PSA CONSULTING AUSTRALIA

PSA Consulting (Australia) Pty Ltd ABN 83 109 836 197
T +61 7 3220 0288 F +61 7 3220 0388 W psaconsult.com.au
O Brisbane (Head Office) L11 / 270 Adelaide Street, Brisbane Qld 4000
P PO Box 10824, Adelaide Street, Brisbane Qld 4000

3 July 2020

Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Ania Dorocinska – ania.dorocinska@planning.nsw.gov.au

Dear Ania,

RE: BAIADA INTEGRATED POULTRY PROCESSING FACILITY (SSD 9394) – RESPONSE TO SUBMISSIONS

I refer to your correspondence dated 2 September 2019 regarding the submissions received by Department of Planning, Industry and Environment (DPE) during the Exhibition Period. A detailed response to each of the submissions has been provided in the attached table.

1. REVISIONS TO THE DEVELOPMENT PLANS

Since lodgement of the EIS and receipt of submissions, the Applicant proceeded with further detailed design and planning of the facility which has resulted an amended the development layout. Plans showing the revised processing plant are included as **Attachment 1** of this response and GFA changes are summarised in **Table 1**.

Table 1: Gross Floor Area Summary

COMPONENT	GFA (m2)	GFA (m2)
Existing Rendering Plant, Boilers and Maintenance Shed	5,482	5,482
Proposed Poultry Processing Plant	30,273	35,145
Proposed Administration, Amenities, Child Care	5,194	3,791
Proposed Ancillary Structures and WWTP	4,343	2,930
TOTAL	**45,292m2**	**47,348m^2**

A brief overview of the proposed changes is provided in Table 1 below. It is important to note that, while the design of the proposed processing plant has bene amended, there is no change to:

- The core objectives of the proposal;
- The production volumes (3 million birds / week and 1,680 tonnes of finished rendering products / week);
- The hours of operation (24 hours, 7 days);
- The number of staff (1176 positions);
- The number of forecast light and heavy vehicle movements and car parking spaces; and
- The access road to the site from Armstrong Street via Workshop Lane.

Table 2: Summary of Design Changes

COMPONENT	PROPOSED AMENDMENTS AND RATIONALE
BUILDING DESIGN AND FUNCTION	• A more compact and efficient building layout with a reduction in total GFA from 47,348m^2 to 45,292m^2. • Improvements to internal processing operations and enhanced food safety outcomes due to increased separation between primary processing and finished products. • Improvements to logistical operations including truck manoeuvring (minimising travel distances and reversing) and worker safety. • Improvements in fire safety design features. • Greater physical separation between the processing operations and the administration building. • Reduced visual prominence to the Oxley Highway. • Staging to ensure existing operations are able to continue during the construction phase.
ADVANCED WASTEWATER TREATMENT PLANT	• Inclusion of an improved Advanced Waste Water Treatment Facility with the ability to recycle up to 90% of the waste water from the processing plant for re-use. • Rendering plant waste water to be treated by the existing WWTP in accordance with additional approvals. • Accelerated evaporation ponds included to reduce the volume of brine by 90% to 80kl/day. • No waste water from the processing plant is to be discharged as trade waste.
CHILDCARE BUILDING	• Increased separation of the child care from processing areas. • Additional internal and outdoor space provided. • Improved access and car parking arrangements for parents.
ADMINISTRATION BUILDING	• More efficient building design with separate entrances to primary processing and finished processing areas. • Greater physical separation between the processing operations and the administration building. • Enhanced landscaping around the administration building.
TRUCK MARSHALLING	• Addition of a truck marshalling area to reduce the risk of internal traffic, enhance traffic control, manage peak periods and provide safe, on-site waiting areas for drivers.
DIRECT ECOLOGICAL IMPACTS	• A reduction in the direct impact on the naturally occurring Box Gum Woodland TEC occurring on the site (0.83 ha to 0.31) has reduced.
LANDSCAPING	• Species from the PCT 599 will used within screen planting to replace the planted vegetation to be removed.
MANAGEMENT AND MITIGATION MEASURES	• In response to the amended design and updated technical assessments, the summary of management and mitigation measures has been updated and is provided in Attachment 12.

2. RESPONSE TO SUBMISSIONS

A detailed response to each of the submissions has been provided in the attached table. This response is also supported by revision to the relevant supporting documents which have been amended in response to the submission and to reflect the revised development plans.

Attachment 1 – Development Plans

Attachment 2 – Landscape Plans

Attachment 3 – Revised Waste Water Treatment Report

Attachment 4 – Windshear and Wake Turbulence Impacts

Attachment 5 – Revised Hazard Assessment

Attachment 6 – Revised Acoustic Report

Attachment 7 – Revised Air Quality Report

Attachment 8 – Revised Stormwater Management Report

Attachment 9 – Revised Biodiversity Development Assessment Report

Attachment 10 – Revised Traffic Impact Assessment

Attachment 11 – Revised CIV Assessment

Attachment 12 – Updated Management and Mitigation Measures

3. SUMMARY

This information provides a detailed response to all items raised in the received submissions. Amendments to the supporting reports and development plans have been made as required. The amendments made in response to the submissions and shown on the attached plans have improved the operations and environmental performance of the proposed processing plant.

The revised material included in this response as well as the submitted Environmental Impact Statement have been prepared in accordance with the requirements of the relevant State and Local statutory planning requirements and consider all relevant impacts of the proposed development. Where impacts have been identified, appropriate management and mitigation measures have been prescribed. Provided that the management and mitigation measures described in this EIS are adhered to, the proposed development is not predicted to result in unacceptable impacts on the receiving environment or local community. Accordingly, the development is recommended for Approval, subject to relevant and reasonable conditions.

If you wish to discuss, please do not hesitate to contact me on telephone number (07) 3220 0288 or email david@psaconsult.com.au.

Regards,

David Ireland
Director - Planning
PSA Consulting (Australia) Pty Ltd

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
V2	3 July 2020	FINAL	NICOLE BOULTON	 DAVID IRELAND

RESPONSE TO SUBMISSIONS

SUBMISSION DETAILS	APPLICANT'S RESPONSE
DEPARTMENT OF PLANNING	
Surrender of consents and approvals 1. *It is requested that you surrender all existing consents and development approvals to consolidate all existing and proposed operations on site into a single consent.*	Upon receipt of the Occupation Certificate and commencement of operations in accordance with a Development Consent, the applicant will surrender all consents which have been superseded.
Child care centre 2. *The EIS states (in Section 4.1.4.4, page 73) that the centre will provide enough indoor and outdoor space to accommodate 62 children (in accordance with requirements of the Education and Care Services National Regulations), please confirm that the intention is to provide capacity for up to 62 children, or whether the proposal seeks to provide for an alternate capacity of children.*	As part of the redesign of the proposed poultry plant, the location of the child care centre has shifted. The child care space has also increased from approximately 260m^2 to 360m^2. Of the 360m^2 of child care space, 80m^2 of this space is proposed to be used for storage, toilets, changing rooms, staff amenities and administration. This will allow approximately 280m2 of indoor child care space for play and learning. The *SEPP (Educational Establishments and Child Care Facilities) 2017* requires compliance with the *Education and Care Services National Regulation* Section 107 for indoor space and section 108 for outdoor space. Section 107 requires 3.25m^2 of unencumbered indoor space per child at the centre and section 108 requires 7m^2 of outdoor space. As a result, the proposed child care centre will be able to accommodate a maximum of 85 children (~3.29m2 / child of indoor space for play and learning). A minimum of 595m^2 of Outdoor play space will also be provided to meet the minimum of 7m^2 / child.
3. *Please confirm the operating hours proposed for the child care centre.*	The Child Care Centre will provide services between (7am – 6pm).
4. *The Department raises concerns with the proposed co-location of the child care centre with the proposed processing facility. Can you please provide examples of developments where similar arrangements have operated successfully.*	Co-location of child care centres in industrial estates are common and provide convenience for parents and guardians working within industrial facilities within the immediate areas. Some recent examples that member of the project team have been involved in include: • Menangle Street Child care, Campbelltown - to be co-located with a car wash. • Wests Cardiff Child Care - co-located with a registered club in an industrial estate.

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	• Broadmeadow child care - located adjacent to a light industrial development within an industrial estate. • Coffs Harbour Child Care - proposed to be located in an industrial estate. • Good Start Early Learning, Murarrie (QLD) – located in the metroplex Industrial estate. While it is acknowledged that co-location on the site of an industrial use is less common, the proposed model is intended to provide convenience to Baiada's workers and provide employment opportunities for people who otherwise may be restricted from joining the workforce. The improve the amenity of the proposed child care centre, it has been relocated to southern side of the building, adjoining the administration building and with greater separation to the live bird shed, processing, truck manoeuvring, and rendering activities on the site. Compliance with the applicable odour and noise requirements is demonstrated in the revised assessments include as **Attachment 6** and **Attachment 4** respectively.
Construction phase 5. *Please provide a timeline for the construction of the development, including any staging if proposed.*	A Preliminary Staging Plan has been prepared by Richard Crookes Constructions and is included in **Attachment 1.** As shown in the plans, the development is expected to be constructed in 3 Stages as follows: 1. Site Compound, Workshop Lane extension, Internal Access Roads connecting to the existing Rendering Plant. 2. Bulk Earthworks, **s**ite preparation, detention basins, perimeter landscaping, screening mounds and planting. 3. Processing Building, car park and roads, office building, maintenance , waste water treatment, plant buildings, evaporation ponds. Depending on the final development schedule, components of each of the above Stages may be taken concurrently.
Transfer of by-products 6. *The EIS states (in Section 2.3, page 34) that by-products generated by the processing facility will be pumped to the rendering plant, please*	A By-Products Transfer Line is shown on the revised Site Plan in **Attachment 1**.

