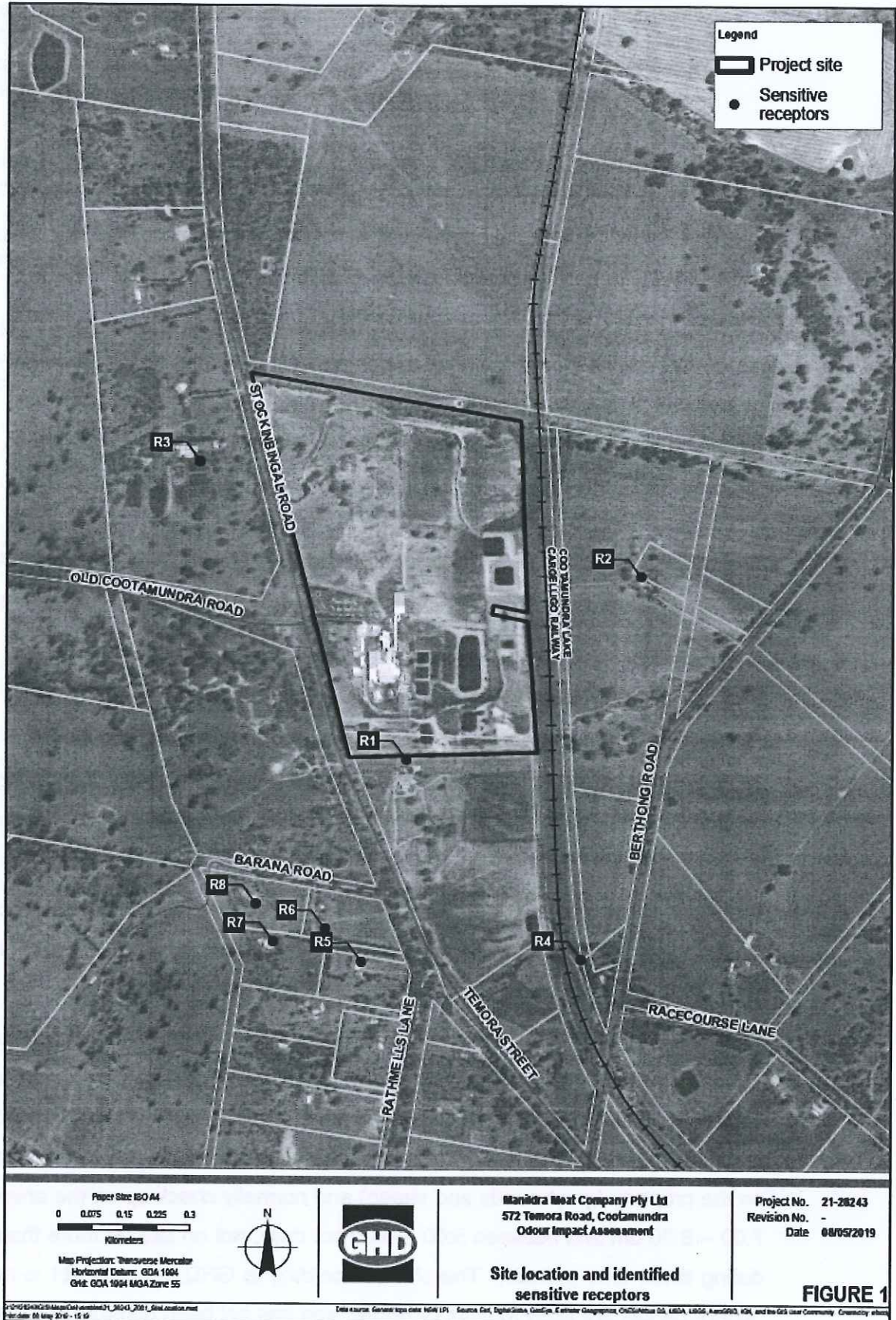


Figure 11: Site location and identified sensitive receptors.

The nearest sensitive receptors to the site have been included in the modelling by GHD and are listed in **Table 7**, including the approximate distances and orientation of each receptor from the site.

Table 7
Location of identified sensitive receptors

Receptor	Lot, DP	MGA55. Easting (m)	MGA55. Northing (m)	Nearest odour source	Distance from nearest odour source, m	Direction from site
R2	Lot 1, DP793676	592652.4	6170259.0	Pond 1	485	NE
R3	Lot 2, DP628945	591638.2	6170522.0	Press pit	600	NW
R4	Lot 12, DP1204301	592516.6	6169387.9	Biofilter	680	SE
R5	Lot 4, DP746100	592011.4	6169382.2	Biofilter	590	SW
R6	Lot 2, DP746100	591929.1	6169455.3	Biofilter	540	SW
R7	Lot 3, DP746100	591809.8	6169426.7	Rendering receivables	600	SW
R8	Lot 1, DP746100	591770.3	6169511.5	Rendering receivables	550	SW

Assessment Criteria

EPA Criterion for Odour

Odour Units

Odour 'strength' or concentration is measured in odour units (OU), where 1 OU represents the concentration of a sample that can just be detected by 50% of people in a controlled situation where there is no background 'ambient' odour.

The most common method of measuring odour concentration according to GHD is Dynamic Olfactometry using the 'forced choice' method. Dynamic olfactometry simply dilutes the odour sample in known ratios with odour-free air. At each dilution, the diluted odour and a zero odour is presented in turn to six panellists via two 'sniffing' ports. Further, the selection of the port with the diluted odour sample is randomly reassigned at each presentation. Each panellist is required (forced) to nominate the port (left or right) from which the diluted odour emanates. Each panellist's response (ie. 'guess', 'likely' or 'certain') is recorded. The sequence of presentations generally follows a decreasing dilution ratio, and when half of the panellists have correctly returned a 'certain' response, that dilution ratio is numerically equal to the concentration of the original, undiluted odour

sample. Hence, for example, if the dilution needed to get the 50% response was 250:1, then by definition the original sample had an odour concentration of 250 OU.

EPA Criterion

Air quality (including odour) impact assessment criteria are prescribed by the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016)* (known as ‘the Approved Methods’).

The Approved Methods specify how the criteria should be applied in dispersion modelling to assess the likelihood of nuisance impact arising from the emission of odour. It should be noted that odour impact is a subjective experience and has been found to depend on many factors, the most important of which are:

- The Frequency of the exposure*
- The Intensity of the odour*
- The Duration of the odour episodes*
- The Offensiveness of the odour*
- The Location of the source*

These factors are often referred to as the FIDOL factors.

According to GHD, the EPA define the odour criterion to take account of two of these factors (F is set at 99 percentile, I is set at from 2 to 7 OU). The choice of criterion odour level has also been made to be dependent on the population of the affected area, and to some extent it could be said that population is a surrogate for location – so that the L factor has also been considered. The relationship between the criterion odour level C to affected population P is given below.

$$C = [\log P - 4.5] \div -0.6 \qquad \text{Equation 1}$$

Table 8 lists the values of C for various values of affected populations as obtained using equation 1.

Table 8
Odour criterion for the assessment of odour (Approved Methods)

<i>Population of affected community</i>	<i>Odour performance criteria (nose response odour certainty units at 99th percentile), OU</i>
Single Residence (≤ ~2)	7
~ 10	6
~ 30	5
~ 125	4
~ 150	3
Urban (~2,000)	2

The NSW Approved Methods specifies a criterion of two odour units at the 99th percentile over a short term averaging nose-response time of one second for a complex mixture of odorous air pollutants in an urban area (population greater than 2000 or with schools and hospitals). The criterion is applied at the location of the nearest sensitive receptor or likely future location of sensitive receptors.

5 OU is commonly taken as a conservative measure of the odour level which can be distinguished against the ambient background level of odour, and which if offensive, could result in complaint.

1 OU generally cannot be detected in a non-laboratory situation (ie. where the ambient background odour levels reduce the detectability of a given odorant).

Peak to mean ratios

As discussed above, the odour criterion specified in the Approved Methods are based on a short term averaging noise-response time of one second.

The dispersion model utilised in GHD's assessment is CALPUFF. CALPUFF is a micrometeorological model that can only predict concentrations over an averaging period of one hour. Therefore, a ratio between the one second peak concentration and 60 minute average concentration is required to be applied to the source odour emission rates.

This ratio is known as the peak to mean ratio (PM60). PM60 is a function of source type, stability category and range (ie. near or far-field). The peak to mean ratios are specified in the Approved Methods and reproduced below in **Figure 12**.

With the application of the peak to mean ratios, the predicted one hour odour levels predicted in CALPUFF represent the corresponding one second short-term levels required to be compared to the Approved Methods criterion.

Adopted Odour Criteria

The site is surrounded by a number of isolated sensitive receptors. The affected community has been defined by GHD as the number of sensitive receptors experiencing an odour level of 2 OU or more.

Therefore, an odour criterion of 7 OU has been considered applicable for the study area by GHD.

Table 6.1: Factors for estimating peak concentrations in flat terrain (Katestone Scientific 1995 and 1998)

Source type	Pasquill-Gifford stability class	Near-field P/M60*	Far-field P/M60*
Area	A, B, C, D	2.5	2.3
	E, F	2.3	1.9
Line	A-F	6	6
Surface wake-free point	A, B, C	12	4
	D, E, F	25	7
Tall wake-free point	A, B, C	17	3
	D, E, F	35	6
Wake-affected point	A-F	2.3	2.3
Volume	A-F	2.3	2.3

* Ratio of peak 1-second average concentrations to mean 1-hour average concentrations

Figure 12: Peak to mean ratios (from NSW Approved Methods).

Meteorology

According to GHD site specific weather data was not available for the subject site. The nearest weather station is located at Young Airport (Station ID 73138), 48 kilometres north-east of the site.

The last complete five years (2013-2018) of weather data (wind speed, wind direction, rainfall, temperature and relative humidity) at Young Airport was analysed by GHD to select a representative meteorological modelling year.

2014 was chosen as the representative modelling year as:

- 2014 had the lowest overall deviation from the 5-yearly (2013-2018) distribution in the meteorological parameters;
- 2014 did not have an anomalously high or low rainfall amount;
- 2014 did not have a strong or moderate ENSO classification (associated with La Nino or El Nina events).

An annual wind rose was generated by GHD is provided in **Figure 13** to show the wind field at the centre of analysis. The following trends are evident from the wind rose and the wind data:

- Annual average wind speed of 3.3 m/s.

- Very low percentage of calms (winds less than 0.5 m/s) - 1.4% of the year.
- Winds are most prevalent from the north, along the north-south axis due to valley channelling flows in the area. The frequency of light winds (dark blue) is similar from the north and south directions.
- Winds are least prevalent along the north-east to south-east directions.

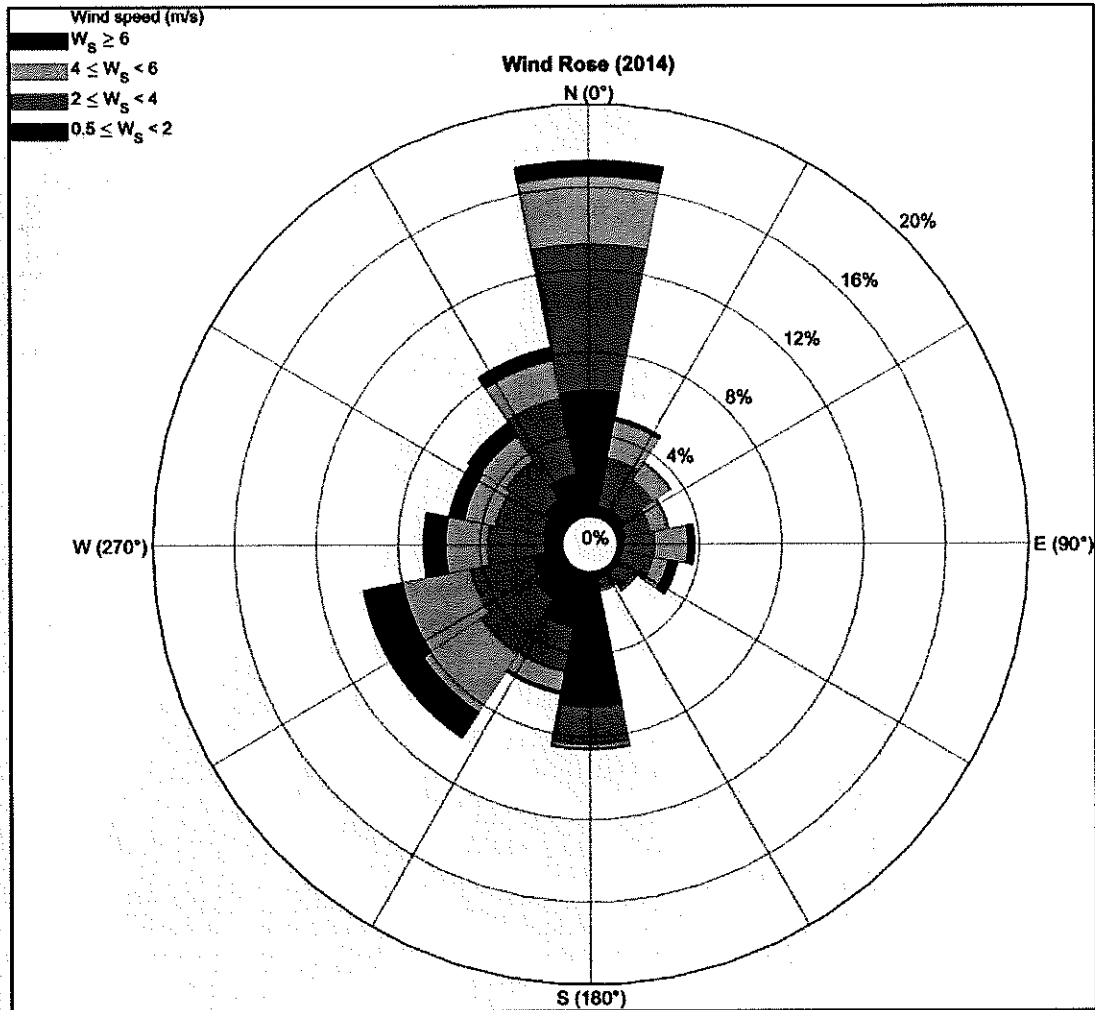


Figure 13: CALMET generated wind rose at site – Annual (2014) (GHD 2019).