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provide detail on how the by-products will be moved across facilities and what necessary infrastructure will be required for this process.	Blood, Offal and Feathers will be pumped from the processing plant via sealed, pipelines to the rendering plant. Please note that these pipelines may be underground on overhead gantries, subject to detailed design consideration.
National Airports Safeguarding Framework (NASF) 7. *The facility is required to comply with the NASF Guidelines particularly as the facility is proposed to be located within 13 km of the airport. A written report from a consultant who is competent and qualified in assessments for the NASF guidelines should be obtained to satisfy the requirement that the development will not add or enhance hazards to the airport.* *https://www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/framework* *_factsheet.aspx* *An assessment is to be undertaken considering the requirements of Airservices Australia for airspace and air navigation effects, and safety of aircraft as required by the Civil Aviation Safety Authority.*	A Windshear and Wake Turbulence Impacts Report has been prepared by SLR Consulting Australia is included as **Attachment 4**. In relation to wind conditions experienced by aircraft landing from the northwest on Runway 12L, the assessment confirms: • The proposed development will have minimal/negligible impact in relation to the NASF-B mean wind speed deficit criteria, essentially no impact at wind speeds of practical interest. • NASF-B 4 kt turbulence level event exceedances are of the order of once per year with the proposed development – essentially the same as for existing conditions at the airport. This is attributed to the low profile of the proposed development buildings and low probability of occurrence of crosswinds of interest to this study (ie from the NE). Again, the proposed development will have minimal/negligible impact at wind speeds of practical interest on runway turbulence levels. It is noted that the Assessment was undertaken based on the previous building design. However, SLR Consulting were consulted and have confirmed that a revised assessment is not required for the proposed reduction in height / footprint associated with the re-design, noting the following: ***Note Regarding Building Envelope Changes*** *It is understood that the final design of the proposed development is currently being reviewed. Based on extensive studies undertaken by SLR and other Wind Engineering consultancies, the impacts identified in the present study would be an upper bound of expected changes to windshear and wake turbulence if any proposed changes to the development result in a decrease of bulk envelope (especially height-wise) in the main operational building.*
Hazard Assessment 8. *Please confirm the actual gas medium used on site for the rendering plant boiler house and other:* *a) is it natural gas supplied via a pipeline from the gas network?*	Natural gas is currently provided to the site via the reticulated gas supply located in the Oxley Highway road reserve. The internal pipeline runs from the street to the Boiler House at the northern end of the Existing Rendering Plant. However, as a result of the unreliability of current reticulated natural gas

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b) *is it Liquefied Natural Gas (LNG) (as referred to throughout the EIS and as shown on drawing number SK01 Rev 2, dated 20 June 2019) or* c) *is it Liquefied Petroleum Gas (LPG)? And where are the LPG tanks located?*	supply, this is supplemented by LNG which is trucked the site. The LNG is stored within 3 x 80,000L tanks (240,000L) next to the boiler house equating to 122.4 tonnes or 64,8000m^3. A small amount of LPG is used on site for forklift fuel. The forklifts for the existing rendering plant require 3 x 40kg LPG tanks. The forklifts for the future processing plant will require 12 x 40kg LPG tanks. 80% of these will be stored in a secured enclosure inside the live bird shed, for exchange/use in the forklifts used in that area. The remaining 20% will be in the workshop for exchange/use in the general grounds. An amended Hazard Assessment is provided in **Attachment 5.**
9. *Section 4.15 of the EIS refers to LNG, however Table 3.3 of the EIS refers to LPG. Please confirm and show on a site plan the: location, distances from buildings, size and quantity of bulk storage tanks for the dangerous goods Class 2.1 that is currently on site.*	An amended Hazard Assessment is provided in **Attachment 5** which includes a plan showing the location of the relevant storages.
10. *Table 33 of the EIS: 'Indicative Chemical Storage Volumes based on Hanwood Processing Plant' should include and list dangerous goods that will be relevant for the Oakburn Processing Plant.*	An amended Hazard Assessment is provided in **Attachment 5** and lists the dangerous goods that are relevant for the Oakburn Processing Plant.
11. *Is the new processing plant to be built over an existing Gas Supply Valve and underground gas main, refer to approved 20/06/2018 Tamworth Regional Council drawing number 17426-CAL Rev 7 for the Baiada Oakburn Rendering Plant? If not, please indicate relocation of gas line and gas supply valve.*	As outlined above, natural gas is supplied via the reticulated gas network located in the Oxley Highway road reserve. The internal pipeline runs from the street to the Boiler House at the northern end of the Existing Rendering Plant. As part of this proposed development, this private connection will be relocated. Reticulated gas and other services will be accommodated in an underground service corridor, which is proposed along the eastern property boundary. The corridor will then turn west and run between the proposed processing building and the existing rendering plant providing necessary connections to the various components of the operation. In additional to the gas, the corridor will contain the mains water supply, HV power, data cables, sewer connection etc. The final location of this corridor will be confirmed as part of the detailed design and construction certificate process.
12. *Please confirm the quantities listed in Table 33 of the EIS for Ammonia Anhydrous, Class 2.3 in particular those pertaining to the enclosed refrigeration systems. The EIS states 1,200L each with a conversion to*	There was a typographic error in Table 33. The weight of anhydrous ammonia has been amended to 0.82T.

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0.0009T which may be an error and may need to be corrected. To assess the aggregate storage of anhydrous ammonia for the processing facility, please provide further detail regarding the enclosed refrigeration systems, and whether they are separate systems or part of one unit.	Ammonia fuelled appliances will be positioned thought out the facility, located specifically refrigeration plant (primary and secondary) two air chillers, the distribution chiller and freezer areas with pipe work connecting the appliances to these plant rooms. An amended Hazard Assessment is provided in **Attachment 5** which includes a plan showing the location of the relevant storages.
Biodiversity & Conservation Division – NSW Planning, Industry & Environment	
Aboriginal cultural heritage *BCD note that a search of the Aboriginal Heritage Information Management System (AHIMS) recorded three Aboriginal sites within the boundary of the project area and a further six sites in close proximity. The three sites within the project area were stone artefacts that were removed for analysis in 1998 under a consent permit.* *The cultural heritage assessment for the proposal found no Aboriginal heritage sites or objects on the development site.*	A Cultural Heritage Assessment has been undertaken by Everick Heritage Consultants to support the proposed new processing plant at Oakburn. The methods used for this assessment comply with the Office of Environment and Heritage (OEH) 'Code of Practice for Archaeological Investigation of Aboriginal objects in New South Wales' (2010) and the relevant legislation. As identified within the submitted EIS, there were no items or sites of Indigenous cultural heritage or historic heritage found during the site inspection. No items or places of potential historic heritage significates were located within the Project Area and as such, it was deemed that an historic cultural heritage significance assessment was not warranted. Regardless, the assessment provided a number of recommendations for the management of cultural heritage (if encountered) during construction of the processing plant, which will be implemented.
Biodiversity offset *The Biodiversity Development Assessment Report (BDAR) has been prepared in accordance with the Biodiversity Assessment Method.* *The proposed facility would require clearing of a total of 1.34 hectares of Blakely's Red Gum – Yellow Box grassy tall woodland on flats and hills in the Brigalow Belt South Bioregion and Nandewar Bioregion (PCT 599). Two condition states for PCT 599 were identified:* 1. *Remnant patches – a total of 0.83 hectares would be impacted by the proposal. This community conforms to the threatened ecological community (TEC) White Box – Yellow Box – Blakely's Red Gum.* 2. *Planted trees – a total of 0.51 hectares would be impacted by the proposal. This community does not conform to the TEC.*	In response to the revised design, an amended Biodiversity Development Assessment Report (BDAR) has been prepared. The revised BDAR is attached in **Attachment 9.** The revised development plans will have a direct impact on: • Approximately 0.31ha of the 1.19 ha of the Box Gum Woodland TEC; and • Approximately 0.68 ha of the 1.45ha of the planted natives (screening buffer) on the site. The remaining ~0.88 ha and ~0.77 ha, respectively, will be retained on site. As shown in the following Table, the direct impacts on the TEC been reduced as a result of the revised building footprint, while there has been a slightly greater

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The BDAR concludes that the proposal will generate an offset credit requirement of 20 ecosystem credits. *Targeted surveys for all but three species credit species have been conducted, with no threatened species being recorded on the site. Three species have been discounted; Regent Honeyeater and Swift Parrot only generate species credits if the site is within a mapped important area, and Glossy Black-Cockatoo requires feed trees to be present on the site. This is in accordance with the BAM. As a result, no species credits were generated for the project.* *The BDAR and environmental impact statement identify that ecosystem offsets are required. While both documents state that a suite of PCTs other than PCT 599 could be utilised to offset this PCT under the offset rules, there is no offset strategy presented for the proposal.* ***Recommendation*** *The proponent is required to offset 20 ecosystem credits of PCT 599 in accordance with the Biodiversity Conservation Act 2016.*	impact on the native screening buffer vegetation which was planted by the Applicant in 2011. | | Previous design | Current design | | --- | --- | --- | | Impact on Box Gum Woodland TEC | 0.83 ha of Box Gum Woodland TEC | 0.31 ha of Box Gum Woodland TEC | | Impact on Planted Natives | 0.51 ha of the 1.45 ha Planted Natives | 0.68 ha of the ~1.45 ha of the Planted Natives | As a result of the removal of native vegetation, offsets are required to be paid in the form of ecosystem credits. The revised BDAR assessment indicates that the development requires a total of 15 ecosystem credits for PCT 599. A suite of other PCTs could be utilised to offset this PCT under the offset rules. The BDAR confirms that 10 of the 15 ecosystems credits are triggered due to removal of the vegetation that has been planted by Baiada in 2011. Five (5) of the credits are due to the removal of the naturally occurring vegetation. Since the first version of the BDAR was prepared, the new Biodiversity Offsets Payment Calculator has been released by the NSW Department of Planning, Industry and Environment. Despite the reduced impact on the naturally occurring Box Gum Woodland TEC, as a result of the new Biodiversity Offsets Payment Calculator the offsets which are payable have increased. The BDAR states "*It is noted that DPIE published a revised version of the BAM that was on public exhibition until 16 October 2019, which included a module to assess planted native vegetation. Application of this module to the planted vegetation within the subject land would result in the vegetation being assessed for species credits only (i.e. no calculation of ecosystem credits). As the revised version of the BAM is not finalised, this BDAR has been based on the current advice for planted vegetation, which is to assign to a best-fit PCT. The consent authority may waive the requirement for offsetting the planted native vegetation based on this future adjustment, which would be deemed appropriate in this case and should be considered.*" As shown on the attached Landscape Plans (**Attachment 2**), the screening buffer is to be replaced with a new planted buffer also using vegetation species

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	commensurate with PCT 599. As the vegetation was planted as part of a private initiative by Baiada and will be effectively replaced, it is considered unreasonable that offsets would apply to its removal and we request that DPIE waive the requirement for offsetting for this component.
Landscaping *The EIS states that significant landscaping is proposed to be implemented. This will consist of formal plantings and gardens in and around the processing plant and screening vegetation along access roads, internal manoeuvring areas and along the Oxley Highway frontage.* *The landscaping concept plan (appendix 5) shows an intent to landscape with exotic and non-indigenous species. BCD recommends that species used for landscaping and screening be commensurate with PCT 599 and be germinated from locally sourced seed.* ***Recommendation*** *Plant species used for landscaping and screening be commensurate with PCT 599 and be germinated from locally sourced seed.*	As shown on the attached Landscape Plans (**Attachment 2**), the screening buffer is to be replaced with a new planted buffer also using vegetation species commensurate with PCT 599.
Borg Manufacturing	
As a landowner in the vicinity of the proposed development we have no objections to the proposal and support the increased economic activity in the Tamworth region. We would like to be kept informed about the progression of the SSD.	Noted.
CASA Aviation Group Submission	
The proponent has, in accordance with the advice provided on 20 August 2018, considered the information included in the National Airports Safeguarding Framework. *CASA has reviewed Section 3.2, Section 3.3.1 and Section 4.18 of the Environmental Impact Statement.* *Section 4.18 (Table 35) includes an Assessment against the National Airports Safety Framework Guidelines.*	Noted. See below responses.

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Guideline A *– CASA has no regulatory responsibilities regarding aircraft noise. Noise issues are a matter for the Tamworth Regional Council and Airservices Australia.*	Noted. Noise issues and their management have been addressed in the EIS.
Guideline B *– Managing the Risk of Building Generated Windshear and Turbulence at Airports. The Site Plan shows that the Processing Plant is approximately 310m from the centreline of Runway 12L/32R. The EIS assessment refers to the Obstacle Limitation Surfaces and concludes that no buildings which would create unsafe windshear or turbulence impacts are proposed. The conclusion is erroneous as the criteria in Guideline B are independent of the Obstacle Limitation Surfaces. Buildings that are under the OLS can cause wind effects (as described in Guideline B para 88). The Guideline B wind effects assessment criteria are the 1:35 rule (paras 15 and 54) and the rectangular 'assessment trigger area' (para 49). It is noted that a Wind Rose was provided in the EIS and the prevailing winds are from the South East.*	A Windshear and Wake Turbulence Impacts Report has been prepared by SLR Consulting Australia is included as **Attachment 4**. In relation to wind conditions experienced by aircraft landing from the northwest on Runway 12L, the assessment confirms: • The proposed development will have minimal/negligible impact in relation to the NASF-B mean wind speed deficit criteria, essentially no impact at wind speeds of practical interest. • NASF-B 4 kt turbulence level event exceedances are of the order of once per year with the proposed development – essentially the same as for existing conditions at the airport. This is attributed to the low profile of the proposed development buildings and low probability of occurrence of crosswinds of interest to this study (ie from the NE). Again, the proposed development will have minimal/negligible impact at wind speeds of practical interest on runway turbulence levels.
Guideline C *– Managing the Risk of Wildlife Strikes in the Vicinity of Airports. CASA notes the advice provided by the Tamworth Regional Council in Section 3.2 of the EIS under 'ODOUR AND BIRD ATTRACTANT'. CASA notes that the EIS advises that "there are no product, by-products or wastes stored externally on the site in a manner that would attract birds and other wildlife". It is assumed that 'product' includes feed. It is important that bird feed is contained and there is no exposed feed. The EIS assessment also advises: "While the clear wells are not expected to result in significant risks to aircraft operations, they can be covered with bird netting if requested by CASA". The clear wells should be wildlife monitored as part of a site wide monitoring program. CASA recommends that the decision whether to net the clear wells be referred to the Aerodrome Operator (Tamworth Regional Council). The Aerodrome Operator would have better local (wildlife) knowledge and situational awareness than CASA. If it is decided not to net the clear wells, and it turns out that the clear wells attract birds, the decision should be reviewed. Advice on monitoring of wildlife (and management of wildlife) can be found in CASA Advisory Circular AC 139-26 (0) 'WILDLIFE HAZARD*	The proposed development does not involve production or use of bird feeds on the site. As outlined in the EIS, the no product, by-products or wastes are stored externally on the site in a manner that would attract birds. The clear wells / evaporation ponds proposed on site can be covered with bird netting if considered necessary.

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MANAGEMENT AT AERODROMES' https://www.casa.gov.au/files/139c26pdf. The Advisory Circular includes the advice: *'Operators of Certified Aerodromes are required to monitor and record the presence of wildlife on or in the vicinity of the aerodrome. Where this monitoring confirms the existence of a wildlife hazard, the aerodrome operator must develop a WHMP' (Wildlife Hazard Management Plan). Wildlife monitoring will involve collaboration between the proponent and the Aerodrome Operator.*	
***Guideline E** – Managing the Risk of Distractions to Pilots from Lighting in the Vicinity of Airports. The assessment should include reference to compliance with the CASA Manual of Standards Part 139 Section 9.21 'Lighting in the Vicinity of Aerodromes'. The proposed facility should comply with Section 9.21. Also, it is preferable, within reason, that roofing materials (including solar panels if they are installed) should be non-reflective.*	Noted. The subject site is not located within areas A, B, C or D on the Maximum Lighting intensities from the CASA Standards, although it is within 6km of the runway. As the facility will operate 24 hours a day, lighting will be required, both internally within the building and externally within the car park and truck manoeuvring areas. No lasers, searchlights, or high intensity lights are proposed. All external lights are able to be appropriately designed and implemented in accordance with the *CASA Manual of Standards Part 139 Section 9.21 'Lighting in the Vicinity of Aerodromes'* and can be conditioned accordingly. Roofing materials including solar panels (if installed) will be non-reflective and again can be conditioned accordingly.
***Guideline F** – Managing the Risk of Intrusions into the Protected Airspace of Airports has been addressed. However, the reference to windshear or turbulence impacts in this section is extraneous. Most of the buildings that other aerodromes have assessed for wind effects, have been under the OLS.*	A Windshear and Wake Turbulence Impacts Report has been prepared by SLR Consulting Australia is included as **Attachment 4**. In relation to wind conditions experienced by aircraft landing from the northwest on Runway 12L, the assessment confirms: • The proposed development will have minimal/negligible impact in relation to the NASF-B mean wind speed deficit criteria, essentially no impact at wind speeds of practical interest. • NASF-B 4 kt turbulence level event exceedances are of the order of once per year with the proposed development – essentially the same as for existing conditions at the airport. This is attributed to the low profile of the proposed development buildings and low probability of occurrence of crosswinds of interest to this study (ie from the NE).

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	Again, the proposed development will have minimal/negligible impact at wind speeds of practical interest on runway turbulence levels.
***Guideline G** – Protecting Aviation Facilities – Communication, Navigation and Surveillance has been addressed. However, the reference to the Obstacle Limitation Surfaces is irrelevant. Guideline H – Protecting Strategically Important Helicopter Landing Sites has been addressed.* *Note that CASA could not open the Appendix 8 Consultation Report or Appendix 3 Development Plans on the web page.*	Noted.
DPI Advice	
DPI advises that this proposal appears likely to have potential implications for food safety and biosecurity from the recycled wastewater generated from the poultry processing facility and has the following comments.	See responses below.
Compliance and Integrity Systems (Food Safety) *In relation to the food safety components of these operations, all water used in the production of food for human consumption must be potable. This standard would need to be supported by mandated testing requirements, for both town supplied water and water treated/recycled by the facility to be compliant.*	All water used in the production of food products on site (including reticulated and recycled supply) is potable. A revised Waste Water Treatment Report is included as **Attachment 3** which demonstrates the advance waste water treatment system to be used to recycle water to a potable standard. As outlined in the report, the system will be tested to ensure that the water for re-use within the facility meets the necessary food safety standards.
NSW Food Authority *In the absence of the Hunter & New England Health comments, and further to comments made by Compliance and Integrity Systems:* • *NSW Food Authority supports in principle the development of water saving technologies* • *The operation of the water recycling plant must be included in the site's food safety program,* • *Baiada must confirm that the recycled water will be suitable if proposed to be used in the spin wash and spin chill stages of the Oakburn plant's process.*	A revised Waste Water Treatment Report is included as **Attachment 3** which demonstrates the advance waste water treatment system to be used to recycle water to a potable standard. This system will be designed to meet and exceed the re-use water quality standards including the log reduction values (LVR) of pathogens, as laid out in: • NSW Food Authority – Water Reuse Guideline – May 2008 • NSW Government – Management of private recycle water schemes – May 2008 • NSW Department of Primary Industries – Recycled Water Management Systems – May 2015

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	• Australian Government – NHMRC – NRMMC – Australian Drinking Water Guidelines 6 - 2011 The operation and management of the Advanced Water Treatment Plant will be included in the food safety program developed for the site.
Animal Biosecurity *There are a number of notifiable bacteria and viruses in poultry that can be isolated from the respiratory excretions, faeces or organs of affected birds. These include highly pathogenic avian influenza virus, virulent Newcastle Disease virus, Salmonella enteritidis, Salmonella gallinarum and Salmonella pullorum. Many of the notifiable diseases of poultry in NSW have zoonotic potential and can potentially be spread to humans via contaminated poultry products.* *DPI strongly recommends that the proponent address the risk of spreading the causative agents of notifiable diseases of poultry through the use of the proposed wastewater treatments at the planned Baiada Oakburn Poultry Processing Facility.* 1. *Will the processing plant be producing poultry meat for human consumption? If so, what is the maximum risk vs the residual risk of spreading zoonotic pathogens to human consumers?* 2. *Will the recycled water be used to wash poultry transport vehicles? If so, what is the maximum risk vs residual risk of contaminating these vehicles and spreading notifiable pathogens to farms where broiler chickens are grown?*	A revised Waste Water Treatment Report is included as **Attachment 3** which demonstrates the advance waste water treatment system to be used to recycle water to a potable standard. This system will be designed to meet and exceed the re-use water quality standards including the log reduction values (LVR) of pathogens, as laid out in: • NSW Food Authority – Water Reuse Guideline – May 2008 • NSW Government – Management of private recycle water schemes – May 2008 • NSW Department of Primary Industries – Recycled Water Management Systems – May 2015 • Australian Government – NHMRC – NRMMC – Australian Drinking Water Guidelines 6 - 2011 The operation and management of the Advanced Water Treatment Plant will be included in the food safety program developed for the site. As the recycled water will be treated to a potable standard, will meet or exceed the standards identified above, the water is also considered suitable for washing of poultry transport vehicles.
NSW EPA	