Odour Assessment

Odour Generating Activities

According to GHD existing approved odour generating activities associated with the site include lamb and cattle processing and rendering and the ponds used to process the wastewater generated on site (Figure 14). Odour generated from other activities undertaken on site is not expected to be significant according to GHD.

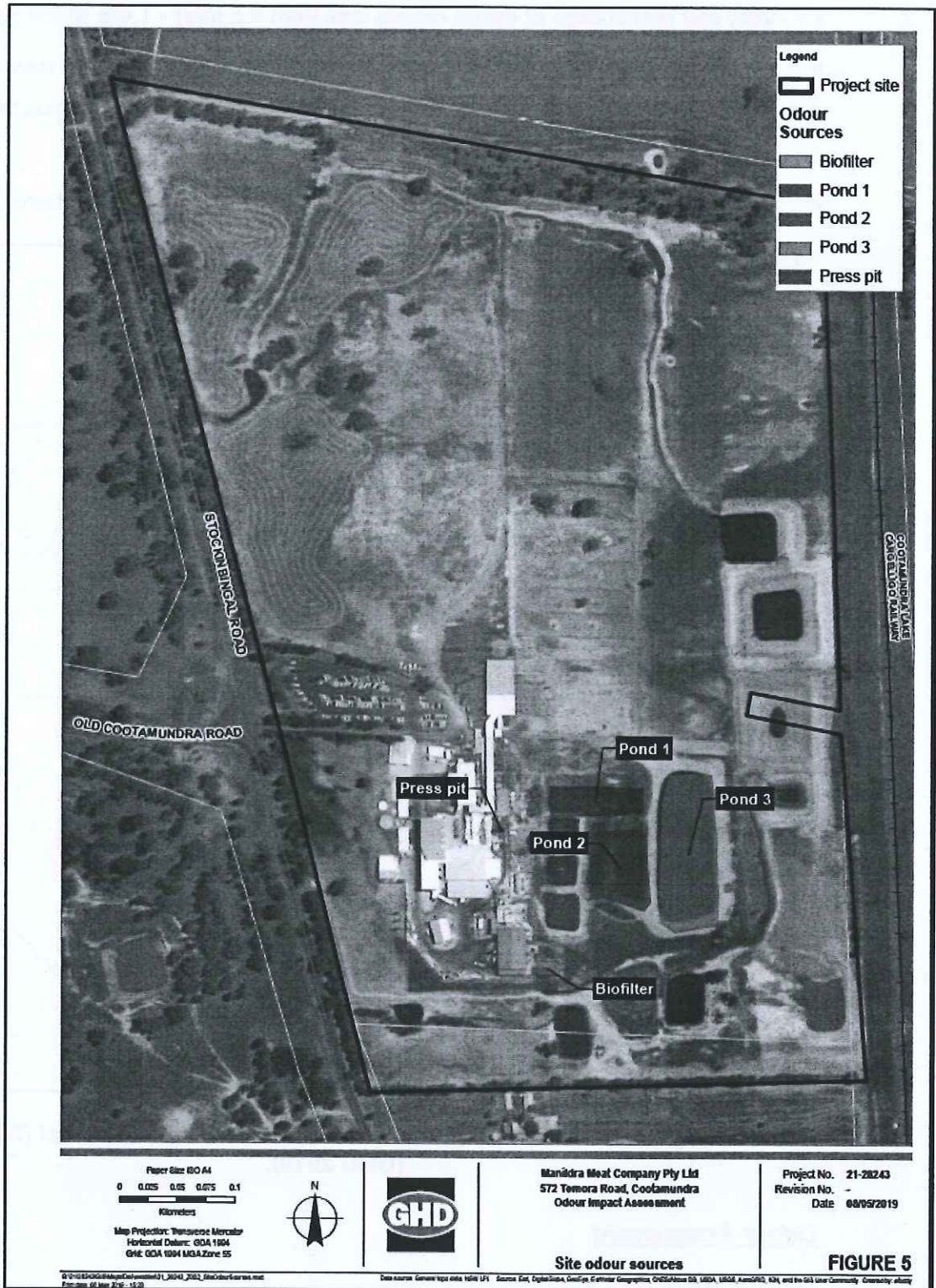


Figure 14: Site odour sources (GHD 2019).

The rendering operations are undertaken inside the enclosed rendering building and odorous vapours are vented to the atmosphere via a vapour condenser and biofilters. Rendering involves feeding a receivables bin with raw feedstock, which is then grinded and converted into fat (and/or oils and other products).

Odour generating activities associated with rendering process include the receivables bin, the press pit and biofilters.

Both existing and future operations are anticipated to have the same major odour sources with the key difference being the choice of the raw feedstock utilised in the rendering process. For the existing operations, the raw feedstock is lamb and cattle, while for the future operations, the raw feedstock will be fish (which is currently approved for a three month trial by Council).

Emissions inventory

According to GHD significant existing and future odour sources from the site are expected to include the plant associated with the rendering process and the wastewater ponds including:

- Render receivables bin;
- Press pit;
- Biofilter;
- Ponds 1, 2 and 3.

For existing (livestock processing and rendering) processing and rendering activities, emission values have been derived by GHD from a literature review from measurements undertaken on similar facilities and from previous measurements undertaken by SEMA (2018).

For the proposed fish processing and rendering activities, measurements undertaken by The Odour Unit (TOU) (2019) during fish processing trials at the site have been used by GHD.

Render Receivables Inlet

The render receivables inlet is a metal bin located inside the rendering building. A roller door is opened to allow raw material to be tipped from a truck directly into the bin. The door is then closed. The entire process is expected to take approximately 30 minutes and will occur a maximum of three to four times in a 24 hour period. The render receivables inlet will handle the following:

- For the existing operations, the site would normally process and render approximately 4000 lambs and 200 cattle per day;
- For the proposed fish rendering operations, approximately 100 tonnes of fish per 24 hours (three to four trucks) will be processed. The fish are chilled prior to transport, the fish are not actively refrigerated during transport. A significant increase in

temperature during transit has not been observed so far. If there are any material delays on site before processing, the surplus fish will be placed in a cold storage under active refrigeration.

The rendering building is maintained at negative pressure and all process gases are extracted through the vapour condenser and the biofilter system.

Therefore, according to GHD the render receivables inlet is not considered to be a significant odour source.

Biofilter

One rectangular biofilter is used to treat exhaust flows from the rendering building. The biofilter is a 20 m by 12.5 m by 1.5 m (250 m²) concrete structure packed with a biologically active medium (compost, tree bark, etc.). The odorous gases are absorbed and then broken down by aerobic bacteria within the medium.

The outlet biofilter emissions depend on the inlet odour concentrations and the biofilter removal efficiency. The adopted biofilter emission concentrations for various feedstock rendering inputs are discussed below.

TOU undertook an extensive review of the biofilter operations on site in July 2019. As a result of this review, the biofilter media depth was increased from 0.9 metres to 1.5 metres. The existing media was also replaced with new media as part of these upgrades.

Since May 2020, upon further review of the biofilter performance, an additional 120 m² of media has been added to the biofilter.

Livestock Rendering

According to GHD, measurements of biofilters undertaken at similar lamb and cattle rendering sites indicate a wide range of emission concentrations, ranging from less than 200 OU to over 1000 OU. For example, in their study for MLA, Katestone Environmental (2004) measured a biofilter inlet sample of 2680 OU and a biofilter outlet sample of 710 OU with an odour removal efficiency of 73.5%. The measured samples were point samples and were for a "large abattoir and rendering facility".

Similarly, according to GHD, measurements undertaken by Pacific Air & Environment (PAE) for the MLA in 2003 (PAE, 2003) evaluated the performance of a biofilter at the Australian Country Choice Cannon Hill meat-processing site. The dimensions of the biofilter were 16 m (length) by 4 m (width) by 3 m (height) per module with four modules in total. Therefore, the total area of the biofilter was approximately 256 m³ and comparable to the biofilter at Manildra Meat. Measured outlet biofilter odour concentrations ranged

from 456 OU to 2080 OU, with odour removal efficiencies ranging from 59% to 91%. PAE concluded that an "overall odour removal efficiency of approximately 83% can be assigned to the biofilter."

Measurements commissioned as part of a GHD odour study of a beef processing facility in Bomen measured odour concentrations of 140 to 370 OU. This was for a site processing approximately 1100 cattle per day. Though, it should be noted that these measurements were undertaken after significant maintenance and upgrade works at the site. Measurements undertaken prior to maintenance and odour reducing upgrades indicated emission levels from the biofilter of over 1600 OU.

SEMA (2018) measured biofilter concentrations of 600 OU during trial chicken rendering operations.

Therefore, conservatively, an odour concentration of 2000 OU has been adopted for the existing approved rendering operations. The odour concentration has been applied across the entire biofilter area source by GHD.

Fish rendering

Australian Meat propose to utilise fresh fish as inputs into the rendering process. The MLA Environmental best practice manual Odour (MLA, 2010) notes that the odour emissions of fresh raw material receivables are typically lower than imported or aged receivables.

Measurements of trial fish rendering operations at the site were undertaken by Ektimo in April 2020 post biofilter optimisation while operating at maximum plant capacity. The measurement report is attached in Appendix B. The measurement results (when compared to SEMA 2018) confirm the effectiveness of the modifications made to the biofilter. The biofilter during fish rendering operations is operating at an efficiency of over 99%.

These measurements indicate biofilter outlet concentrations of 280 to 410 OU on the further plant side of the biofilter and outlet concentrations of 1100 to 1200 OU on the nearer plant side. The maximum measured odour concentration of 1200 OU has been conservatively applied across the entire biofilter area source (refer to Table 5-1).

The odour samples were taken from the biofilter with the existing higher temperature rendering process, and the new modification which includes a low temperature rendering process is expected to have about 20% less odours. The existing high temperature process results in a high oil content fish meal (up to 25%), which was exposed to high temperatures and results in more odour. The low temperature rendering process will result in fish meal with less than 15% fish oil. In order to be conservative, odour reductions from using a low temperature rendering process have not been included in this assessment.

Press Pit

The press pit is used to remove water from the water-fat mixture extracted as part of the rendering process. The press pit opening a small 21 m² rectangular grill at ground level.

SEMA measured an odour concentration of 2900 OU during chicken rendering trial operations on the site during 2018. The odour emissions from the press pit are assumed

to be independent of the raw feedstock used in the rendering process as, according to GHD, the extracted water-fat mixture would be of a similar composition for different feedstock.

This odour concentration has been adopted in the GHD Report and applied across the press pit area source for all rendering inputs.

Wastewater Ponds

The effluent pit and ponds accumulate the liquid waste from the abattoir slaughter and boning operations as well as the rendering operations.

Process wastewater from the site drains to sumps. Each sump has a submersible cutting style pump. The water is then pumped to primary solids removal consisting of a screw press where major solids are removed. Water gravity drains to another sump where it is collected and from there pumped with a centrifugal pump to an anaerobic pond. Effluent passes through the anaerobic pond to an aeration pond and finally to the settlement (storage) ponds.

Livestock rendering

Measurements were undertaken by SEMA for three wastewater ponds on site during trial chicken rendering operations in 2018:

Ponds 2 and 3 were aerobic and settlement ponds with measured odour concentrations of 91 OU and 194 OU respectively.

Pond 1 was an anaerobic pond with a dry/crusty surface and a measured odour concentration of 1200 OU. It is noted that emissions to atmosphere from such ponds are potentially high intensity odour and the emissions depend on the crust and underlying characteristics of the pond.

According to GHD, similar concentrations would be anticipated during the existing approved lamb and cattle rendering operations. Therefore, all settlement ponds (Pond 2 and Pond 3) have been conservatively modelled by GHD with an odour concentration of 194 OU.

For the anaerobic pond (Pond 1), an additional review of available literature was undertaken by GHD:

- SLR cited measurements of two 1400 m² anaerobic ponds as part of the odour assessment for meat processing activities at 50 Tahmoor Road, Tahmoor (SLR, 2018). The measured odour concentrations for the ponds were 1977 OU (Pond 1) and 451 OU (Pond 2)

- Holmes Air Sciences undertook an odour assessment of odour sources around the Bomen Industrial Estate in Wagga Wagga, NSW (Holmes Air Sciences, 2008). They cited a measured odour concentration of 3113 OU for the anaerobic pond on site.

Based on the measurements undertaken by SEMA and the variability of values cited in the literature, a moderately conservative odour concentration value of 2000 OU has been adopted by GHD for the anaerobic pond for existing approved lamb and cattle rendering operations.

Fish Rendering

Measurements of the wastewater ponds during typical fish rendering operations at the site were undertaken by The Odour Unit in November 2019. The measurements indicate the following:

- Pond 1 (Anaerobic pond): Odour concentrations of 45 to 332 OU.
- Pond 2 (Storage pond): Odour concentrations of 128 to 152 OU.
- Pond 3 (Aerobic pond): Odour concentrations of 108 to 152 OU.

According to GHD the storage and aerobic pond emissions are similar to those measured by SEMA (2018). The anaerobic pond emissions are lower as extensive improvements were made to the pond operations as part of Manildra Meat's commitment to odour reduction between July and November 2019 according to GHD. The reduction in odour emission levels confirms the effectiveness of these measures according to the GHD Report.

Conservatively, the modelling has been based on the highest measured odour concentrations for each pond, applied across the pond area.

Emissions inventory summary

The final modelled emissions inventory, which includes existing operations and proposed fish rendering operations is summarised in **Table 9**.