SUBMISSION DETAILS	APPLICANT'S RESPONSE
1. NOISE IMPACT ASSESSMENT *The EPA has reviewed the noise assessment provided with the EIS documents on the planning portal (https://www.planningportal.nsw.gov.au/major-projects/project/10536) for the Baiada Oakburn Poultry Processing Facility, SSD9394. The acoustic report included in the EIS generally addresses the SEARs noise requirements for the application.* ***However, further information is required from the applicant before we can recommend conditions.***	A revised Noise Impact Assessment has been prepared and is attached as **Attachment 6**. A response is provided to the matters raised below.
• *Additional information is needed on the background noise monitoring. Noise logger graphs for each location and a description of the existing ambient noise environment at each monitoring location is needed for the EPA to complete its assessment. Demonstration that noise measurement and the derivations of rating background levels (RBL) have been collected and calculated in accordance with the Noise Policy for Industry (NPfI) is also required.*	Section 2.2 of the Acoustic Report has been amended to clarify the logger locations. The Acoustic Report confirms the above background (L90) noise levels (i.e. those in Table 2.2 of the report) "*are below the minimum assumed RBL's specified in Table 2.1 of the NPfI. Therefore, for the assessment purposes, the minimum RBL's have been adopted in all receiver areas for assessment purposes, i.e. 35dB(A),L90 for day (7am-6pm) and 30dB(A) for the evening and night (6pm-10pm and 10pm-7am).*"
• *Additional information is needed on the calculation methodology presented for the adverse meteorological conditions in Section 3.1.3 of the acoustic report to validate the noise model assumptions and outcomes. The assessment was undertaken under adverse weather conditions stipulated in the (superseded) Industrial Noise Policy. However, the procedure described in Fact Sheet D of the NPfI should be applied, and information provided to evaluate whether predictions made using the NPfI methods would result in different predicted noise level outcomes compared to those presented in the acoustic report.*	As outlined in Section 3.1.3 of the Revised Acoustic Report, calculations of the adverse meteorological conditions have been undertaken in in accordance with the NPfI.
• *Clarification is required on how Equation 2 within the acoustic report (Section 3.1.2) has been incorporated into the ENM model. Equation 2 contains a standard correction for distance loss, however the EPA expects this algorithm is applied by the ENM model. If source noise levels have been included into a model that already includes a distance*	Equation 2 has been deleted from the revised Acoustic Report. The revised report confirms that *"All noise sources at the site were input into our model as point sources using the point calculation mode to determine the noise level at each receiver".*

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loss correction, then predicted noise levels at the residential receiver locations may be underestimated.	
• *The acoustic report has not considered the possibility of tonal aspects from the mechanical plant and equipment which has the potential to add a 5 dBA penalty to the noise level at the receiver. If tonal characteristics are present this would likely result in non-compliance with the Project Noise Trigger Levels at most locations during the evening and night periods. As such, any potential tonal or low frequency adjustments must be made addressed in accordance with Fact Sheet C of the NPfI.*	Section 2.3.5 if the revised report presents the tonality criteria from the NPfi. Section 3.4.2 of the revised report concludes that "*Noise emissions at the nearest receivers are not expected to contain any significant tonal components, in accordance with the requirements of Fact Sheet C of the NPfI. No further adjustments or penalties are therefore required for noise predictions at residential receivers*".
• *The report makes no reference to Section 3.4.5 of the NPfI "Noise mitigation for the night-time collection of poultry". The proponent is requested to take this into account as appropriate/applicable.*	Section 3.4.5 of the NPfI, relates to the night time collection of poultry on the farm. As such, this is not relevant for the delivery of poultry to the processing plant.
• *The vibration aspects of both the operation and construction of the development have not been included as required under SEARs. However, given the distance of the development to the nearest affected receiver locations this is unlikely to be an issue.*	As noted in the submitted EIS, given the distance from the development to the nearest affected receiver, the submission of vibration assessment is not considered necessary for this project.
2. WATER IMPACT ASSESSMENT ***<u>Process Effluent Management</u>*** *There are no proposed operational process discharges to water as 75% of the water treatment plant effluent will be reused within the plant and Baiada is negotiating a discharge to sewer through a trade waste agreement for the brine stream. The treatment process includes a Waste Water Treatment Plant (WWTP) and an Advanced Water Treatment Plant, including filtration and low-pressure Reverse Osmosis (RO). The system will be designed to meet and exceed the relevant industrial re-use water quality standards which are not regulated by the EPA.* *A RO concentrate stream will be produced. This stream will have a high concentration of dissolved salts and is intended to be discharged to the municipal sewer where it will be shandied with other reticulated sewer and treated water at the Westdale Sewer Treatment Plant (STP). This discharge is proposed to be subject to a Trade Waste Agreement (TWA) with Tamworth Regional Council.*	The Advanced Wastewater Treatment Plan (AWTP) has been redesigned and is documented in the revised Waste Water Treatment Report included as **Attachment 3.** As well making 90% of the water suitable for re-use on site, the AWTP will also negate the need to discharge trade waste to Council's wastewater treatment plant. Following the treatment process, the AWTP will generate a concentrated brine stream which is held on site in accelerated evaporation ponds, before being dried out and periodically taken offsite to a licensed disposal facility. Efforts will be made to mine the remaining material for minerals as the technology becomes available. The advanced waste water system and evaporation ponds are shown on the revised development plans included as **Attachment 1.**

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The EIS states that the applicant has met with Council with respect to the terms of the TWA who have advised that, while having concerns with receiving inflows with a higher than normal concentration of dissolved salts, the Council is committed to working with Baiada on a workable solution. The Environmental Impact Statement (EIS) notes that Baiada is researching the use of peracetic acid as an alternative to chlorination which may reduce the TDS in the concentrated stream. *It is noted that if a TWA is accepted there are some potential risks, including:* • *saline wastewater can damage STP assets and affect the treatment process* • *salinity is generally not effectively treated in STPs and any increased salinity in STP effluent could impact receiving waters or reduce potential for reuse.* *If a TWA is not in place there would be a waste stream requiring management with limited options due to its high salinity, e.g. disposal as crystallised salt which would require an additional treatment step and an appropriately designed landfill. These potential risks should be considered as part of the development assessment process.* ***It is recommended that the fate of brine waste stream is considered as part of the development assessment process.***	
<u>Pond Linings</u> *The EIS indicates there will be adequate liners for processing and treatment systems used on site such as the Covered Anaerobic Lagoons. It is noted that part of the WWTP is currently under construction as Baiada has recently obtained consent from Council for construction of that part of the plant. This part of the plant consists of the series of Sequence Batch Reactors, Coverer Anaerobic Lagoons and maturation ponds which is aimed at improving the quality of the existing wastewater generated by the rendering plant.* ***The proponent needs to confirm the adequacy of liners for processing and treatment systems for both the existing and proposed development.***	The Advanced Wastewater Treatment Plan (AWTP) has been redesigned and is documented in the revised Waste Water Treatment Report included as **Attachment 3.** The revised waste water treatment will see all wastewater from the rendering facility treated separately at the existing wastewater treatment plant which is operational, and has been designed to accommodate additional volumes requested in this EIS. Treated wastewater from the rendering plant wastewater treatment plant will continue to be discharged to sewer in accordance with a trade waste agreement with Council. Water from the proposed processing plant will be treated by the AWTP treat 90% of the water to a potable standard, suitable for re-use within the processing plant. The AWTP will also negate the need for additional SBR and CAL Lagoons to be constructed on site.

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	Following the treatment process, the AWTP will generate a concentrated brine stream which is held on site in accelerated evaporation ponds, before being dried out and periodically taken offsite to a licensed disposal facility. Three 10,000 m2 evaporation lagoons, with a minimum depth of 1.5m are proposed to be constructed on site to accommodate the concentrated brine discharged from the AWTP. The ponds will include a minimum freeboard of 500mm in order to accommodate the 7-day RDRD (rare design rainfall depth) for a 1 in 2000-year event, of approximately 480mm. The ponds will require raised banks to avoid ingress of stormwaters which fall outside the pond footprint. The ponds will be lined with HDP Plastic or clay to ensure that no leakage occurs. With respect to the adequacy of the liners, Australia does not have specific standards which need to be met. The Applicant's preferred supplier uses industry GRI-GM Standards from the United States of America. The supplier is also an active member of the "International Association of Geosynthetic Installers (IAGI) which means that they follow the GRI-GM standards. The supplier ensures that for all Baiada projects, the relevant materials are subject to on-site destructive testing and off site independent testing through an approved NATA laboratory. The advanced waste water system and evaporation ponds are shown on the revised development plans included as **Attachment 1.** Further details are provided in the revised Waste Water Treatment Report included as **Attachment 3.**
WTP Sludge Management *It is unclear how sludge not returned to the treatment process will be managed.* ***The proponent needs to identify and described management measures of any sludge that is not returned into the treatment process.***	Sludge from the DAF and Membrane bioreactor will be dewatered and collected on site before being transported in a sealed trailer (daily) for composting at a licensed facility. At full operation, it is estimated the sludge produced will be approximately 40 Tonnes (1 -2 truck loads) per day.
Stormwater and Discharges to Waters *Stormwater risks are limited to construction stage erosion and sediment control and then general site runoff from rooves, car parks, access roads, surrounds and truck wash. These activities (except for the truck wash, see below) should be able to be managed with standard stormwater management techniques. It appears that live bird receivals are indoors and therefore bird handling should not affect*	Noted. It is correct that the live birds will be unloaded inside the plant and as such will not affect stormwater quality. A Revised Stormwater Management Report has been prepared and is included as **Attachment 8**.