Table 9
Emissions Inventory
(Table 5-1 of GHD Report)

Statement of Environmental Effects and Planning Report
Australian Meat Group Pty Ltd
 Lot 1 DP 611755, Stockinbingal Road, Cootamundra

Source	Model ID	Source type	Modelled odour concentration, OU		Scaling method	Hood flow velocity ¹ (m/s)	Existing operations SOER, OU m ³ /m ² /s	Fish rendering SOER, OU m ³ /m ² /s	Area, m ²	Existing operations MOER ² OU m ³ /s	Fish rendering MOER ² OU m ³ /s
			Existing operations	Fish rendering							
Pond 1 (Anaerobic)	P001	Area	2,000	332	Isolation flux hood	0.00064	1.28	0.19	2,070	2,660	393
Pond 2 (Aerobic)	P002	Area	194	152			0.12	0.089	3,250	405	289
Pond 3 (Storage)	P003	Area	194	152			0.12	0.088	6,401	798	563
Press pit	PPIT	Area	2,900	2900			1.86	1.86	21	39	39
Biofilter	BFIL1	Area	2,000	1200	Static hood (SEMA, existing) and based on measured flow rate (3.3 m ³ /s, TOU for fish)	0.0265	53.0	31.8	250	13,250	7,950 ³
Total MOER										17,152	9,234

Note 1: For the isolation flux hood, this is calculated based on the US EPA standard flow rate of 5 L/min and an area of 0.13 m² (corresponding to a hood diameter of 406.4 mm). For the static hood, this is calculated based on the witches hat hood discharge velocity of 0.0265 m/s and an area of 0.008 m² (corresponding to a witches hat discharge vent diameter of 100 mm).

Note 2: The modelling applied the following peak to mean ratios to the MOERs for the area sources: 2.5 (stability classes A, B, C and D) and 2.3 (stability classes E and F).

Note 3: The MOER for the fish rendering biofilter is higher in this assessment than the Ektimo report. This is due to a slightly larger area being used in the model and also conservatively keeping a higher hood flow velocity from existing operations when deriving the MOER.

Predicted Odour Impacts

Figures 15 and 16 show the predicted 99th percentile odour impacts (one second nose-response time) for the existing and proposed modelling scenarios as outlined in the GHD Report.

Table 10 shows the predicted odour levels at all modelled receptors for all scenarios as detailed in the GHD Report.

According to GHD the results show that the odour concentrations are predicted to comply with the criteria for both existing (approved) and proposed fish rendering operations. Furthermore, the odour levels are predicted to decrease when transitioning feedstock from existing (lamb/cattle) to fish.

Table 10
Predicted peak odour impact at nearby receptors
 (Table 5-2 of GHD Report)

Receptor	Distance from nearest odour source, m	To nearest odour source	Direct from site	Criteria, OU	Odour impact, OU 99 th percentile Nose-response time	
					Existing	fish
R2	485	Pond 1	NE	4	2.5	1.4
R3	600	Press pit	NW	4	0.7	0.4
R4	680	Biofilter	SE	4	1.6	0.9
R5	590	Biofilter	SW	4	1.5	0.8
R6	540	Biofilter	SW	4	1.4	0.8

Statement of Environmental Effects and Planning Report
Australian Meat Group Pty Ltd
Lot 1 DP 611755, Stockinbingal Road, Cootamundra

R7	600	Rendering receivables	SW	4	1.2	0.7
R8	550	Rendering receivables	SW	4	1.3	0.8
Note 1: R1 is not considered to be a sensitive receptor as per the discussion in Section 2.3						

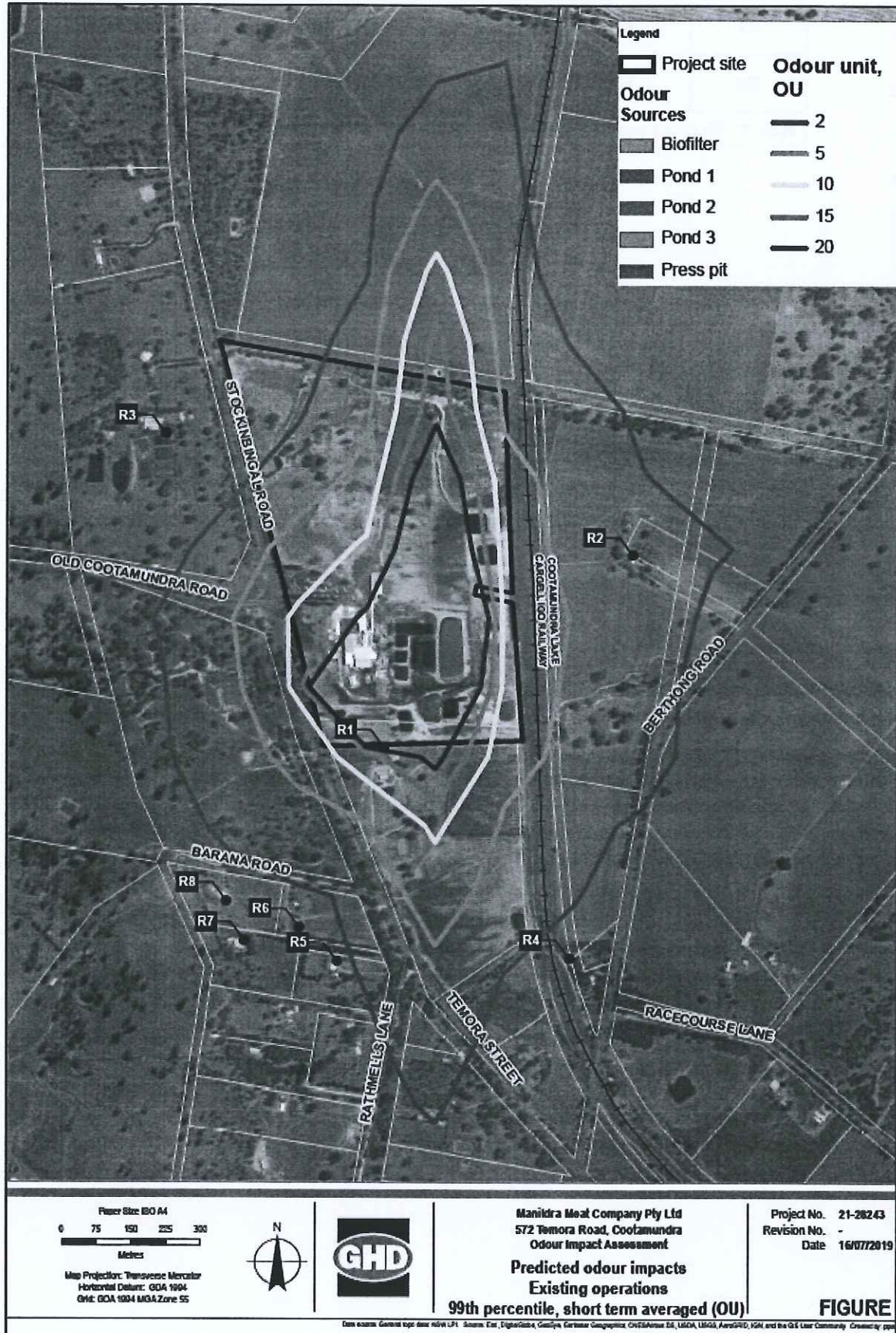


Figure 15: Predicted odour impacts – Existing Livestock Processing Operations (GHD 2019).

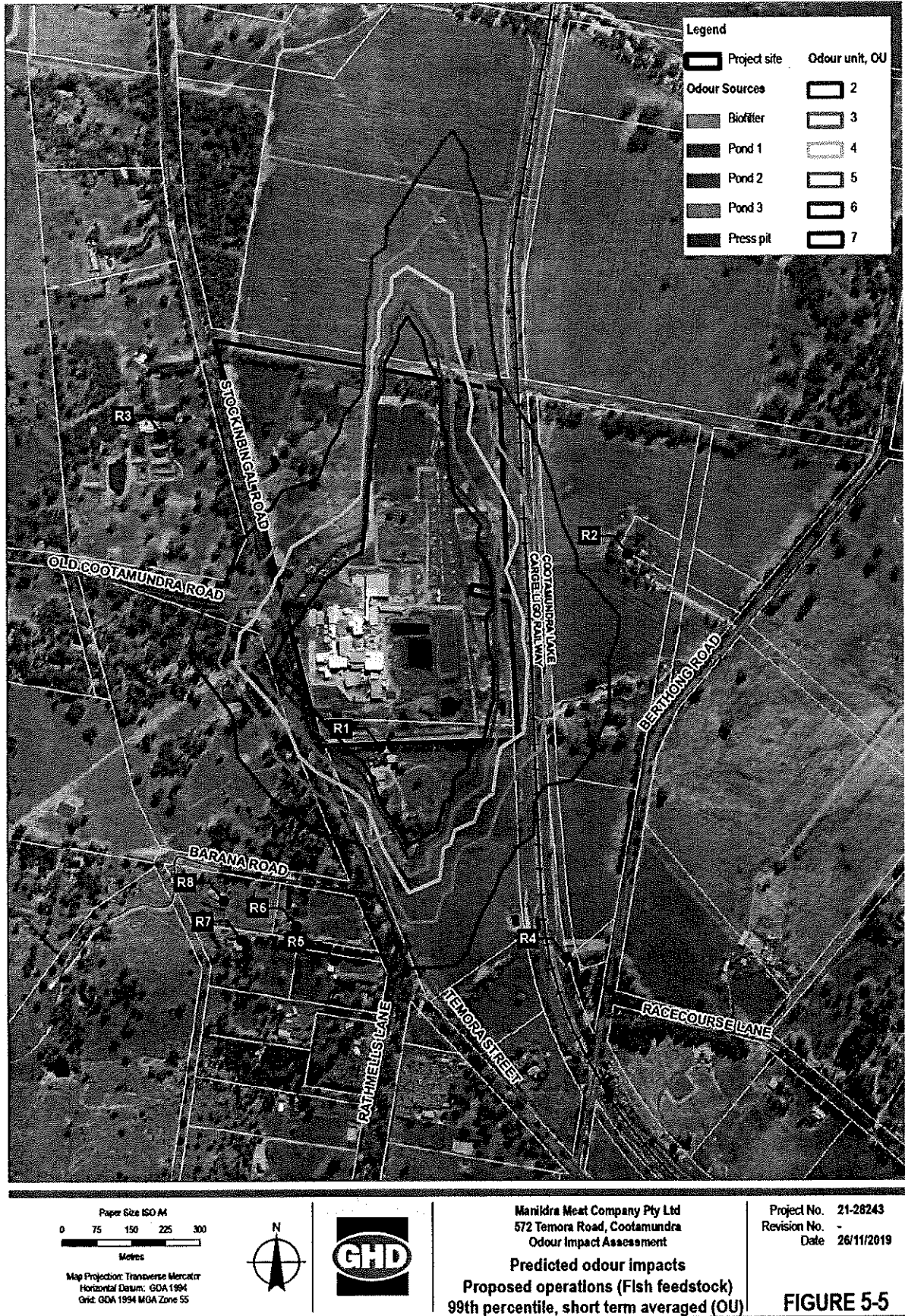


Figure 16: Predicted odour impacts - Proposed Fish Rendering Operations. (GHD 2019)

Management Measures and Best Practice

According to GHD the results of the odour modelling indicate that the predicted odour levels comply with the criteria at all sensitive receptors during proposed fish rendering activities.

GHD however recommend that Manildra should aim to minimise potential offensive odour emissions from the site by undertaking the following best practice and management measures.

Commissioning odour surveys

GHD is recommending that When the upgraded plant is commissioned, it is recommended that a comprehensive odour survey is undertaken in order to demonstrate that odour from the facility is not impacting on the surrounding environment. The surveys can assist with commissioning and pinpointing any issues so they can be rectified immediately. The survey should consist of at minimum:

- Dedicated and suitably trained staff member(s) who is working full time assessing odour
- Survey to be undertaken daily for a minimum of two weeks, and include weather conditions considered worst-case for nearby sensitive receptors
- Ideally commence at 6 am (or earlier if needed) to capture worst-case conditions for poor odour dispersion and when sensitive receptors will wake up
- Include odour observations at sensitive receptors, community areas, worst-case or downwind locations from site, and site boundary

Conclusions

With respect to this proposal the GHD Report concludes:

“Australian Meat propose to obtain an ongoing development application for fish rendering operations at 572 Temora Road, Cootamundra. GHD was engaged by Australian Meat to undertake an odour air quality impact assessment in support of this development application.

Existing (approved) sources of odour on site include processes associated with lamb and cattle processing and rendering and wastewater ponds. Future sources of odour on site are to include fish processing and rendering.

Odour sampling has been undertaken of all key odour sources onsite, during a recent trial of fish rendering. A number of key improvements have been undertaken at the site in order to reduce odour including:

- *New low temperature rendering process with an expected 20% reduction in odours*
- *New biofilter fan with better airflow to help reduce fugitive odours across the entire plant*

- *Sealing and re-routing vents of outside oil storage tanks to inside the Rendering facility, so that all air movement related to the oil tanks is treated in bio filter system*
- *Recladding/removal of vents, eliminating any corroded holes in colourbond sheeting around the entire Rendering plant facility*
- *Establish a bulk bag meal storage area attached to the Rendering facility and connected to the bio filter system, and new internal forklift access, and load out access using rapid roller doors to mitigate fugitive odour*
- *Installing an additional extraction system which captured and transported the odours from the press pit to its own bio filter for processing*

Odour dispersion modelling was undertaken using the CALMET-CALPUFF system, with upper air meteorological data generated using TAPM. Odour dispersion modelling was undertaken for both existing and proposed operations. The results of the modelling show compliance with the odour criteria for both existing and proposed operations.

GHD have discussed best practice management and mitigation measures to reduce the potential for odour impacts during these activities. One key recommendation is to undertake a commissioning odour survey once the facility begins operation again.