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stormwater quality. The EIS states that unloading of live birds will occur on the western side of the building with the facilities designed for trucks to reverse and deliver live bird modules before processing occurs.	
Truck wash *The EIS states that if car or truck washing occurs on site it will be within a bunded area where surfactants will be captured and treated prior to discharging into the stormwater network. There are no details provided on the extent or type of truck wash facilities.* *The proponent needs to clarify whether the insides of trucks, that may contain feathers and manure, will be washed and treated in a system that discharges offsite.*	As shown on the Revised Plans included as **Attachment 1**, there are 2 Truck Washes proposed as part of this development. **1. Live bird trailer washing** The truck wash is located within the Live Bird Receival area where trucks will be washed using high pressure hot water to remove remnant, dirt and manure. The run off from this activity will be directed to trade waste treatment via screens and baskets to collect larger debris. The large debris will collected on site before disposal to a licensed facility. The washdown water will be directed to the advanced waste water treatment plant. **2. Distribution** This activity will take place within a building at the entrance to the Distribution Area. The washing activity will be limited to the internals of the refrigerated vans using primarily high pressure hot water, followed by a detergent and surfactant to sanitise the surfaces. Any run off will be collected by a floor drain, screened to catch large debris. The large debris will collected on site before disposal to a licensed facility. The washdown water will be directed to the advanced waste water treatment plant.
3. AIR QUALITY IMPACT ASSESSMENT ***Analysis of issues*** *The EPA has reviewed the Air Quality Report: Odour Impact Assessment (AQR1) submitted for the proposal as Appendix 9 of the Environmental Impact Statement (EIS2). There is insufficient information in the AQR to assess the odour impacts from the proposed facility based on the proposed bird capacity and operating hours.* *The AQR provides a quantitative assessment of predicted odour impact utilising CALPUFF. The odour assessment includes odour from the proposed upgraded waste water treatment plant, the poultry processing facility (PPF) and the existing protein recovery plant (PRP) but does not include odour from the existing poultry farms.*	A revised Air Quality Impact Assessment, including an Odour Management Plan has been prepared by The Odour Unit and is included as **Attachment 7**. The revised Odour Impact Assessment addresses the cumulative odour effects of the proposed Poultry Processing Facility, existing Protein Recovery Plant and Waste Water Treatment Plant. It is important to note "*In TOU's experience, multiple odour plumes of distinctly different odour characters do not combine in the atmosphere and tend to be observed as individually identifiable odour characters in the field, even well downwind of the sources. Furthermore, treated odour emissions from an effective biofilter remove almost all process odour, having an earthy, vegetative odour character. In TOU's opinion, odour impacts from biofilters and other proven odour control systems should be modelled as a non-cumulative impact.*

SUBMISSION DETAILS	**APPLICANT'S RESPONSE**
The AQR includes adequate worst-case emission scenarios for the waste water treatment plant (WWTP) -assuming daytime filling for sequencing batch reactor (SBR)- but not for the PPF and PRP. *The odour at the childcare centre exceeds the project impact assessment criteria (IAC) for 24-hour operation. During day time operation (6am-6pm) of the childcare centre, odour is not predicted to exceed the IAC. Mitigation strategies (carbon filters, landscaping and remaining indoors at night) are suggested but not proposed.* *The AQR does not include an air quality assessment for the boilers at the PRP, including an assessment of meeting the Clean Air Regulations emission limits.* ***The following issues need to be addressed by the proponent to enable to EPA to complete its assessment.***	*Cumulative odour effects from the proposed PPF with three poultry farms located to the northwest have been considered in the form of a sensitivity test."*
PPF Live Bird Ventilation Emission Rate Factors are not Adequately Explained and Justified *The proposal is seeking to increase the maximum processing for the PPF from 1 million birds/week to 3 million birds/week (~430,000 birds/day). The proposal is also seeking approval for operation of all aspects of the site facility 24 hours/day, 7 days/week with no restrictions. The existing Out Street facility is licenced for 120,000 birds/day. The PPF live bird storage ventilation ducts (AQR1 section 2.1.1.2) were modelled using an odour emission factor of 0.35 OU/m2/s (measured at the Out Street facility) and a ventilation rate of 900,000 m3/h based on a maximum capacity of 90,000 birds (present 2am – 9pm).* *The odour emission inventory for the live bird storage ventilation ducts is based on data from a facility licenced for 120,000 birds/day. As the proposal is seeking to process ~430,000 birds/day, it is unclear if the assumed odour emission rate for live bird ventilation adequately reflects the proposal.* ***The AQR needs to be revised to include information on:*** • ***Actual maximum live bird storage capacity at proposed PPF*** • ***Duration live birds are present at the proposed PPF and*** • ***Justification for using a ventilation rate based on 90,000 birds when the proposed PPF will process 3 million birds/week.***	Section 3.1.2 of the revised OIA Report addresses Live bird reception ventilation and has assumed: • Maximum live bird reception capacity is 90,000 birds per hour and not exceeded in any modelled hour of the day. • Actual numbers are likely to be lower and fluctuate as trucks arrive and birds are processed. • Birds are to be present between 1am to 9pm. Three million birds a week equates to approximately 21,500 birds per hour over 20 hours per day, seven days per week. Therefore, a ventilation rate based upon a peak capacity of 90,000 birds is considered conservative and worst-case under normal operations.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
1 Baiada Poultry Pty. Ltd. Proposed Poultry Processing Facility Odour Impact Assessment, Final Report, June 2019, The Odour Unit *2 Environmental Impact Statement, Oakburn Poultry Processing Plant – Tamworth NSW, July 2019, PSA Consulting Australia*	
PPF live bird ventilation worst-case scenario not based on maximum bird processing *A worst-case scenario was performed by multiplying the live bird emission factor by three. It is unclear why this scenario was considered worst-case. A factor of three does not account for the greater capacity at Oakburn compared to the Out Street facility.* *The worst-case scenario provided in the AQR is inadequate as it does not account for the greater capacity at Oakburn compared to Out Street. Further, the worst-case scenario was not included in the cumulative odour emissions modelling (Figure 3.1).* ***The AQR needs to be revised to include:*** • ***a scenario which reflects the proposed maximum bird capacity of the PPF and include this scenario in the cumulative odour assessment and*** • ***a descriptive and justified analysis of the worst-case scenario of odour emissions for the live bird storage facility. This worst-case scenario should then be modelled and included in a cumulative odour assessment.***	Section 3.1.2 of the revised Odour Impact Assessment Report addresses Live bird reception ventilation. The Odour Impact Assessment was intended to demonstrate the effectiveness of vertical dispersion of odour through mechanical ventilation by applying a nominal multiplication factor to the emission rates as a form of sensitivity test and abnormal worst-case scenario to provide further confidence in the recommended mitigation measures. The worst case scenario under normal operations has been addressed through the assumption of 90,000 birds within the live bird receiving area.
PPF Ventilation rate not representative of proposed facility processing capacity *The ventilation rate for the PPF Ventilation Ducts (section 2.1.1.3) was based on nominally increasing the value measured at another poultry processing facility (Baiada Hanwood) by 50%. There is no justification of how this nominal increase of 50 % relates to the capacity of the two facilities.* ***The AQR needs to be revised to provide realistic and justified ventilation rates for the proposed PPF ventilation ducts.***	Section 3.1.3 of the revised Odour Impact Assessment Report addresses PPF ventilation. PPF ventilation rates have been revised by multiplying the volume of each process room by a nominal 15 air changes per hour. The discharge odour concentration used was the mean measured value of 220 ou based upon measurements from the Hanwood Processing Plant roof vents. Discharge points have increased from 6 to 17 in the modelling, some that ventilate rooms with negligible odour in practice but have been included for conservatism to address inherent uncertainties.

SUBMISSION DETAILS	**APPLICANT'S RESPONSE**
PRP impact assessment of air impurity emissions from boilers not included in AQIA *The proposal includes an additional boiler for the PRP2. The AQR does not include any information about emissions from the existing and proposed boilers at the PRP facility and whether the additional boiler has been included as either an existing or proposed upgraded source as part of the assessment of the facility.* ***The AQR needs to be revised to include an air quality impact assessment for the existing and proposed boilers at the PRP. This is to include information about both the existing and proposed boilers at the PRP such as:*** • ***Size of boiler*** • ***Fuel type*** • ***Emissions performance*** • ***Compliance with the POEO (Clean Air) Regulation 2010, Group 6 emission standards***	Section 2.5 of the Odour Impact Assessment Report addresses the potential for air quality impact from boilers. Two compliant existing 10 megawatt and one compliant 15 megawatt natural gas fired boilers will be employed. Any new boiler acquired for the new processing will also be natural gas fired, sized similarly and will comply with POEO (Clean Air) Regulation 2010, Group 6 emissions standards.
PRP facility increased production assessment *The proposal is seeking to increase the production rate from an average of 160 tonnes/day to a maximum of 240 tonnes/day. The AQR is unclear if this increased production has been accounted for in the assessment and if it will be achieved through increased operating hours and/or increased throughput. The odour emissions from the PRP have been modelled in the AQR based on 24 hours/7 days a week operation:* *"As a conservative measure, the theoretical maximum production rates have been used (i.e. 24 hours, 7 days per week)." (Section 2.1.3.1)* *However, these operating hours are not likely to be conservative, but are actual operating hours if this is how the proposed increase in production is to be achieved.* *Possible errors in the emission inventory have been identified and include:* 1. *Table 2.4 Low Temperature – Storage odour emission rates (84 OU.m3/s) do not match test data provided in Appendix B (page 43 of AQR) which shows 100 OU.m3/s*	The volume sources from the Protein Recovery Plant are addressed in section 3.3.1 of the revised Odour Impact Assessment. The revised report has deleted the phrase "as a conservative measure…" and has revised table 3.4 (previously table 2.4). A more realistic OER estimate and justification for the raw materials loading bay has been provided consistent with measurements and observations made by TOU in August 2018 reflecting the excellent odour capture at the Protein Recovery Plant. The former estimate represented a highly conservative approach to the loading bay with consideration to superseded reports by MWH.

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2. *Table 2.4 Raw Materials/Loading Bay peak emission rates (10,493 OU.m3/s) do not match the table in Appendix C which shows 25,169 OU.m3/s* *Additionally, a sampling report is not provided for raw materials received at the PRP.* ***The AQR needs to be revised to provide more information on how the PRP facility will achieve the maximum processing capacity and the operating hours for the PRP. The odour emission modelling of odour impacts must be revised, if necessary, to include the maximum processing capacity and the correct odour emission rates for the loading bay and low temperature storage.***	
Odour criteria has not been determined properly *The AQR has not adequately demonstrated that is has used the correct odour assessment criteria for the potential affected population, including the childcare centre and Tamworth Regional Airport.* ***The AQR needs to be revised to include a 2 OU contour. The odour assessment criteria must then be based on the population within that 2 OU contour, including maximum capacity of the childcare centre. The maximum capacity of the Tamworth Regional Airport should be considered if it falls within the 2 OU contour.***	The Odour Impact Assessment addresses the procedure prescribed by NSW EPA during the notification phase of the proposed Poultry Processing Facility development to calculate the Odour Impact Assessment Criteria has been considered in section 5.1 of the Odour Impact Assessment Report.
Cumulative odour effects from poultry farm not included in odour assessment *The AQR has not considered or included the odour from the poultry farms located to the north-west of the proposed development (Figure 1.1). The cumulative effect of the odour resulting from the existing poultry farms and the proposed poultry processing facility may result in a cumulative odour impact over the IAC of 5 OU at a sensitive receptor located between the two sites.* ***The AQR needs to be revised to include a cumulative odour assessment of the proposal and all poultry facilities in the vicinity of sensitive receptors.***	The cumulative odour effects from the proposed Poultry Processing Facility have been considered, along with the cumulative odour effects from the three poultry farms along Bowlers Lane in the form of a sensitivity test. The prediction of cumulative effects shown in Figure 5.2 of the Odour Impact Assessment is almost certainly overstated as it considers all Oakburn sources including treated odours (e.g. biofilter) and odours of different characters (e.g. rendering, wastewater, etc) that do not combine in the atmosphere and tend to be observed as individually identifiable odour characters in the field. A more realistic analysis more in line with TOU's expectation of odour impact risk would consider the cumulative effect of the poultry farm (orange) contour with the Live Bird Reception (dashed yellow) contour that has a similar live bird odour character.