The proposed fish rendering operations are not predicted to increase the environmental impacts of the total development compared to the existing approved operations. Therefore, from an air quality perspective, this assessment supports the transition of the current trial fish rendering approval into a permanent approval."

5.3.2.2 Noise Impacts

The SEE is supported by a "Noise Impact Assessment" prepared by Benbow Environmental ("Benbow") (**Annexure 5**). It should be noted that the noise impact assessment was prepared in relation to an earlier proposal for the Manildra Meat Company that involved both the rendering of fish as well as poultry. The rendering of poultry however no longer forms part of this proposal, as the proposal only involves the rendering of fish. The findings and recommendations of this noise impact assessment however still have relevance to this proposal and are included as part of the documents relied upon by the SEE.

Nearest Sensitive Receptors

Table 11 below provides the list of the nearest sensitive receptors potentially affected by the noise generated from the proposed site's activities as identified by Benbow. These residential and non-residential receptors were selected based on their proximity and directional bearing from the subject site.

Table 11

Nearest Potentially Affected Receivers Considered

<i>Receptor</i>	<i>Address</i>	<i>Direction from Site</i>	<i>Approximate Distance (m)¹</i>	<i>Type of Receptor</i>
R1	125 Berthong Road, Cootamundra	E	653	Residential
R2	41 Berthong Road, Cootamundra	SSE	809	Residential
R3	442 Temora Street Cootamundra	S	911	Residential
R4	445 Temora Street, Cootamundra	S	843	Residential
R5	4 Rathmells Lane, Cootamundra	S	627	Residential
R6	15 Barana Road, Cootamundra	S	565	Residential
R7	502 Temora Street, Cootamundra	S	221	Commercial
R8	79 Old Cootamundra Road, Cootamundra	W	953	Residential
R9	621 Stockinbingal Road, Cootamundra	NW	851	Residential

Note: 1) Measured from rendering plant to residence

The location of the receptors is shown in **Figure 17**. It is noted that R7 is currently being used as a greyhound kennel and is not being used as a residence. It is noted that R9 contains both a residence and a piggery.



Figure 17: Aerial photograph of the project site location and the nearest potentially affected receptors.

Current Legislation and Guidelines

NSW EPA Noise Policy for Industry

The *NSW Noise Policy for Industry* was developed by the NSW EPA primarily for the assessment of noise emissions from industrial sites regulated by the NSW EPA.

The policy sets out two components that are used to assess potential site-related noise impacts. The intrusiveness noise level aims at controlling intrusive noise impacts in the short-term for residences. The amenity noise level aims at maintaining a suitable amenity

for particular land uses including residences in the long-term. The more stringent of the intrusiveness or amenity level becomes the project noise trigger levels for the project.

Project Intrusiveness Noise Level

The project intrusiveness noise level is determined as follows:

$$L_{Aeq, 15 \text{ minute}} = \text{rating background noise level} + 5 \text{ dB}$$

Where the $L_{Aeq,(15\text{minute})}$ is the predicted or measured L_{Aeq} from noise generated within the project site over a fifteen minute interval at the receptor.

This is to be assessed at the most affected point on or within the residential property boundary or if that is more than 30 m from the residence, at the most affected point within 30 m of the residential dwelling.

Amenity Noise Level

To limit continuing increases in noise levels, the maximum ambient noise level within an area from industrial noise sources should not normally exceed the acceptable noise levels specified in Table 2.2 of the NSW Noise Policy for Industry 2017. The relevant recommended noise levels applicable are reproduced in **Table 12** below.

Table 12
Amenity Noise Levels

<i>Receiver</i>	<i>Noise Amenity Area</i>	<i>Time of Day</i>	<i>L_{Aeq} dB(a)</i> <i>Recommended amenity noise level</i>
Residential	Rural	Day	50
		Evening	45
		Night	40
Commercial	All	When in use	65

Source: Table 2.2 NSW Noise Policy for Industry

The project amenity noise level for industrial developments
= recommended amenity noise level minus 5 dB(A)

The following exceptions to the above method to derive the project amenity noise levels apply:

1. *In areas with high traffic noise levels*
2. *In proposed developments in major industrial clusters*
3. *Where the resultant project amenity noise level is 10 dB or more lower than the existing industrial noise level. In this case the project amenity noise levels can be set at 10 dB below existing industrial noise levels if*

it can be demonstrated that existing industrial noise levels are unlikely to reduce over time.

- 4. Where cumulative industrial noise is not a necessary consideration because no other industries are present in the area, or likely to be introduced into the area in the future. In such cases the relevant amenity noise level is assigned as the project amenity noise level for development.*

According to Benbow this development is not considered to be captured by the above exceptions.

Sleep Disturbance Criteria

In accordance with the NSW EPA Noise Policy for Industry, the potential for sleep disturbance from maximum noise level events from premises during the night-time period needs to be considered. Sleep disturbance is considered to be both awakenings and disturbance to sleep stages.

Where the subject development/premises night-time noise levels at a residential location exceed:

- **$L_{Aeq, 15 \text{ minute}}$ 40 dB(A) or the prevailing RBL plus 5 dB, whichever is the greater, and/or**
- **L_{AFmax} 52 dB(A) or the prevailing RBL plus 15 dB, whichever is the greater,**

A detailed maximum noise level assessment should be undertaken.

Project Noise Trigger Levels

The project noise trigger levels for the site have been established in accordance by Benbow with the principles and methodologies of the NSW Noise Policy for Industry (EPA, 2017).

The table below presents the rating background level, project intrusive noise level, recommended amenity noise level, and project amenity noise level as identified by Benbow. The project noise trigger level is the lowest value of intrusiveness or project amenity noise level after conversion to $L_{Aeq, 15 \text{ minute}}$, dB(A) equivalent level. Sleep disturbance trigger levels associated with operational activities are presented in **Table 13** below.

According to Benbow different time periods apply for the noise criteria as the intrusive criterion considers a 15-minute assessment period while the amenity criterion requires assessment over the total length of time that a site is operational within each day, evening

or night period. In order to ensure compliance under all circumstances, a 15-minute period assessment has been considered for all receptors.

Table 13
Project Noise Trigger Levels (PNTL) for Operational Activities, dB(A)

<i>Receiver</i>	<i>Type of Receptor</i>	<i>Time of Day</i>	<i>Rating Background Noise Level</i>	<i>Project Intrusiveness Noise Level Leq(15minute)</i>	<i>Recommended Amenity Noise Level LAeq period</i>	<i>Project Amenity Noise Level LAeq 15 minute⁴</i>	<i>PNTL LAeq 15 minute</i>
R1	Residential-Rural	Day	31	40 ¹	50	48	40
		Evening	39	40 ²	45	43	40
		Night	34	39	40	38	38
R2	Residential-Rural	Day	31	40 ¹	50	48	40
		Evening	39	40 ²	45	43	40
		Night	34	39	40	38	38
R3	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38
R4	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38
R5	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38
R6	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38
R7	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38
	Commercial	When in use	-	-	65	63	63
R8	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38
R9	Residential-Rural	Day	34	40 ¹	50	48	40
		Evening	35	40	45	43	40
		Night	36	40 ³	40	38	38

Notes:

- 1 This value is based on the minimum assumed rating background level of 35 dB(A) for daytime.
- 2 The project intrusiveness noise level for evening should be set no greater than the project intrusive noise level for daytime.
- 3 The project intrusiveness noise level for night-time should be no greater than the project intrusive noise level for day and evening.
- 4 These levels have been converted to LAeq 15 minute using the following: LAeq 15 minute = LAeq period + 3 dB (NSW Noise Policy for Industry Section 2.2)

NSW Road Noise Policy

The NSW Road Noise Policy has been adopted by Benbow to establish the noise criteria for the potential noise impact associated with additional traffic generated by the proposed development. The NSW Road Noise Policy was developed by the NSW EPA primarily to identify the strategies that address the issue of road traffic noise from:

- Existing roads;
- New road projects;
- Road redevelopment projects; and
- New traffic-generating developments.

Road Category

Based on the RNP road classification description, Temora Street/Stockinbingal Road would be classified as 'Sub-arterial road'.

Noise Assessment Criteria

According to Benbow Section 2.3 of the RNP outlines the criteria for assessing road traffic noise. The relevant sections of Table 3 of the RNP are shown **Table 14** below.

Table 14
Road Traffic Noise Assessment Criteria for Residential Land Uses, dB(A)

<i>Road Category</i>	<i>Type of Project/Land Use</i>	<i>Assessment Criteria, dB(A)*</i>	
		<i>Day (7am - 10pm)</i>	<i>Night (10pm – 7am)</i>
Sub-arterial road	Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments	L _{Aeq} (15 hour) 60 dB	L _{Aeq} (9 hour) 55 dB

* Measured at 1 m from a building façade.

Relative Increase Criteria

In addition to the assessment criteria outlined above, according to Benbow any increase in the total traffic noise level at a location due to a proposed project or traffic-generating development, must be considered. Residences experiencing increases in total traffic noise levels above the relative criteria should also be considered for mitigation as described in Section 3.4 of the RNP. For road projects where the main subject road is a local road, the relative increase criterion does not apply.

Table 6 of the RNP outlines the relative increase criteria for residential land uses, with the details applicable to this project shown in **Table 15** below.

Table 15
Relative Increase Criteria for Residential Land Uses, dB(A)

<i>Road Category</i>	<i>Type of Project/Land Use</i>	<i>Assessment Criteria, dB(A)*</i>	
		<i>Day (7am - 10pm)</i>	<i>Night (10pm – 7am)</i>
Sub-arterial road	Land use development with potential to generate additional traffic on existing road	Existing traffic L _{Aeq} (15 hour) + 12 dB (external)	Existing traffic L _{Aeq} (9 hour) + 12 dB (external)

According to Benbow the assessment criteria provided in **Table 14** and the relative increase criteria provided in **Table 15** should both be considered when designing project specific noise levels. When existing traffic levels are below the criteria in **Table 14**, the lower of the relative increase criteria and the assessment criteria in **Table 15** should be adopted. For example, if the assessment criteria is 60 dB(A) and the relative increase criteria is 42 dB(A), then a project specific noise level of 42 dB(A) should be adopted. Similarly, if the assessment criteria is 60 dB(A) and the relative increase criteria is 65 dB(A), a project specific noise level of 60 dB(A) should be adopted.

Exceedance of Criteria

If the criteria shown in both **Table 14** and **Table 15** cannot be achieved, justification should be provided that all feasible and reasonable mitigation measures have been applied.

For existing residences and other sensitive land uses affected by additional traffic on existing roads generated by land use developments, any increase in the total traffic noise level should according to Benbow be limited to 2 dB above that of the corresponding 'no build option'.

Assessment Locations for Existing Land Uses

Table 16
Assessment Locations for Existing Land Uses

<i>Assessment Type</i>	<i>Assessment Location</i>
External noise levels at residences	The noise level should be assessed at 1 metre from the façade and at a height of 1.5 metres from the floor. Separate noise criteria should be set and assessment carried out for each façade of a residence, except in straightforward situations where the residential façade most affected by road traffic noise can be readily identified.

Table 16 (continued)

Assessment Type	Assessment Location
	The residential noise level criterion includes an allowance for noise reflected from the façade ('façade correction'). Therefore, when taking a measurement in the free field where reflection during measurement is unlikely (as, for instance, when measuring open land before a residence is built), an appropriate correction – generally 2.5 dB – should be added to the measured value. The 'façade correction' should not be added to measurements taken 1 metre from the façade of an existing building. Free measurements should be taken at least 15 metres from any wall, building or other reflecting pavement surface on the opposite side of the roadway, and at least 3.5 metres from any wall, building or other pavement surface, behind or at the sides of the measurement point which would reflect the sound.
Noise levels at multi-level residential buildings	The external points of reference for measurement are the two floors of the building that are most exposed to traffic noise. On other floors, the internal noise level should be at least 10 dB less than the relevant external noise level on the basis of openable windows being opened sufficiently to provide adequate ventilation. (Refer to the Building Code of Australia (Australian Building Codes Board 2010) for additional information.)
Internal noise levels	Internal noise levels refer to the noise level at the centre of the habitable room that is most exposed to the traffic noise with openable windows being opened sufficiently to provide adequate ventilation. (Refer to the Building Code of Australia (Australian Building Codes Board 2010) for additional information.)
Open space – passive or active use	The noise level is to be assessed at the time(s) and location(s) regularly attended by people using the space. In this regard, 'regular' attendance at a location means at least once a week.

Operational Noise Impact Assessment

Noise Sources

The sound power levels for the identified noise sources associated with the operational activities have been taken from on-site measurements of existing site activities and taken from Benbow Environmental's database.

A-weighted third octave band centre frequency sound power levels have been used and are presented in **Table 17** below. The noise sources utilised as part of this assessment comprise of the primary noise generating activities associated with the effective operation of the proposed development.

Table 17
A-weighted Sound Power Levels Associated with Operational Activities, dB(A)

ID	Noise Source	Source Type	Source Height	Quantity	L _A F _{max}	Overall (Single Source)	Third Octave Band Centre Frequency (Hz)										Comments
							25	31	40	50	63	80	100	125	160	200	
1	Diesel Water Pump	Point	1 m	2	83	81	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000	Modelled: 100% of the time 24/7 Used to pump water into ponds (NE), only operate at night during major storm events.
							-	-	-	-	55	-	-	67	-	-	
							68	-	-	72	-	-	76	-	-	76	
2	Electric Water Pump	Point	1 m	4	71	69	-	-	-	-	-	41	-	49	-	-	Modelled: 100% of the time 24/7 2 x Used to pump water into ponds (NE), only operate at night during major storm events.
							-	-	70	-	-	62	-	-	-	-	
							-	-	-	-	-	-	63	-	-	64	
3	Tractor	Line	1 m	1	-	92	-	59	-	-	82	-	84	-	-	-	Modelled: 8 hay delivery movements/hour, daytime only
							79	-	-	87	-	-	86	-	-	83	
							-	-	77	-	-	69	-	-	-	-	
4	Sump Plant	Point	1 m	1	77	75	-	-	-	-	47	-	55	-	-	-	Modelled: 100% of the time 24/7
							62	-	-	67	-	-	69	-	-	70	
							-	-	67	-	-	59	-	-	-	-	
5	Conveyor drive motor	Point	1 m	2	79	77	-	-	-	-	54	-	57	-	-	-	Modelled: 100% of the time 24/7
							61	-	-	68	-	-	75	-	-	68	
							-	-	65	-	-	59	-	-	-	-	
5	Axial Flow Fan	Point	1 m	12	72	70	-	-	-	-	38	-	55	-	-	-	Modelled: 100% of the time 24/7
							64	-	-	64	-	-	62	-	-	63	
							-	-	61	-	-	57	-	-	-	-	

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Table 17 (continued)

ID	Noise Source	Source Type	Source Height	Quantity	L _A F _{max}	Overall (Single Source)	Third Octave Band Centre Frequency (Hz)											Comments
							25	31	40	50	63	80	100	125	160	200		
							250	315	400	500	630	800	1000	1250	1600	2000		
6	Biofilter fan	Point	1 m	1	94	92	44	45	54	68	63	59	64	70	71	72	Modelled: 100% of the time 24/7	
							77	80	81	80	82	82	86	84	80	77		
7	Evaporative Condenser	Point	1 m & 9 m	4	89	87	40	42	47	63	57	58	63	64	67	71	Modelled: 100% of the time 24/7 2 x Evaporative Condensers are located on the roof of the blast freeze cold store mechanical plant room. Point sources are modelled 1m above 8 m building (9 m)	
							70	74	77	75	76	76	76	76	75	75		75
8	Hot water plant	Point	1 m	1	102	98	75	74	74	73	72	71	65	63	59	54	Modelled: 100% of the time 24/7	
							48	50	53	69	65	68	76	75	76	80		
							78	78	82	83	84	87	87	87	89	90		89
9	Diesel Generator 125 kVA	Point	1 m	1	115	113	87	87	84	80	77	77	74	65	63	61	Modelled: 100% of the time 24/7	
							-	-	-	-	80	-	-	90	-	-		
							97	-	-	103	-	-	106	-	-	-		107
10	4MW Boiler	Point	1 m	1	-	93	-	-	107	-	-	105	-	-	-	-	Modelled: 100% of the time 24/7	
							47	42	45	57	56	69	74	71	76	76		
							76	75	81	82	79	80	80	81	81	81		80
11	6MW Boiler	Point	1 m	1	-	96	81	83	82	77	78	75	79	78	79	70	Modelled: 100% of the time 24/7	
							50	45	48	60	59	72	77	74	79	79		
							79	78	84	85	82	83	83	84	84	84		83
							84	86	85	80	81	78	82	81	82	73		

Table 17 (continued)

ID	Noise Source	Source Type	Source Height	Quantity	L _A F _{max}	Overall (Single Source)	Third Octave Band Centre Frequency (Hz)										Comments	
							25	31	40	50	63	80	100	125	160	200		
12	Compressor -Large	Point	1 m	6	-	103	2500	3150	4000	5000	6300	8000	10000	12500	16000	20000	Modelled: 100% of the time 24/7	
							-	52	-	-	67	-	-	78	-	-		-
							86	-	-	90	-	-	98	-	-	-		99
13	Compressor - Small	Point	1 m	9	-	95	-	-	94	-	-	86	-	-	-	-	Modelled: 100% of the time 24/7	
							-	52	-	-	67	-	-	78	-	-		
							86	-	-	88	-	-	91	-	-	-		88
14	Vacuum Pump	Point	1 m	3	84	82	18	22	27	27	34	47	48	55	66	55	Modelled: 100% of the time 24/7	
							58	65	67	69	73	73	74	71	70	68		
							68	67	67	67	68	69	65	-	-	-		-
15	Hand Tools	Point	1 m	1	-	100	-	-	-	-	71	-	-	81	-	-	Modelled: 100% of the time 24/7	
							91	-	-	96	-	-	94	-	-	-		90
							-	-	87	-	-	81	-	-	-	-		-
16	Forklift	Point	1 m	2	102	92	36	59	61	51	65	66	77	68	60	62	Modelled: 100% of the time 24/7	
							66	69	74	81	78	78	81	85	84	84		
							81	75	71	71	65	63	56	51	45	42		
17	Truck Engine	Line	1.5 m	5	109	103	44	48	57	65	70	73	78	78	80	82	Modelled: Feed delivery: 4 units/hr daytime only Livestock delivery: 4 units/hr 24/7 Carcass loadout: 4 units/hr 24/7 Rendering plant pickup: 4 units/hr 24/7 Blast freeze store pickup: 4 units/hr 24/7	
							83	85	94	98	94	96	89	88	82	87		
							85	84	82	83	83	82	78	-	-	-		-
18	Truck Exhaust	Line	3 m	5	107	101	42	46	55	63	68	71	76	76	78	80		
							81	83	92	96	92	94	87	86	80	85		
							83	82	80	81	81	80	76	-	-	-		-

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Table 17 (continued)

ID	Noise Source	Source Type	Source Height	Quantity	L _A F _{max}	Overall (Single Source)	Third Octave Band Centre Frequency (Hz)											Comments											
							25	31	40	50	63	80	100	125	160	200	250		315	400	500	630	800	1000	1250	1600	2000	2500	3150
19	Rendering Plant Equipment 1	Point	1 m	1	-	99	50	48	52	76	65	66	73	74	77	84	Modelled: 100% of the time 24/7												
							82	94	88	89	90	90	88	87	85	84													
							83	81	77	74	72	68	62	54	49	46													
20	Rendering Plant Equipment 2	Point	1 m	1	-	83	33	31	36	59	48	49	56	57	61	67	Modelled: 100% of the time 24/7												
							66	77	72	73	73	73	71	71	68	67													
							67	64	60	57	56	51	46	38	33	29													
21	Rendering Plant Equipment 3	Point	1 m	1	-	83	39	33	36	47	50	55	57	59	62	71	Modelled: 100% of the time 24/7												
							68	71	75	75	74	74	74	72	72	69		68											
							67	65	61	57	55	50	44	40	35	32													
22	Rendering Plant Equipment 4	Point	1m	1	-	104	66	55	56	75	67	71	78	78	85	90	Modelled: 100% of the time 24/7												
							88	93	93	95	94	95	93	93	91	90													
							89	87	84	82	82	76	76	68	67	59													
23	Rendering Plant Hammer Mill	Point	1m	1	-	94	49	48	47	66	58	62	69	71	72	77	Modelled: 100% of the time 24/7												
							78	85	82	83	83	86	85	83	80	80													
							78	75	72	70	71	65	65	57	56	46													

NOTE: L_AF_{max} levels have been included for night time sources. L_AF_{max} levels have not been included for internal noise source due to SoundPlan v7.3 limitations.

Modelling Scenario

Two scenarios were modelled by Benbow for operational noise emissions. These scenarios assess existing 24/7 operations for scenario 1. The proposed development involves the 24/7 processing of off-site feedstock in the absence of standard meat processing for scenario 2. Scenario 1 includes all the sources including feed delivery operations. Details of the operational assumptions of the sources modelled are in **Table 18** below.

Table 18
Operational Assumptions

Scenario 1	Sources
Scenario 1 – Existing Operations	Existing meat processing sources. See Noise Impact Assessment (Annexure 6).
Scenario 2 – Proposed Operations	<ul style="list-style-type: none"> • Processing of fish/poultry in rendering plant • Existing Refrigeration sources. See Noise Impact Assessment (Annexure 6).

Predicted Noise Levels – Operational

Noise levels at the nearest residential and industrial receptors have been calculated and results of the predictive noise modelling considering operational activities are shown in **Table 19**.

Table 19
Predicted Noise Levels – Operational Activities dB(A)

Receptor	Project Criteria $L_{aeq}(15\text{ minute})$			Project Criteria L_{AFmax}	Scenario 1		Scenario 2	
	Day	Evening	Night	Night	Predicted $L_{eq}(15\text{ minute})$	Predicted L_{Amax}	Predicted $L_{eq}(15\text{ minute})$	Predicted L_{Amax}
R1	40	40	38	52	35✓	46✓	34✓	39✓
R2	40	40	38	52	31✓	39✓	30✓	39✓
R3	40	40	38	52	30✓	39✓	30✓	37✓
R4	40	40	38	52	31✓	40✓	31✓	39✓
R5	40	40	38	52	34✓	44✓	34✓	44✓
R6	40	40	38	52	37✓	46✓	37✓	46✓
R7	63			N/A	50✓	-	49✓	-
R8	40	40	38	52	34✓	39✓	34✓	39✓
R9	40	40	38	52	30	41✓	29✓	41✓

✓ Complies x Non-compliance

According to Benbow the predicted levels comply with the relevant criteria at all sensitive receptors.

Noise Control Measures

The noise impact assessment prepared by Benbow predicts noise levels would be met at all surrounding receivers during all periods.

The following proactive noise mitigation measures are however recommended by Benbow in order to further reduce noise levels from truck movements at surrounding receivers:

- Prohibition of extended periods of on-site revving/idling;
- Minimisation of the use of truck exhaust brakes on site;
- Enforcement of low on-site speed limits; and
- Signs to encourage quiet operations during the night period.

Road Traffic Noise Impact Assessment

According to Benbow previous records provided by Manildra indicated the following daily truck trip generation:

- 13 livestock truck deliveries;
- 5 finished product truck loadouts; and
- 4 goods truck deliveries.

Based on these volumes, no more than 5 truck trips are expected to have been generated in any single hour.

The proposal provides for the following truck trip generation:

- 3 rendering truck material deliveries per day;
- 1 goods truck delivery per day; and
- 3 finished product truck loadouts per week.

General operations will not occur concurrently with proposed poultry and fish processing; therefore, these truck movements are considered separately.

The most likely route for trucks travelling to and from the facility would utilise Temora Street/Stockinbingal Road south of the subject site.

The proposed truck numbers for the site are as follows, in **Table 20** below.

Table 20
Proposed Number of Truck Movements

<i>Existing Truck Numbers</i>	<i>Existing Truck Movements</i>	<i>Proposed Truck Numbers</i>	<i>Proposed Truck Movements</i>
13 livestock delivery trucks, 5 finished product trucks, 4 goods delivery trucks (22 total)	44	3 Rendering plant raw material delivery trucks, 1 goods truck delivery, 1 finished product truck* (5 total)	10

*Note: 3 finished product trucks per week

The trucks are assumed by Benbow to travel at the speed of 80 km/h. Trucks have been modelled by Benbow considering two moving point sources at heights of 1.5 m and 3 m above ground level in order to account for the engine (1.5 m) and the exhaust outlet (3 m). As a worst-case scenario 54 truck movements have been assumed for daytime and 26 truck movements have been assumed for night-time.

The $L_{Aeq, 15 \text{ hour-day}}$ and $L_{Aeq, 9 \text{ hour-night}}$ noise descriptors have been calculated by Benbow at the most affected residential receptor located along Temora Street. The receiver has been selected as it is the closest residential receiver along the road route to the site. The predicted noise levels are displayed in Tables 21 and 22. The highest noise levels would be predicted at this location, Lot 303 DP 753601 is the only location considered.

Table 21
Predicted Levels for Existing Operation Traffic Noise

<i>Receptor</i>	<i>Roads Noise Criteria</i>		<i>Existing Traffic</i>		<i>Site Contribution</i>		<i>Cumulative Road Traffic Noise</i>	
	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>
Lot 303 DP753601	60	55	58	50	50 ✓	50 ✓	59 ✓	53 ✓

Table 22
Predicted Levels for Proposed Road Traffic Noise

<i>Receptor</i>	<i>Roads Noise Criteria</i>		<i>Existing Traffic</i>		<i>Site Contribution</i>		<i>Cumulative Road Traffic Noise</i>	
	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>	<i>Day $L_{Aeq, 15 \text{ hour}}$</i>	<i>Night $L_{Aeq, 9 \text{ hour}}$</i>
Lot 303 DP753601	60	55	58	50	44 ✓	44 ✓	58 ✓	51 ✓

✓Complies * Non-compliance

According to Benbow, **Table 22** above details that the predicted daytime $L_{Aeq,15\text{ hour}}$ and night-time $L_{Aeq,9\text{ hour}}$ road traffic noise levels attributed to traffic from the site comply with the noise criteria for a local road, as established in the NSW EPA Road Noise Policy. Furthermore, there is no increase in the cumulative road traffic noise levels during the day and 1 dB(A) increase at night complying with the 2 dB(A) increase criteria.

Therefore, according to Benbow, the proposed vehicle movements comply with the NSW Road Noise Policy, and no additional mitigation strategies are recommended.

The Noise Impact Assessment prepared by Benbow concludes:

"Benbow Environmental has been engaged by Manildra Meat Company to prepare a noise impact assessment for the existing meat processing facility and the existing rendering plant for processing offsite feedstock such as fish and poultry at 572 Temora Street, Cootamundra.

An assessment was conducted under the NSW Noise Policy for Industry (EPA, 2017), NSW Road Noise Policy (DECCW, 2011) and Interim Construction Noise Guideline (DECC, 2009). Noise modelling was undertaken by using the predictive software SoundPLAN v. 7.3.

The processing of off site feedstock would not occur concurrently with existing meat processing operations, however, the existing freezers/refrigeration system may operate simultaneously. As a result the noise impacts from this proposal will be less than the existing operations for both operational noise and offsite road traffic impacts.

Furthermore, the noise impacts from the proposed development are predicted to comply with the criteria at all surrounding receptors for all operational and road traffic scenarios."

5.3.3 Traffic Impacts

The SEE is supported by a "Transport Impact Assessment" prepared by Ason Group (**Annexure 7**). It should be noted that the Transport Impact Assessment was prepared in relation to an earlier proposal for the Manildra Meat Company that involved both the rendering of fish as well as poultry. The rendering of poultry however no longer forms part of this proposal, as the proposal only involves the rendering of fish. The findings and recommendations of this Transport Impact Assessment however still have relevance to this proposal and are included as part of the documents relied upon by the SEE.