SUBMISSION DETAILS	**APPLICANT'S RESPONSE**
Childcare centre operational hours and odour exceedance *A child care centre on site for children of staff is included in the proposal. The AQR demonstrates the odour impact assessment criteria adopted for this proposal (5 OU) is predicted to be exceeded for a 24-hour operation (7.8 OU, 99 %, P/M60). The AQR considers a 12-hour operation (6am – 6pm) which eliminates odours resulting from poor dispersion during night-time condition and predicts the odour concentration at the childcare centre is below the odour impact assessment criteria (4.7 OU, 99 %, P/M60). Further mitigation strategies that could be considered are proposed to reduce odour at the childcare centre. These mitigation strategies include activated carbon filters, boundary landscaping and keeping the children indoors during adverse odour events.* ***The proponent needs to clarify the actual hours of operation of the childcare facility. If the childcare centre will be operational for 24 hours, as the proposed facility is seeking 24 hour/7 days a week operation, then the odour exceeds the criteria. The AQR must then be revised to incorporate mitigation strategies to reduce odour over the full operational hours of the childcare centre.***	The Child Care Centre is addressed in section 4.2.9 and 5.2. For the ancillary child care centre, both 24 hours per day operation and 14 hours per day operation (nominally from 5am to 7pm) were considered. The actual child care operating hours will be 7am-6pm.The results shown in Table 5.1 consider recommended odour risk reduction as part of an Odour Management Plan, which is not quantifiable by odour dispersion modelling. The following will be adopted as part of the Odour Management Plan with respect to the on-site child care centre: - *Adaption of a hybrid high efficiency particulate air and carbon filter system to protect the indoor airspace environment of the child care activities during atypical or upset conditions. During normal operating conditions, odour impact risks are very unlikely under the odour management protocol adopted for the PPF operations; and* - *Vegetative landscaping for the outdoor areas to provide a level of screening attenuation and visual disconnection for the PPF operations.*
Clarification of time period for SBR filling *The AQR states "The results show that the predicted odour impact for Stage Two upgraded WWTP is below the NSW EPA odour IAC under the assumption that SBR night-time filling would be avoided" (page 35). While the EIS repeats this in section 4.7.4 (page 100), it also states in section 5 Management and Mitigation Measures Table 36 (page 122) "Filling of the SBR is to be programmed to take place outside of daylight hours where practical."* ***The time period for the SBR filling should be clarified between the AQR and EIS as this would impact the odour assessment of the WWTP.***	The SBR filling time period is noted in section 3.2.1, which states "*The proposed phasing of the SBR cycles was modelled under the assumption that filling during night time hours would be avoided. As a worst case scenario, the SBR was set at the fill emission rate for daytime hours between 8am and 5pm with the aeration and settling emission rates set overnight*".
Name Withheld	
I object to the proposed development on the following grounds; 1. ***Odour**. This proposed development will produce offensive and annoying odours. If the odours that are currently produced by Baiada's rendering plant*	A revised Air Quality Impact Assessment, including an Odour Management Plan has been prepared by The Odour Unit and is included as **Attachment 7**.

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that operates on this site are any indication, it certainly doesn't bode well for the odours that will be produced by this processing facility. *Everybody that drives along the Oxley Highway past the proposed development site can tell you how much the rendering plant stinks. This pungent smell is certainly not a very nice welcome or good bye to the travelling public using the Oxley Highway when they visit Tamworth.*	The subject site is located within a livestock and food processing hub identified by Council for the purpose of locating businesses such as poultry production at the edge of Tamworth. The EIS is supported by an Odour Impact Assessment which has identified the addition of the Poultry Processing Facility modelled along shows the predicted odour impact does not largely exceed the NSW EPA odour criteria of 5 odour units beyond the site boundary. The results are below the odour criteria at the nearest sensitive receptor and that the proposed Poultry Processing Facility is unlikely to cause adverse odour impacts under normal conditions within the assumptions made. Furthermore, the modelling is almost certainly overstated as it considers all proposed and existing odour sources including treated odours and odours of different characters that do not combine in the atmosphere and tend to be observed individually.
2. ***Visual Impact**. This very large structure will have a significant visual impact on the local area. This massive unattractive building will be the first or last impression the travelling public using the Oxley Highway will have of Tamworth.* *Not only will the road users be visually impacted by this development all people flying in and out of Tamworth via the airport will be impacted.* *The operators of the airport would also be concerned about the height (26 metres) of the proposed development.*	The subject site is located within an established food processing hub, which has been identified by Council as an industry that is to be supported and encouraged. As such, the construction of a large processing plant in the site is consistent with community expectations for development on the site. The existing rendering plant is a high quality industrial food processing facility and presents as a neat, clean and modern industrial site. The visual form of the proposed processing plan will adopt a similar style and quality as it and will present as a modern industrial building, with a modern administration centre at the front of the building. While the site will present as high quality, modern building to the surrounding public vantage points, significant landscaping and screening vegetation has also been utilised to soften built form and add visual interest to the site. The visual impact of the processing plant be most prominent from the Oxley Highway, which is not a pedestrianised environment and the traffic utilising this road travels at 100km/hr. Views of the facility will be broken up by the proposed landscaping treatments, including buffering vegetation along the site boundary. Based on the maximum height of the processing plant and the distance from the highway, screening trees with a height of ~5m will screen the vast majority of the elevation to ensure the building will not dominate the landscape. As such, the proposed building is not expected to have an unacceptable impact in terms of visual impacts.

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	A Revised Landscape Plan has been prepared and is included as **Attachment 2**. It is noted the screening vegetation will utilise species consistent with the Box Gum Woodland TEC to ensure the planting provide visual and ecological benefits to the site. A Windshear and Wake Turbulence Impacts Report has been prepared by SLR Consulting Australia is included as **Attachment 4**. In relation to wind conditions experienced by aircraft landing from the northwest on Runway 12L, the assessment confirms: • The proposed development will have minimal/negligible impact in relation to the NASF-B mean wind speed deficit criteria, essentially no impact at wind speeds of practical interest. • NASF-B 4 kt turbulence level event exceedances are of the order of once per year with the proposed development – essentially the same as for existing conditions at the airport. This is attributed to the low profile of the proposed development buildings and low probability of occurrence of crosswinds of interest to this study (ie from the NE). Again, the proposed development will have minimal/negligible impact at wind speeds of practical interest on runway turbulence levels.
3. ***Water**. The availability of water is very limited, where will this development source its water. There is not enough water to meet the demands of this development. Tamworth is currently looking down the barrel of going onto level 5 water restrictions due to the present drought. Tamworth is currently growing and needs to be able to guarantee a continued supply of water for residential use and future residential expansion.*	Based on current estimates, at full operation, the Oakburn processing plant will consume up to 8ML of potable water per processing day. As the processing plant will result in closure of operations at Out Street, the overall increase in potable water demand will be approximately 6ML per processing day. Recognising sustainability, climate change, seasonal variability and the development's dependence on potable water, Baiada is proposing to use advanced water treatment technology to treat the wastewater and allow up to 90% to be re-used by the facility. This will mean that the overall water use at the facility will be approximately 800KL per processing day which is less than the existing processing plant.
4. ***Flow on effects**. This development if approved will have very significant adverse impacts on the Tamworth region. The EIS prepared by the proponent states that the processing facility will need an additional 300 broiler sheds (Section 4.11.7) to supply the plant once it is operational. In addition to this*	The proposed development will aim to meet not only future, but existing increases in poultry production in the region as a result of growth in demand for poultry meat products in Australia. In addition to this, the proposed development is intended to centralise Baiada's Tamworth poultry slaughtering and processing operations onto a single, integrated and efficient site, which

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one would assume that there will also be a large number of parent and breeder sheds needed to supply the meat chicks to the broiler farms. *The very large number of sheds needed to supply this processing plant is going to have a very significant detrimental impact on the Tamworth region. The day to day lives of a very large number of people is going to be impacted by all these poultry sheds that will be constructed in the region.* *In addition to new sheds it also expected that the existing poultry farms in the Tamworth area will be expanding and ramping up production to meet the requirements of the proposed processing facility. This will further impact the day to day lives of the existing residents of the area.*	includes the ultimate decommissioning of the current Out Street Processing Facility in Tamworth's town centre. Any further development of poultry operations within the Tamworth Region would be subject to the legislative requirements and provisions under NSW's planning legislation, the *Environmental Planning and Assessment Act 1979*. Potential impacts associated with these developments would be assessed as part of the relevant assessment processes, prior to approvals being issued.

Some of the issues that will occur as a result of the massive expansion in the number of poultry sheds in the Tamworth region needed to supply the proposed processing facility at Oakburn are as follows; • ***Odour**. It is well known and documented that the main reason for complaints about poultry farms is in relation to the odour they produce and emit. Every year the Environmental Protection Authority receives a large number of complaints about poultry farms in relation to odour issues. The poultry industry itself openly admits that it is simply unworkable to expect a chicken farming operation to operate with no offensive odours.* • ***Visual Impacts**. The visual amenity that the existing residents of the area currently have and enjoy will be lost forever when all these sheds are built. The rural views of traditional grazing and cropping areas will be replaced by a large number of unsightly factory farms.* • ***Water**. Water is a very scarce and valuable resource. Poultry farms need water, any new farms and increased demand for water at existing poultry farms will take water and water entitlements away from the existing traditional farming operations. It is very doubtful if the water supply needs of so many proposed new poultry sheds and farms could be met.* • ***Traffic**. If all the sheds needed are constructed there is going to be a very significant increase in the amount of traffic (mostly heavy vehicles) on the regions roads. Some of the local roads in the region are not up to a good enough standard to carry the large volumes of heavy traffic that all these poultry farms will generate. The local residents who use these roads will be greatly impacted by all this additional heavy traffic.* • ***Noise**. The people who have the misfortune to live close to these poultry farms and those people with homes along the haulage routes of the trucks servicing these farms are going to be greatly impacted by the large amount of noise produced by these farms. Broiler farms are a 24 hour a day operation so there will be no respite from the noise that is produced by these farms. Even the poultry industry itself admits that it is simply unworkable to expect a chicken farming operation to operate with no noise.* • ***Dust**. The dust (particulate matter) that will be produced by all these poultry farms will have a detrimental effect on the air quality of the local area. The adjoining properties to these poultry developments will be impacted the most. The cumulative impacts of odour and dust produced by all these poultry farm*	Any further development of poultry operations within the Tamworth Region would be subject to the legislative requirements and provisions under NSW's planning legislation, the *Environmental Planning and Assessment Act 1979*. Potential impacts associated with these developments would be assessed as part of the relevant assessment processes, prior to approvals being issued.

developments will have a very significant detrimental effect on the region's air quality.

- ***Health Impacts**. The quality of life of the region's population will be impacted by all these poultry developments. Local residents will have to breathe in the air contaminated by the offensive odours and dust produced by all these developments on a daily basis. Scientific studies have shown that Air Pollution produced by odour and dust can have serious health impacts such as heart attacks and increased rates of asthma. Local residents will be impacted by the noise that these developments produce, and as a result will suffer from sleep disturbance.*
- ***Lights**. The people who live in close proximity to poultry farms or live along the haulage routes that service these farms will be subjected a significant amount of headlight intrusion as a result of the large increase in the volume of traffic coming and going to the farms at night.*
- ***Property Devaluations**. The adjoining landowners to these poultry developments (some of which will be very large operations) will have the value of their properties significantly impacted as a result of the adverse impacts these developments will have on them. People with properties along the haulage routes to and from these developments will potentially have the value of their properties adversely impacted.*
- ***Land Use Conflict**. It is well known and documented that the poultry industry causes land use conflicts. The impacts of odour, dust, traffic, noise, visual amenity and property devaluations are the main forms of conflict. Every year the Environmental Protection Authority receives a large number of complaints about poultry farms, especially in relation to odour issues. The Department of Primary Industries advises that land use conflict arising from odour from the poultry industry is a significant issue that has the potential to inflame community tensions.*

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• ***Biosecurity Risk**. This very large concentration of poultry developments in the region has the potential to be a major biosecurity risk. Should there be a pollution incident or a contamination issue at any of the poultry developments in the area the entire region could be impacted. With all the vehicle movements to and from the poultry developments on a daily basis there is a very high risk of the spread of disease and pests. All these vehicle movements have the potential to carry with them and spread diseases, insect pests and invasive weeds.*	Baiada adheres to best practice biosecurity to prevent the introduction and dissemination of disease. Maintaining meat chickens and breeding flocks in sound health, and free of disease is required to achieve good animal welfare outcomes as well as optimal performance and productivity. Therefore, maintaining biosecurity is fundamental to the success of the business. For this reason, Baiada's Policies, Standards, farm infrastructure requirements and all operational activities are underpinned by a solid understanding of the biosecurity risks and the measures that need to be consistently implemented and monitored to ensure risks are appropriately mitigated. Biosecurity practices are in accordance with the *National Farm Biosecurity Manual for Chicken Growers* and Baiada's *National Quarantine Policy* and *National Animal Welfare and Biosecurity Manual*. Implementing the requirements outlined in the meat chicken industry's Manual is contractually enforced on all farms raising chickens for Baiada. Routine farm visits by Baiada personnel and a rigorous internal biosecurity auditing program ensures that compliance is optimal at all times. Furthermore, the vertically integrated nature of the business enables biosecurity and disease prevention strategies to be managed and implemented through-chain with close attention to the management and health status of each farm and facility within the operation. Baiada employs a team of people who are responsible for visiting farms on a regular basis throughout each batch and are competent at assessing farm management and the health status of meat chicken and breeder flocks. All farms are required to record daily mortality and monitor a range of other parameters that provide a detailed assessment of flock health, management and performance. If set trigger levels are exceeded, the reporting system generates an automatic alert and sends this to the Baiada representative responsible for supervising the farm. This system, in addition to proactive reporting by farm personnel, enables timely investigation to occur in the event of any mild increase in mortality. Regular training in biosecurity, signs of ill-health and farm management is provided by Baiada and third party certified. The Tamworth region also has a full-time poultry veterinarian who is also responsible for routinely visiting farms and assessing the health status of flocks. The focus of a poultry veterinarian is on disease prevention rather than disease investigation. The veterinarian is responsible for developing the vaccination

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	program for the region, monitoring response to vaccination and reviewing quarantine and biosecurity protocols. In the event of any flock health or biosecurity issues, the veterinarian develops a tailored response plan and thoroughly monitors the implementation of this plan. Furthermore, the majority of diseases affecting meat chickens are species specific. They do not pose a risk to the health of other livestock species or humans. Therefore, if there was a disease outbreak affecting meat chickens was to occur, this would affect the operation of Baiada's business in the region primarily. In this circumstance, it would be in the best interests of Baiada to minimise the risk and prevent the spread. Therefore, ensuring optimal preventative quarantine and biosecurity procedures are in place to prevent such an outbreak is considered critical. Baiada has set trigger levels and indicators for determining when exotic or emergency disease investigation must occur. This protocol would enable rapid and early detection and subsequent on-farm flock depopulation to minimise the risk to farms in the surrounding area. A detailed biosecurity prevention strategy and documented movement protocols are outlined in Baiada's *National Animal Welfare and Biosecurity Manual*. Waterfowl and wild bird risk mitigation procedures also form part of this plan. Chlorination of surface water used for drinking and cooling systems is strictly monitored with automatic alerts generated for any daily readings that do not meet stipulated minimum requirements. With respect to insect pests, the only risk would be posed by flies. This is not considered to be a significant issue on poultry farms relative to other livestock farms. Fly populations can be successfully managed. Poultry lice, fleas and mites are very rarely ever encountered on commercial farms. Again, these poultry parasites are species specific and can be identified and treated on farm if they are identified at any stage. Rodent control is routine on all poultry farms with logs kept of rodent activity and bait replenishment. Dead bird disposal protocols, including the requirement for freezers for storage prior to regular collection, ensure that flies and other pest species are kept to a minimum and farm hygiene is optimal. Furthermore, chicken meat and chicken meat breeder farms are operated as all-in-all-out facilities with full depopulation, cleaning and disinfection occurring between flocks. Strict

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	protocols around cleaning and disinfection between flocks minimises the risk of carryover of pathogens and maintains the health status of farms in the region. Baiada's biosecurity, hygiene, management and health monitoring protocols are sophisticated and are in accordance with industry best practice. They are developed by a veterinary team and monitored by Baiada veterinarians and livestock personnel. The systems that are in place are designed to safeguard animal welfare, performance and productivity and ensure the success of the business into the future.
• ***Environmental Concerns**. What are the **potential** environmental ramifications as a result of all these poultry developments? Every poultry development within the region has the potential to have a pollution incident or a contamination issue, what effects would this have on the local environment? There is potential for the local streams and rivers being polluted by these developments as well as the air pollution these developments will emit on a daily basis.*	Any further development of poultry operations within the Tamworth Region would be subject to the legislative requirements and provisions under NSW's planning legislation, the *Environmental Planning and Assessment Act 1979*. Potential impacts associated with these developments would be assessed as part of the relevant assessment processes, prior to approvals being issued.
There has been considerable concern and opposition expressed towards proposed large scale broiler farms in the region. *Baiada has development approval for a 70 shed broiler farm on the property known as "Strathfield", Namoi River Road, Manilla. This development proposal caused considerable angst in the local community, and its approval was challenged in the Land and Environment Court. It was ultimately approved with stringent conditions.* *Another major poultry development has been proposed at Rushes Creek (SSD 7704). This development has yet to be determined by the Department of Planning. The proponents of this development are having difficulty in meeting the requirements of the NSW Environment and Protection Authority and the NSW Department of Primary Industries. There is also considerable local opposition to this development proposal.*	Any further development of poultry operations within the Tamworth Region would be subject to the legislative requirements and provisions under NSW's planning legislation, the *Environmental Planning and Assessment Act 1979*. Potential impacts associated with these developments would be assessed as part of the relevant assessment processes, prior to approvals being issued.
NRAR & Water Response	

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DPIE – Water and Natural Resources Access Regulator ***Pre-approval Recommendations*** *It is recommended that, as part of the EIS, the proponent should:* • *Develop a groundwater monitoring plan to manage the risk of leakage from the lagoons and resulting contamination.*	The Advanced Wastewater Treatment Plan (AWTP) has been redesigned and is documented in the revised Waste Water Treatment Report included as **Attachment 3.** The revised waste water treatment plans will see all wastewater from the rendering facility treated separately at the existing wastewater treatment plant which is operational, and has been designed to accommodate additional volumes requested in this EIS. Operation and monitoring of the existing waste water treatment ponds will continue in accordance with existing approval requirements. The AWTP which will treat the waste water from the proposed processing plant no longer requires additional SBR / CAL ponds to be constructed. Following the treatment process, the AWTP will generate a concentrated brine stream which is held on site in accelerated evaporation ponds, before being dried out and periodically taken offsite to a licensed disposal facility. Three 10,000 m2 evaporation lagoons, with a minimum depth of 1.5m are proposed to be constructed on site to accommodate the concentrated brine discharged from the AWTP. The ponds will include a minimum freeboard of 500mm in order to accommodate the 7-day RDRD (rare design rainfall depth) for a 1 in 2000-year event, of approximately 480mm. The ponds will require raised banks to avoid ingress of stormwaters which fall outside the pond footprint. The ponds will be lined with HDP Plastic or clay to ensure that no leakage occurs. The advanced waste water system and evaporation ponds are shown on the revised development plans included as **Attachment 1.** Further details are provided in the revised Waste Water Treatment Report included as **Attachment 3.** No groundwater will be used within the processing plant.
• *Include a map of surrounding bores and borehole logs to support the findings on groundwater (as determined in the EIS).*	The Contaminated Site Assessment provides the commentary within the EIS with respect to groundwater. The onsite groundwater bore log is included as an Appendix 3 of that report. The location of the onsite groundwater bore is Latitude 31º04'05.3"S and Longitude 150º50'21.1"E.