5.3.3.1 The Local Road Network

Site Access

Site and Stockinbingal Road and Old Cootamundra Road

The subject site access intersection operates under Give Way control, with priority to Stockinbingal Road through movements. An auxiliary right (AUR) treatment is provided

in Stockinbingal Road, whereby an additional (northbound) through lane is provided through the intersection to allow northbound vehicles to pass right turning vehicles entering the subject site.

Sight distances on all approaches comply with Austroads requirements according to Ason Group.

Site and Stockinbingal Road

The subject site's access intersection also operates under Give Way control, with priority to Stockinbingal Road through movements. The AUR treatment at the Stockinbingal Road and Old Cootamundra Road and site intersection to the south also extends through this intersection, while an auxiliary left (AUL) treatment provides for southbound vehicles to pass left turning vehicles entering the subject site.

Sight distances on all approaches comply with Austroads requirements according to Ason Group.

The Road Network

The key roads and intersections within the vicinity of the subject site are shown in **Figure 18** and described below.

Stockinbingal Road

Stockinbingal Road (MR 235) is a sealed road which runs in a generally north-south direction between Stockinbingal to the north and (via Temora Street) Cootamundra to the south. In the vicinity of the subject site it provides two traffic lanes and formal verges, and has a posted speed limit of 100 km/h.

Temora Street

Temora Street is a sealed road which runs in a generally north-south direction between Stockinbingal (via Stockinbingal Road) to the north and Cootamundra to the south. Outside of Cootamundra it provides two traffic lanes and formal verges, and has a posted speed limit of 100 km/h. Within Cootamundra itself (generally south of McGowan Street) it provides two traffic lanes and parking on both sides of the road, and has a posted speed limit of 50 km/h.

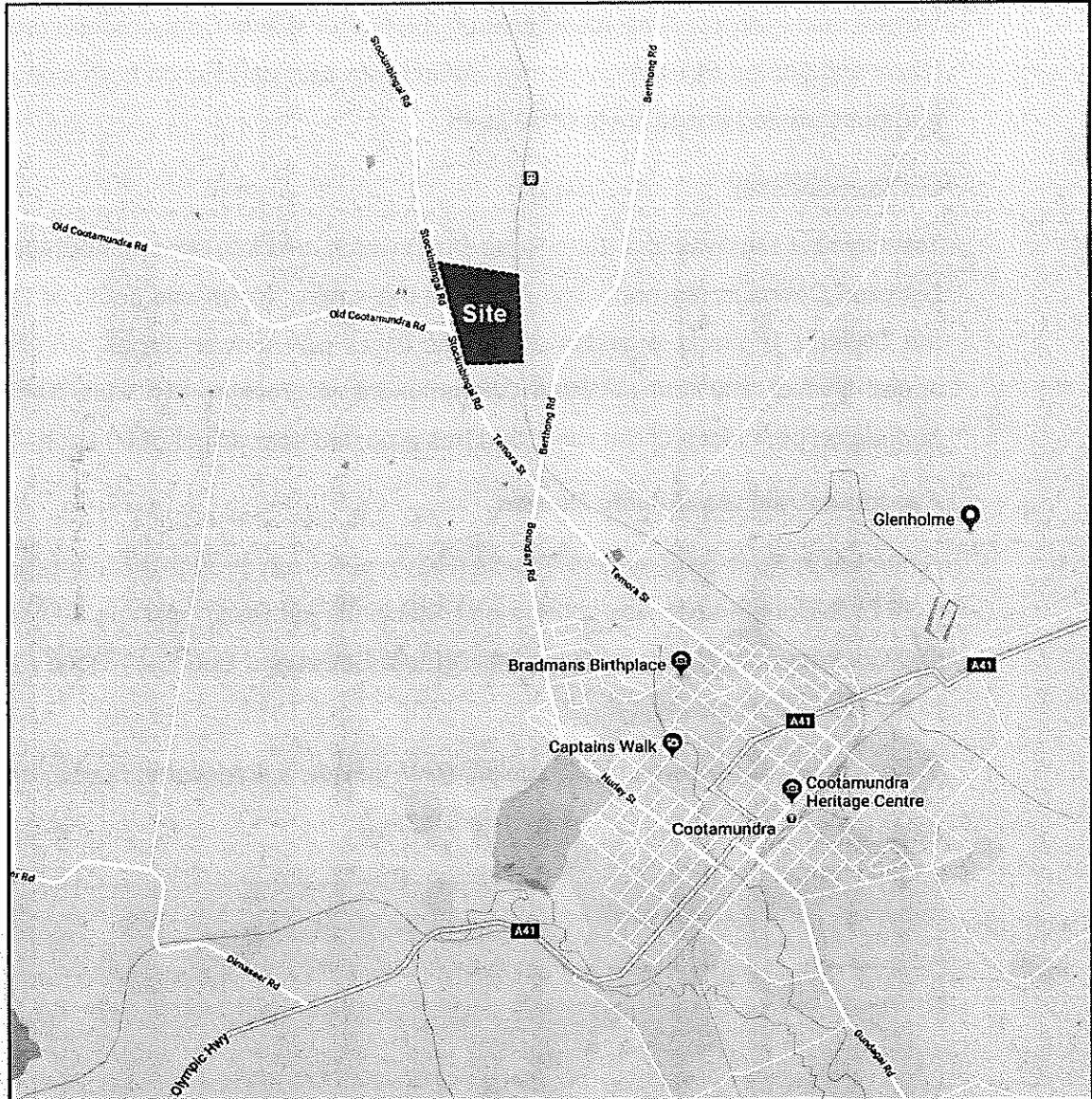


Figure 18: Local road network.

Old Cootamundra Road

Old Cootamundra Road is a sealed road which runs in a generally east-west direction between Stockinbingal Road to the east and Temora to the west. It provides two traffic lanes and formal verges, and has a posted speed limit of 100 km/h. Based on information provided by RMS, Old Cootamundra Road is a designated alternative heavy vehicle route to Stockinbingal Road.

Boundary Road / Hurley Street

Boundary Road is a sealed road which runs in a generally north-south direction between Temora Road in the north and Hurley Road, which in turn runs south to the Olympic Highway. Outside of Cootamundra, Boundary Road provides two traffic lanes and formal

verges, and has a posted speed limit of 100 km/h. Within Cootamundra, both Boundary Road and Hurley Street provide two traffic lanes and parking on both sides of the road, and have posted speed limits of 50 km/h.

Olympic Highway

The Olympic Highway is a State Road (A41) which runs in a general north-south direction between Cowra in the north and Albury in the south. North and south of Cootamundra, the Olympic Highway provides two traffic lanes with formal verges, and has a posted speed limit of 100 km/h. Within Cootamundra, it provides two wide traffic lanes and parking on both sides of the road, and has a posted speed limit of 50 km/h.

Restricted Access Vehicle Routes

A number of Restricted Access Vehicle (RAV) routes run through the sub-region, including a 26 m B-Double approved route along Stockinbingal Road past the subject site; along Old Cootamundra Road; and via both Temora Street and Boundary Road / Hurley Street to the Olympic Highway.

These routes are shown in RMS' online RAV Viewer, a screenshot of which is provided in

Figure 19.

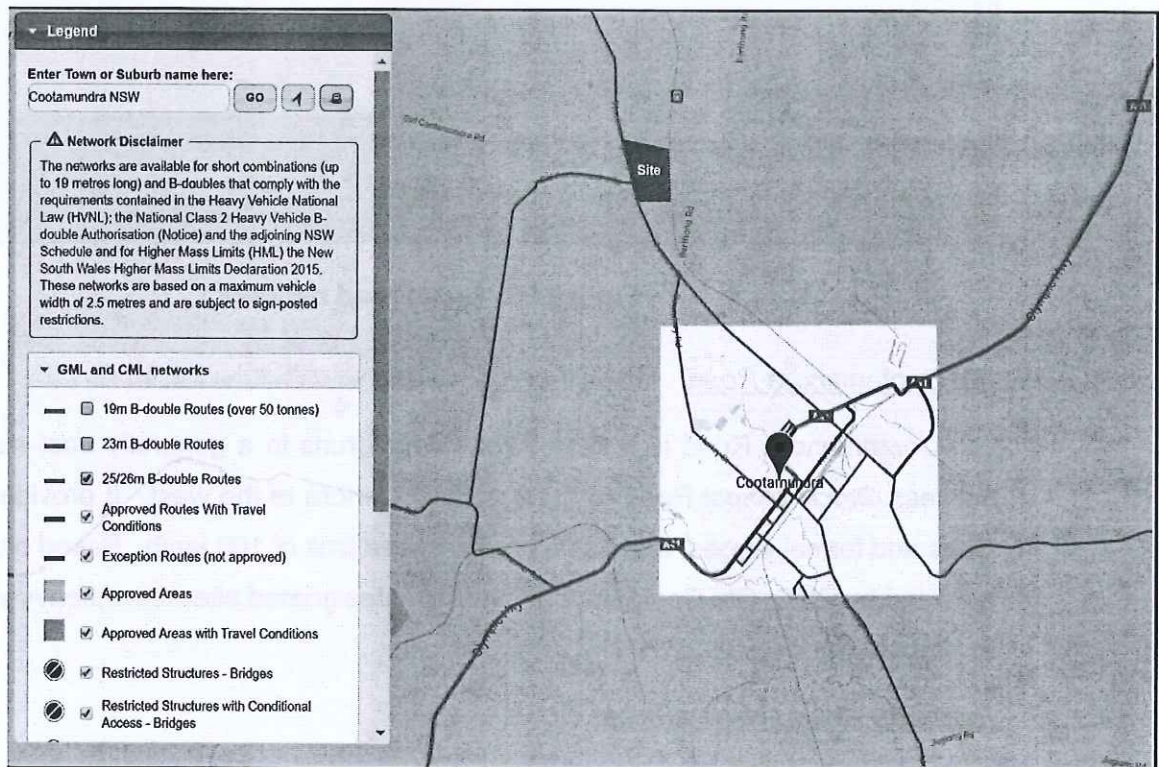


Figure 19: RMS Restricted Access Vehicle Routes

Existing Traffic Flows

Existing traffic flows along Stockinbingal Road and Old Cootamundra Road are very low; indeed, the normal abattoir traffic flows would likely significantly exceed background traffic flows. In addition, there is little, if any, information to suggest any significant potential for traffic growth in the future, with only site-specific traffic generators (such as the abattoir operations) generating any significant level of traffic.

Public and Active Transport

There are currently few public or active transport opportunities for (future) employees of the site, with only a single daily bus service operating between Griffith and Cootamundra (Route 718 & 726) via Stockinbingal Road. This service generally operates in the middle of the day (bookings only) and has no stops in the vicinity of the subject site.

While no formal cycle facilities are available in the area, Stockinbingal Road is generally well surfaced, wide, and as stated has sealed verges (generally of a minimum 1 m). Such conditions would be acceptable to some experienced cyclists to travel to and from the subject site, and further end of journey facilities (showers and lockers) are available to all employees.

5.3.3.2 Existing Operations and Traffic Impacts

Staff

When normal livestock processing operations occur, the abattoir employs up to 341 staff, working across a number of shifts and disciplines on-site. A breakdown of staff characteristics is provided in **Table 23**.

Table 23
Livestock Processing Operations Staff Characteristics

<i>Department</i>	<i>Shift</i>	<i>Staff Numbers</i>
Ovine	5:30 am - 2:00 pm	95
Bovine	5:30 am - 2:00 pm	35
Ovine Boning	6:00 am - 4:00 pm	95
Bovine Boning	6:00 am - 2:30 pm	65
Stockyards	4:30 am - 12:30 pm	1
	5:30 am - 2:00 pm	2
	12:00 am - 8:00 pm	1
Cleaning	4:00 pm - 12:30 am	10
Office	8:00 am - 5:00 pm	15

Table 23 (continued)

<i>Department</i>	<i>Shift</i>	<i>Staff Numbers</i>
Engineering	4:30 am - 12:30 pm	2
	6:00 am - 2:30 pm	3
	12:00 pm - 8:00 pm	3
	7:00 am - 4:00 pm	3
Rendering	6:00 am - 2:30 pm	2
	12:00 pm - 10:00 pm	2
Quality / Vet	5:00 am - 2:30 pm	1
	6:00 am - 2:30 pm	2
	6:00 am - 4:00 pm	2
	7:00 am - 4:00 pm	2
Total		341

Trip Generation and Distribution

Trip Generation

The past peak period of traffic generation to/from the subject site coincides with the start of the primary shifts (generally 5:00 am – 6:00 am) and then at the end of these shifts (generally 2:00 pm – 3:00 pm). With reference to **Table 23**, the AM peak hour is estimated by Ason Group to have generated up to 300 vehicle trips per hour (vph), the majority of which would have been arrival trips; and the PM peak hour is estimated to have generated up to 200 vph, the majority of which would have been departure trips.

According to Ason Group the existing operations involve the following daily truck trip generation:

- 13 livestock truck deliveries;
- 5 finished product truck loadouts; and
- 4 goods truck deliveries.

Based on these volumes, no more than 5 truck trips are expected to have been generated in any single hour.

Trip Distribution

While there is little information available in regard to the directional distribution of trips, it is expected that a majority of trips would have been to / from the south (Cootamundra).

Parking and Servicing

Parking

The subject site provides a total of over 300 formal and informal parking spaces, the majority of which are located in two primary parking areas in the northern part of the subject site, with additional parking provided in proximity to office and engineering areas.

Servicing Facilities

The subject site provides a number of different servicing and loading areas associated with the different operations of the Site. These facilities have (necessarily) previously been designed with reference to the appropriate Australian Standards for the largest vehicle accessing the Site, which we understand was a B-Double.

5.3.3.3 Traffic Impacts associated with the Proposal

Staff and Work Shifts

The processing fish will require far fewer staff than would be employed at the site during normal livestock processing operations. A summary of staff numbers and shifts is provided in **Table 24**.

**Table 24
 Proposal Staff and Shifts**

<i>Department</i>	<i>Shift</i>	<i>Staff Numbers</i>
Rendering	6:00am - 2:00pm	3
	2:00pm - 10:00pm	3
	10:00pm - 6:00am	3
Office	7:00am - 5:00pm	4
Engineering	6:00am - 2:30pm	1
	7:00am - 4:00pm	1
Total		15

Heavy Vehicle Movements

Fish rendering operations are estimated to generate the following heavy vehicles trips:

- 3 rendering truck material deliveries per day;
- 1 goods truck delivery per day; and
- 3 finished product truck loadouts per week.

Access

Stockinbingal Road Access

All access to the subject site will be via the existing access intersections to Stockinbingal Road. These intersections, according to Ason Group, already provide auxiliary infrastructure and good sight distances on all approaches; and geometrically have been designed to accommodate the maximum size vehicle (B-Double) accessing the subject site.

Internal Access

From the Stockinbingal Road access point, the subject site's internal driveway provides access to the staff car park and to servicing areas. The internal road has been designed, according to Ason Group, to accommodate the largest heavy vehicle accessing the service areas.

Traffic Generation and Distribution

The peak period traffic generation of the subject site as a result of fish rendering operations, is not expected to be any more than 10 vehicle trips per hour, occurring during the shift start and end periods. As for past trips, the majority of these trips are expected to be generated to and from the south (Cootamundra).

Traffic Impacts

According to Ason Group the proposal will generate a level of traffic significantly lower than normal livestock processing operations, literally representing less than 5% of normal flows during the peak periods.

The processing fish in the existing rendering plant on site will generate a minor fraction of the livestock processing traffic flows and utilise roads and access intersections previously designed for the significant greater traffic demands of those livestock processing operations. As such, according to Ason Group, the proposal will have no significant impact on the local road network.

Parking Requirements

The peak parking demand will be generated during the primary day shifts, where up to 12 staff would be on-site. As outlined above the car parks within the subject site currently provide capacity for over 300 vehicles, and as such, according to Ason Group, there is significantly higher capacity on-site than the peak demand generated by this proposal.

Servicing

While DCP 2013 does not provide any specific requirements in regard to the provision of service/loading bays, the proposal will utilise the subject site's existing service bays, which, according to Ason Group, will provide more than appropriate capacity for the proposed operations (noting that these facilities were again designed for the significantly higher servicing demands of the normal livestock processing operations).

These service areas are entirely separated from the employee and visitor parking areas and have again been previously designed with reference to AS 2890.2.

5.3.4 Social and Economic Impacts

As outlined in **Table 23** above, operating at full capacity the existing plant has the capacity to employ over 340 people.

Due to high livestock prices and the loss of supply contracts to a major supplier, the previous owners of the site, the Manildra Meat Company shut down livestock processing operations in 2017 resulting in significant loss of employment in the local area.

The site has now been acquired by the Australian Meat Group. The Australian Meat Group intend to recommence livestock processing at the site when processing of livestock is again commercially viable.

The processing of alternative feed stocks such as fish into the rendering plant while the normal livestock processing operations are shut down ensures the site is financially viable and sustainable on an ongoing basis, particularly during troughs in the livestock processing cycle. It also provides a processing option that will not be affected by adverse weather conditions that affect livestock production such a drought. Under these circumstances the new owners wish to continue with the ability to process of fish in the rendering plant on a permanent basis.

In addition, it will enable on-going employment for approximately 15 employees as detailed in **Table 24** above.

The short-term fish trial approved by Cootamundra Gundagai Regional Council has demonstrated that such a proposal can utilise the existing plant and technology, with minor modifications, an incorporating suitable mitigation measures to mitigate adverse impacts to the amenity of the locality.

Under these circumstances this proposal should not result in any adverse economic or social impacts provided adverse impacts are mitigated. In this regard this revised SEE is supported by expert assessments in terms of odours, wastewater management, noise and

traffic impacts which demonstrate the proposal will result in less impacts when compared to the normal livestock processing operations.. Indeed, the opportunity to keep the rendering operations of the plant operating during periods when the normal livestock processing operations are not occurring will ensure that a level of employment will be maintained, and the wages of those people employed will be able to be spent in the local area. Such can only have a positive social and economic impact in the area.

5.3.5 Waste Management

Given the nature of the use solid waste will not be generated by the process. Over-coarse material from the screening processes will be fed back through the process the rendering process.

All liquid wastes generated during the trial period will treated and disposed through the existing on-site waste-water treatment system.

A Waste Management Plan has previously been formulated by Manildra for the site in accordance with condition No. 10 of development approval DA 2019/103 for the fish rendering trial and is included as **Annexure 4** to this SEE.

As detailed in Section 3.2.2 above, the following contingencies, such as plant break downs or loss of power the following measures have been addressed in the Waste Management Plan for the site:

- If there is a plant breakdown, any raw material that has been loaded into the raw material bin will be removed either manually or mechanically (by excavator) into bins and placed into refrigeration.
- Material that has left the receival bin and has commenced being processed will be removed and placed in bins and will be refrigerated.
- During a plant breakdown, any material being processed within the cooker will be left in the cooker as this is a sealed vessel.
- If there is a power breakdown, the site does have a generator that can be connected to the refrigeration unit to maintain refrigeration during any breakdown or power loss.
- Given the contingency measures already available particularly the ability to refrigerate fish on site following arrival at the site if need be, the potential for fish to decay to a point that they are unable to be processed in the rendering plant is highly unlikely and remote. However, if any fish are found to be unsuitable ("*unsuitable material*") for processing for whatever reason, such as if material has decomposed either during transportation or while parked at the site, such material will be placed immediately into covered bins and refrigerated on site.

Such refrigerated unsuitable material could then be fed as a 'shandy' in small proportions over an extended period of time with suitable material in the rendering plant.

Alternatively, if required, the refrigerated unsuitable material can be transported for disposal to a landfill that is able to take the material. In this regard Council have previously advised that Cootamundra's landfill facility does not have the capacity to accept mass disposal of fish into the landfill's animal pit.

It should be noted however that as this material will be refrigerated, it is possible for smaller amounts of the unsuitable material to be transported to a landfill over an extended period of time, while the remainder of the unsuitable material is kept refrigerated on site. In this way the amount of material that would be required to be disposed by landfill at any one time can be minimised. As a result, there would be no need for the Cootamundra landfill to be required to accept the mass disposal of fish at the one time.

If, however the Cootamundra land fill is unable to accept smaller amounts of unsuitable material then the refrigerated unsuitable material can be transported for disposal to other landfills in the region. For instance, the Gregadoo Waste Management Centre located within the Wagga Wagga local government area would be able to accept the receipt of such unsuitable material under these circumstances (confirmed per. Comm. Geoff Pym, Gregadoo Waste Management Centre Manager 23rd January 2020). This situation would be assisted with the ability to refrigerate the unsuitable material and then transport smaller loads to reduce the amount that is required to be disposed at any one time.

6.0 SCHEDULE 3 ENVIRONMENTAL PLANNING & ASSESSMENT REGULATIONS

As detailed in Section 4.1.1.4 Schedule 3 of the EP&A Regulations lists those activities that comprise 'designated development' for the purposes of the EP&A Act. Designated developments are those activities for which an Environmental Impact Assessment is required to accompany any development application.

Part 2, and in particular clauses 35 and 36, of Schedule 3 however deals specifically with alternations and additions to existing or approved development and reads:

Part 2 Are alterations or additions designated development?

35 *Is there a significant increase in the environmental impacts of the total development?*

Development involving alterations or additions to development (whether existing or approved) is not designated development if, in the opinion of the consent authority, the alterations or additions do not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development.

Note. Development referred to in this clause is not designated development for the purposes of section 4.10 of the Act. This means that section 8.8 of the Act (Appeal by an objector) will not extend to any such development even if it is State significant development.

Comment

Under clause 35 above a proposal that seeks to undertake alterations or additions to development is not designated development if in the opinion of the consent authority the alterations or additions do not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development. This provision furthermore applies whether the development is existing or approved.

This proposal seeks to enable the continuation of the use of fish in the rendering process on site. The application seeks to enable the continuation of fish rendering at the site on a permanent basis following the fish rendering trial approved by Cootamundra Gundagai Regional Council on the 11th December 2019 (DA2019/103). The processing of fish will only occur while the normal livestock processing operations are shut down at the site.

This following section addresses the specific matters for consideration as listed under clause 36 of Part 2 of Schedule 3 of the EP&A Regulations and having regard to the findings of the assessment undertaken in the preceding sections of this report.

36 *Factors to be taken into consideration*

In forming its opinion as to whether or not development is designated development, a consent authority is to consider:

- (a) *the impact of the existing development having regard to factors including:*
 - (i) *previous environmental management performance, including compliance with the conditions of any consents, licences, leases or authorisations by a public authority and compliance with any relevant codes of practice, and*

Comment

It is understood the Cootamundra Abattoir commenced operations around 1974 and since that time has obtained a range of development approvals from Council. Since 2000, for instance, a range of separate development approvals have been obtained from the previous owners of the site (G.M. Scott) and more recently by Manildra. **Table 25** below provides a summary of those approvals issued by Council since 2000.

Table 25
List of Development Approvals applying to subject site since 2000

Approval Reference No.	Development Description	Date Approved
DA00/1160	New Beef Chiller	01.11.2000
DA01/1234	New Warehouse	28.03.2001
DA01/1293	Load Out and Marshalling Area	20.08.2001
DA01/1359	New Boiler Room	26.11.2001
DA02/1398	Separator Pit	08.02.2002
DA02/1460	Extension to Office Building	22.05.2002
DA02/1523	Storeroom and Amenities Block	14.08.2002
DA04/0096	Additions to Office Block	16.04.2004
DA04/150	Extensions to Slaughter Floor	01.07.2004
DA05/0111	Chiller Room Extension Meat Processing and Packing Plant	12.07.2005
DA05/0119	Storage Shed	01.06.2005
DA08/058	Chiller Room Additions	07.11.2007
DA09/030	Demolition and New Rendering Plant	29.10.2008
DA10/024	New Chiller Room Addition	02.12.2009
DA10/089	New Chiller Rooms and Roof Addition	24.02.2010
DA10/094	New Storage Shed	28.06.2010
DA11-018	New Skillion Roof	07.09.2010
DA12-126	Extensions to Slaughter Floor	17.07.2012
	New Skin Processing Shed	03.05.2013

Table 25 (continued)

<i>Approval Reference No.</i>	<i>Development Description</i>	<i>Date Approved</i>
DA2014/94	Additions to Sheep Yards	10.10.2014
DA2014/123	Extension to Amenities Building	11.12.2014
DA2015/02	New Chiller Room Addition	23.01.2015
DA2015/28	New Chiller Room Addition	05.05.2015
DA2015/63	Awning/Office/Storeroom	23.06.2015
DA2015/99	New Roof over Beef Slaughter Floor	29.09.2015
DA2015/105	Install Effluent Reuse Pipeline	03.11.2015
DA2015/109	New Covered Cattle Yards	09.11.2015
DA2016/21	New Plate Freezer/Engine Room/Carton Store	07.03.2016
DA2016/34	New Covered Cattle Yards	28.04.2016
DA2016/39	Additions to Lamb Slaughter Floor	12.05.2016
DA2017/81	Lamb Feedlot	NYD

On the 11th December 2019 Cootamundra Gundagai Regional Council issued development consent (DA 2019/103) for a short-term trial for the processing of fish in the rendering plant on the subject site. This approval permitted the rendering of fish on a short-term basis of three (3) months. Section 3.2.1 of this SEE provides discussion on the terms of this consent and the sites operations since this trial approval was granted in accordance with that consent.

Condition 17 of development consent DA 2019/103 required the preparation of an Environmental Audit Report at the completion of the fish rendering trial which:

- a) *Detailed the results of temperature monitoring of raw material delivered to the site, and if there were occurrences where fish temperatures rise above 15°C actions taken by the company to remedy these occurrences.*
- b) *Detailed the results of monitoring of effluent quality as required by the sites EPL and including oil and grease analysis as recommended by ProAnd.*
- c) *Detailed compliance with any development consent conditions issued by Council.*
- d) *Detailed compliance with the requirements of the EPL during the fish rendering trial period.*
- e) *Detailed any complaints received in relation to the site operations and actions take to remedy complaints.*

This Environmental Audit Report is attached as **Annexure 7**.

The environmental management of site operations have also been mainly controlled by the sites EPL (No. 3889) issued by the EPA under the Protection of the Environmental Operations Act

EPL No. 3889 imposes a range of requirements in terms of the operations of the existing operations on the site and including:

- Monitoring locations for discharges to the air and water including application of treated effluent to the land.
- Limits on pollution of water, waste generation and odours.
- Operating conditions in terms of:
 - The carrying out of activities in a competent manner;
 - The maintenance of plant and machinery;
 - Dust minimisation;
 - The application of effluent to land.
- Monitoring and recording requirements.
- Recording of pollution complaints and the need for a telephone complaints line.
- Reporting requirements.

Under the licence there has also been a series of pollution studies and reduction programs that have been implemented at the site as detailed in **Table 26** below:

Table 26
Pollution Studies and Reduction Programs under EPL 3889

<i>Program</i>	<i>Description</i>	<i>Completed Date</i>
Installation of Equipment to Improve Wastewater Quality	Installation of a fan press screw separator, pump and holding pit to remove gross solids from the wastewater collected at the site. This will minimise the amount of gross solids entering the anaerobic pond at the premises which will improve wastewater quality for irrigation and minimise the generation of offensive odours.	30-June-2003
Works to Control Odour	1) The temperature monitoring equipment on the condensers located in the rendering plant must be reconnected. 2) Works must be implemented to control the emission of offensive odour from the wastewater collection pit. Offensive odours should be minimised with the implementation of these works.	30-August-2005
Construction of Impervious Bunds	Impervious bunds must be constructed around all above ground fuel tanks. On the event of a spill or leak, the contents will be captured rather than spilt onto the surrounding areas causing potential contamination.	30-August-2005

Table 26 (continued)

<i>Program</i>	<i>Description</i>	<i>Completed Date</i>
Waste Disposal	Accumulated waste at the premises must be removed and lawfully disposed of at an approved waste disposal facility. The waste located onsite will be disposed of correctly and therefore preventing contamination of further land.	30-August-2005
Weather Station	The licensee must install a weather station. A weather station will allow wind speed, wind direction and temperature to be monitored. The licensee can then base the days works on this information which will help reduce impacts on the neighbouring premises.	30-August-2005
5-Year Forward Management Plan	The licensee must prepare and submit a 5 year forward management plan for the on-site utilisation of wastewater by irrigation. This report will allow the licensee to plan a cropping regime to follow to ensure the utilisation area becomes environmentally sustainable and remains that way.	28-July-2007
Rendering Plant Improvements	Staged planning and construction of a new building structure around rendering plant which includes an air handling capture and treatment system for fugitive emissions from the rendering process. Significantly improve local air quality and amenity.	11-March-2011
Wastewater Management and Soil Sustainability Plan	A plan to introduce sustainable management of effluent through improved irrigation, soil and cropping management.	19-December-2012
Improvements to Soil Sustainability and Effluent Infrastructure and Management	Requirements to increase on- site effluent storage capacity, land available as effluent reuse area, install groundwater monitoring bores, submit an updated WMSSP, improve irrigation infrastructure and management and soil sustainability.	11-March-2014
Biofilter extraction fan replacement	Replacement of the biofilter extraction fan	19-March-2020

In addition to the above the EPL also required an audit of the wastewater management system to be undertaken and submitted to the EPA by 31st July 2017. The audit report was submitted by Manildra in 2017.

The EPA did add a Pollution Studies and Reduction Program (PRP) to the site's EPA licence as a result of the intermittent odour complaints from the fish rendering for further odour mitigation works namely the installation of a new extraction fan on the biofilter. This work has been completed.

During the trial period the EPA received six (6) complaints associated with activities at the subject site. The following is a summary of the complaints received and associated responses:

- Complaint received by EPA on 17th December 2019 in connection with odours to the south-west of the site. The EPA notified the company on the 20th December 20219. At this time the company could not identify any odours being generated.
- Complaint received by EPA on 15th February 2020. The EPA notified the company on the 17th February 2020. No obvious source of odour was identified by the company.
- Complaint received by EPA on 19th February 2020. The Company investigated and identified and advised EPA that the potential issue appeared to be a blocked drain. The drain was unblocked, and the float switch adjusted on the pump system and the sump was cleaned out the following week to ensure no further blockages. The company will monitor this situation moving forward.
- Complaint received by the EPA on the 27th February 2020, with nominated location Berthong Road. The Company also received a separate complaint from a property on Gilgand Road. When company staff investigated the complaint from the Gilgand Road property no odour was present. Investigations carried out on-site identified the only possible source to be intermittent gassing activity at the infeed area of the anaerobic pond.
- Complaint received by EPA on 2nd March 2020.
- Complaint received by EPA on 5th March 2020.

During the period from 11 March 2020 until processing ceased on June 5 2020 a further 53 complaints were reported to EPA Environment line. None were reported to Australian Meat Group directly.

As a response to the escalation to odour complaints and odour surveys carried out by EPA, Australian Meat Group was issued a penalty notice for odour impacts offsite.

EPA has since issued a prevention notice after processing was stopped in June 2020 requiring the below actions to occur before fish rendering recommences onsite to mitigate odour concerns due to the intermittent odour complaints:

- Fit out of product (Fish meal) storage area and bio filter connection
- Rapid roller doors are installed at the rendering plant
- Installation of a new low temperature rendering plant
- Re-cladding of the rendering plant housing

Following further consultation, the EPA advise that the continued processing fish in the existing rendering plant will require the existing EPL to be reviewed. Under these circumstances the

development application to which this SEE applies, will comprise integrated development for the purposes of Section 4.46 of the Environmental Planning & Assessment Act.

It is the Company's view that the likely cause for the odour complaints during the first half of 2020 relate to oil storage tanks venting hot vapour to atmosphere. The fish oil is heated to approximately 80 degrees to be pumped out to the storage tanks, the tanks themselves have steam coils which are used to heat the oil when required. However to maintain the integrity of the tanks vents must be used to vacate air when the tank is filled, and allow air to enter the tank as oil is pumped out otherwise the tank walls would implode or explode. Where the previous vents were located were 13 and 7 meters respectively above the ground, this fits both the requirement for the odour to travel being that it is discharged at height and that the nature of the description of odour from the EPA surveys was of a cooked fish nature. With the assistance of GHD we were able to simulate the conditions when the oil tanks were loaded out during June, and with the purchase of a thermographic camera were able to see the vapour exiting the vents on the tanks, giving us confidence this is the likely source. And during the current shut down the tanks have had the vents connected into the rendering facility so they no longer vent to atmosphere.

(ii) rehabilitation or restoration of any disturbed land, and

Comment

The abattoir site comprises an existing industrial complex with a range of industrial buildings. The rendering plant associated with this proposal comprises one of these existing buildings.

In addition, the site includes a range of waste-water treatment dams for the storage and treatment of wastewaters from the site operations as well as range of paddocks use for stock awaiting slaughter.

There is no evidence that areas of the subject site require rehabilitation or restoration works.

The site has existing effluent systems that will be utilised as part of the proposed trial. The SEE is supported by the ProAnd Report which provides an environmental assessment of the proposal on the wastewater management system at the site (**Annexure 2 & 2a**). Overall, this assessment concludes that the proposed fish rendering trial will significantly reduce the environmental impact from waste-water treatment storage and irrigation compared to normal livestock processing

(iii) the number and nature of all past changes and their cumulative effects, and

Comment

It is evident from **Table 25** above, that there has been a range of alterations and additions undertaken to the site over many years.

As detailed above the environmental management performance of the site has been largely controlled through the sites EPL (No. 3889) issued by the EPA. It is evident from **Table 26** above that through the EPL the site has been subject to a history of pollution reduction strategies which have sought to improve the environmental performance of the site operations.

Development consent DA 2019/103 granted by the Cootamundra Gundagai Regional Council issued approval for a short term trial of fish rendering from the site. This fish rendering trial has enabled an assessment to be made whether the plant can process fish in an economically as well as environmentally sustainable manner and which does not significantly impact the amenity of the local area.

This proposal seeks the continuation of the rendering of fish at the subject site on a short term basis. The processing of livestock from the site will still not occur during the fish rendering operations and as soon as livestock processing commences onsite no further fish processing will occur onsite.

This SEE is supported by:

- The GHD Report (**Annexure 1**). This assessment has had the benefit of sampling of emissions by TOU from the site during trial fish rendering activities that have occurred from the site and following improvements that Manildra have implemented across the site. This assessment confirms the proposed fish rendering trial will not increase the environmental impacts of the total development from odours when compared to the livestock processing operations.
- The TF Consultant Report (**Annexure 1a**). This report identifies the process change impact of “low Temp” rendering. While it is a minor change to equipment it uses the existing equipment in a different sequence to have the impact of a 20% reduction in process odour generation, and reduce process energy requirements by 30%.
- The ProAnd Report (**Annexure 2 & 2a**) which is an environmental assessment of how the proposed fish rendering trial will impact upon the wastewater management system and irrigation area. In particular the ProAnd Report provides a comparison between the hydraulic and wastewater loads associated with both the normal livestock processing operations associated with the site and the proposed fish rendering trial. This assessment confirms that the proposed fish rendering trial will have less impact on both the effluent management system as well as the irrigation area when compared to the normal meat livestock processing operations.
- An Environmental Noise Impact Assessment prepared by Benbow Environmental. The noise impact assessment was prepared in relation to an earlier proposal that involved both

the rendering of fish as well as poultry. The rendering of poultry however no longer forms part of the proposal, as the proposal only involves the rendering of fish. The findings and recommendations of this noise impact assessment however still have relevance to this proposal and are included as part of the documents relied upon by the SEE. The noise impact assessment concludes that whilst the processing of off-site feedstock would not occur concurrently with existing meat processing operations, the existing freezers/refrigeration system at the site may operate simultaneously. As a result, the noise impacts from this proposal will be less than the existing operations for both operational noise and offsite road traffic impacts. Furthermore, the noise impacts from the proposed development are predicted to comply with the criteria at all surrounding receptors for all operational and road traffic scenarios.

- A Transport Impact Assessment prepared by Ason Group. As with the Noise Impact Assessment the Transport Impact Assessment was also prepared in relation to the earlier proposal that both the rendering of fish as well as poultry. The rendering of poultry however no longer forms part of the proposal, as the proposal only involves the rendering of fish. The findings and recommendations of this Transport Impact Assessment however still have relevance to this proposal and are included as part of the documents relied upon by the SEE. The Transport Impact Assessment concludes the proposal is supportable with respect to access, traffic and parking, and will have fewer impacts on the local traffic and transport environment than the normal meat processing operations at the site.

(b) *the likely impact of the proposed alterations or additions having regard to factors including:*

(i) *the scale, character or nature of the proposal in relation to the development, and*

7.0 CONCLUSION

The Cootamundra Abattoir situated at Lot 1 DP 611755 Stockinbingal Road Cootamundra contains a multi-species abattoir that processes lamb, cattle and goats, with a capacity of processing 4000 small stock and 200 head of cattle per day.

The site has operated as a livestock processing plant since about 1974. G.M. Scott Pty Ltd previously owned and operated the site prior to its takeover by the Manildra Group in 2014. The Australian Meat Group acquired the site earlier this year (2020) from the Manildra Group.

Historically livestock processing operations have the capacity to employ over 340 people at the site. Due to high livestock prices and the loss of a contract that underpinned its operations, the previous owner, Manildra, shut down livestock processing operations in 2017 resulting in significant loss of employment in the local area.

Although the plant is closed, the site is still subject to considerable on-going expenses in maintaining the site. Staff are required to be retained on the site to ensure the plant is maintained to enable it to operate in the future. In addition, considerable insurance premiums are required to be retained for the site. In the absence of an operating plant, such ongoing expenses are clearly not financially sustainable.

With the purchase of the site in late February 2020 Australian Meat Group is proceeding to complete the previously started developments onsite in relation to the replacement of the beef processing area so that livestock processing can recommence, to enable that development and the retention of existing staff during that 12 month period approval is sort to process fish through the rendering operation until the livestock processing commences, at that point in time no further fish will be processed onsite.

The products derived from processed fish have the potential to produce a range of products including fish meal / oils that may be used in a range food production processes such as for the aquaculture industry (and most notably the salmonoid industry in Tasmania).

Cootamundra Gundagai Regional Council granted development consent (2019/103) on the 11th December 2019 for a three-month trial for the processing of fish in the existing rendering plant on the site. The three-month trial has occurred while the normal livestock processing operations were shut down. The processing of livestock was not be permitted during the fish rendering trial. This fish rendering trial that has been carried out at the Cootamundra Abattoir has demonstrated that:

- the plant and technologies that operate at the site are able to accommodate this alternative feedstock with only minor modifications.
- That such operations are able to accommodate changes in seasons and associated seasonal variations in fish species that are able to be caught and processed.
- The potential environmental impacts associated with such a proposal can be addressed by suitable mitigation measures.
- And through the trial process it has been established the heightened sensitivity any fish related odours induce when compared with previous operations, and what is required to mitigate the odour impacts of the operation moving forward

The ability to introduce an alternative feed stock into the rendering plant, while the normal livestock processing operations are shut down, has the potential to ensure the site is financially viable, and continues to employ about 20 employees onsite and supports a significant number local businesses and contractors through the period of construction onsite.

The development application has been made pursuant to the provisions of Part 2 of Schedule 3 of the Environmental Planning & Assessment (EP&A) Regulations. The SEE demonstrates with adopting the learnings from the trial period, the fish rendering proposal will not significantly increase the environmental impacts of the total development (that is the development together with the additions or alterations) compared with the existing or approved development as required by clause 35 of the Regulations and subject to the matters for consideration as listed under clause 36 of the Regulations.

Approval of this development application will ensure a pathway to ensure that their overall site operations will be able to continue in a sustainable and environmentally acceptable manner into the future.

The existing livestock processing operations are subject to an Environment Protection Licence (EPL) (No. 3889) issued by the Environment Protection Authority under the Protection of the Environment Operations Act for a livestock processing activity involving the 'slaughtering and processing of animals' and 'rendering or fat extraction". Following consultation, the EPA advise that the processing of fish in the existing rendering plant will require the existing EPL to be

reviewed. Under these circumstances the development application will comprise integrated development for the purposes of Section 4.46 of the Environmental Planning & Assessment Act.

This Statement of Environmental Effects (SEE) has been prepared to address the relevant matters for consideration as listed under Section 4.15 of the Environmental Planning & Assessment Act and Part 2 of Schedule 3 of the Environmental Planning & Assessment Regulations. The proposal is considered supportable having regard to the relevant matters for consideration listed under Section 4.15 of the Act and Part 2 of Schedule 3 of the Regulations and merits Council's approval.

Jason Graham
AUSTRALIAN MEAT GROUP PTY LTD

The following is a summary of the findings of the study. The results of the study are presented in the following table. The data show that the incidence of the disease is significantly higher in the group with the highest exposure to the agent. The results are consistent with the hypothesis that the disease is caused by the agent. The study was conducted in a controlled environment and the results are reliable. The findings are of great importance and should be taken into consideration in the future. The study was conducted in a controlled environment and the results are reliable. The findings are of great importance and should be taken into consideration in the future.

TABLE I
SUMMARY OF FINDINGS