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• *Confirm the maximum annual water volumes to be accessed and the proposed water sources. Confirm the ability to access this volume e.g. via agreement with council or via purchase of water entitlement if groundwater is proposed.* ○ *If groundwater is required, the proponent will need to assess impacts of any proposed bore on the water source and adjacent users.* • *Provide confirmation by the water supply authority that the volume of water required for the proposal is adequately serviced at the proposed location.*	Based on current estimates, at full operation, the Oakburn processing plant will consume up to 8ML of potable water per processing day. As the processing plant will result in closure of operations at Out Street, the overall increase in potable water demand will be approximately 6ML per processing day. Recognising sustainability, climate change, seasonal variability and the development's dependence on potable water, Baiada is proposing to use advanced water treatment technology to treat the wastewater and allow up to 90% to be re-used by the facility. This will mean that the overall water use at the facility will be approximately 800KL per processing day which is less than the existing processing plant. Water will initially be sourced from Tamworth Regional Council's potable water supply (up to 8ML). However, with the operation of the Advanced Water Treatment Plant, 100% of the water will be treated and approximately 90% (7.2ML) will be treated to a potable standard and will be reused within the processing plant. As such, overall the water consumption of the facility will be less than the existing water usage at the Out Street facility. No groundwater will be used by the processing plant.
• *Reassess the storm water rainfall runoff model using the complete rainfall record.*	A revised Stormwater Management Plan is provided as **Attachment 8**. The rainfall model that runs from 1958-1992 relates to the MUSIC modelling for stormwater treatment analysis, and not the detention assessment. The rainfall station at Tamworth Airport only has pluviograph rainfall data from 1958-1992 which is why this time period was selected for modelling purposes. The use of this rainfall station for the MUSIC modelling for the development was agreed with Council officers as part of the Stage 1 development. The detention basins are sized based on the site rainfall intensities under ARR1987.
Water Source and Retention *It is noted that based on current estimates at full operation, the proposed Oakburn Processing Plant will consume up to 8ML per day. It is noted within the EIS, that the existing Out Street plant uses 2ML per day (which will be closed) which results in a net increase in potable water demand of 6ML per day. Given*	Water will initially be sourced from Tamworth Regional Council's potable water supply (up to 8ML). However, with the operation of the Advanced Water Treatment Plant, 100% of the water will be treated and approximately 90% (7.2ML) will be treated to a potable standard and will be reused within the

SUBMISSION DETAILS	APPLICANT'S RESPONSE
the proposed Advanced Water Treatment Plant, the overall water make-up requirement is expected to be 2ML per day. The source and security of this volume is yet to be confirmed. *The size of the storm water retention basins do not appear to be large enough to contain all the storm water in a 1:100 year event. The model run from 16 August 1958 to 31 December 1992 is not sufficient. It does not include the storm event of 29/11/2008 where 164.2 mm of rain fell in one 24 hr period. The model appears to have only used the rainfall station that closed in 1992 and did not include the new station that commenced in 1993.* *The proposed ponds for stormwater detention on minor streams are considered exempt from harvestable rights calculations, provided they are solely to prevent the contamination of a water source. If this is not the case the dams must be considered in calculating the Maximum Harvestable Right Dam Capacity.*	processing plant. As such, overall the water consumption of the facility will be less than the existing water usage at the Out Street facility. The stormwater basins are for detention, not retention, and will completely drain following storm events. The rainfall model that runs from 1958-1992 relates to the MUSIC modelling for stormwater treatment analysis, and not the detention assessment. The rainfall station at Tamworth Airport only has pluviograph rainfall data from 1958-1992 which is why this time period was selected for modelling purposes. The use of this rainfall station for the MUSIC modelling was agreed with Council officers as part of the Stage 1 development. The detention basins are sized based on the site rainfall intensities under ARR1987. It is confirmed that the proposed stormwater detention basins are solely to prevent the contamination of a water source, and therefore exempt from harvestable rights calculations.
Groundwater Monitoring *The proposal will not be extracting groundwater as part of its water requirements. Water will be sourced from the town water supply and a treatment plant shall return 75% of the water used back to the plant for reuse. The proposed treatment plant will be installing two Covered Anaerobic Lagoons to a depth of about six metres below the surface. Monitoring bores will be required to determine if the lagoons leak. Groundwater monitoring bores and a groundwater monitoring plan have not been considered in the EIS.*	The Advanced Wastewater Treatment Plan (AWTP) has been redesigned and is documented in the revised Waste Water Treatment Report included as **Attachment 3.** The revised waste water treatment will see all wastewater from the rendering facility treated separately at the existing wastewater treatment plant which is operational, and has been designed to accommodate additional volumes requested in this EIS. Operation and monitoring of the existing waste water treatment ponds will continue in accordance with existing approval requirements. The AWTP which will treat the waste water from the proposed processing plant no longer requires additional SBR / CAL ponds to be constructed. Following the treatment process, the AWTP will generate a concentrated brine stream which is held on site in accelerated evaporation ponds, before being dried out and periodically taken offsite to a licensed disposal facility. Three 10,000 m2 evaporation lagoons, with a minimum depth of 1.5m are proposed to be constructed on site to accommodate the concentrated brine discharged from the AWTP. The ponds will include a minimum freeboard of 500mm in order to accommodate the 7-day RDRD (rare design rainfall depth)

SUBMISSION DETAILS	APPLICANT'S RESPONSE
	for a 1 in 2000-year event, of approximately 480mm. The ponds will require raised banks to avoid ingress of stormwaters which fall outside the pond footprint. The ponds will be lined with HDP Plastic or clay to ensure that no leakage occurs. The advanced waste water system and evaporation ponds are shown on the revised development plans included as **Attachment 1.** Further details are provided in the revised Waste Water Treatment Report included as **Attachment 3.** No groundwater will be used within the processing plant.
Post-approval Recommendations *Should the project be approved, the following is recommended:* • *Preparation of an erosion and sediment control plan which refers to the guidelines, Managing Urban Stormwater: Soils and Construction (Landcom 2004) to manage sediment loads during the construction period.* • *Groundwater monitoring bores be installed around the Covered Anaerobic Lagoons and a Water Management Plan be developed (in consultation with DPIE) as a condition of consent. Further detail is contained in Attachment A. This should also include:* a. *An incident response plan with triggers for the National Water Quality Management Strategy (NWQMS) guidelines (ANZECC/ARMCANZ latest issue) should the lagoons be found to be leaking.* b. *Revision of the size of the retention basins if the reassessment of the storm water rainfall runoff model shows that they are not large enough.* c. *Undertaking adequate groundwater sampling (e.g. including routine and event based).* d. *Scheduling of ongoing reporting in the plan.*	These recommendations can be included as conditions of approval.
NSW Health	
It is noted that the proponents intend to consider "a concept design for a Wastewater Treatment Plant (WWTP) followed by Advanced Water Treatment Plant (AWTP) on the proposed site.	A revised Waste Water Treatment Report is included as **Attachment 3** which demonstrates the advance waste water treatment system to be used to recycle water to a potable standard.

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The system is designed based on the staged production and processing up to 3 million birds per week. • *Based on current estimates and processing technology, the facility will require up to 8 million litres of potable water per day.* • *The Advanced Water Treatment Plant is designed to treat up to 8 million litres of water per day and allow recovery of up to 6 million litres (75%) for reuse.* • *Reuse of wastewater will have a significant impact on the water supply.* • *The AWTP will generate a concentrate stream produced by the final process stages of disinfection and salt reduction.* • *The Total Dissolved Solids (TDS) concentration at maximum recovery of water (i.e. 75%) will be approximately 5500mg/L, which at the maximum design flow (8 ML/day), equates to 11,000 kg TDS per day in 2ML of water.* • *The TDS mass discharged from the site will be same regardless of the flow treated in the AWTP.* • *The advanced water treatment plant (AWTP) process has been operating successfully at two poultry processing plants in Australia for over 10 years. We would recommend the proponent address the following issues in particular:* *Hunter New England Local Health District Population Health recommends that the proponents adhere to, amongst other relevant legislation and guidelines, the Australian Guidelines for Water Recycling: Managing Health and Environment Risks (Phase 1).* *System analysis and management;* 1. *Assessment of the recycled water system* 2. *Preventative measures for recycled water management* 3. *Operational procedures and process control* 4. *Verification of recycled water quality and environmental performance* 5. *Management of incidents and emergencies* *These guidelines set out a preventative risk-based approach to managing health and environmental risks associated with water recycling. The approach involves systematically assessing where and how hazards or hazardous events may arise*	This system will be designed to meet and exceed the re-use water quality standards including the log reduction values (LVR) of pathogens, as laid out in: • NSW Food Authority – Water Reuse Guideline – May 2008 • NSW Government – Management of private recycle water schemes – May 2008 • NSW Department of Primary Industries – Recycled Water Management Systems – May 2015 • Australian Government – NHMRC – NRMMC – Australian Drinking Water Guidelines 6 - 2011 The operation and management of the Advanced Water Treatment Plant will be included in the food safety program developed for the entire processing plant site. Furthermore, Critical Control Points for the processing plant will ne critical limits set. During operation of the AWTP, the proponent will undertake operational monitoring and corrections, calibrations and operation and maintenance. Prior to use of recycled water, the AWTP, will be operational for 12 weeks generating potable water supply for validation and testing. The initial start-up phase will consist of the following: **Week 1 –** Pre-validation **Week 2 –** Initial validation stage 1 **Weeks 3-6 –** Initial validation stage 2 **Weeks 7-11 –** Further validation **Week 12** – HACCP Verification and ongoing The water quality will exceed guidelines stipulated by NSW Food Authority and ADWG using a multi-barrier approach. The system and framework implemented from concept through operation will comply with *NSW Food Authority Water Reuse Guideline 2008*. The development of a comprehensive food safety program for the site (including the AWTP) will be prepared and approved by the relevant food safety authorities prior to commencement of operations and can be conditioned accordingly.

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and find their way to the point of use and how to protect consumers and the environment. *Recycled water comes from an inherently unsafe source, sewage, therefore prevention is an essential feature of effective recycled water quality management. Preventative measures, in the context of managing recycled water schemes, are the actions, activities and processes used to prevent significant hazards from being present in recycled water schemes or to reduce any hazards to acceptable levels.* *The identification and planning of preventive measures should always be based on system specific hazard identification and risk assessment, to ensure that the level of protection to control a hazard is proportional to the associated risk. When identifying existing preventative measures, or developing new measures, the following aspects must be considered:* • *The entire recycled water system, including the water source, its characteristics and proposed end uses;* • *Existing preventive measures, from source(s) to the user of recycled water, for each significant hazard or hazardous event;* • *Increased risk due to inadvertent or unauthorised actions;* • *Spatial aspects (these need to be considered when identifying preventive measures for environmental risks, because the sensitivity of receiving environments can vary over space);* • *Areas where the use or discharge of recycled water is not appropriate, due to, for example, environmental sensitivity or soil type or topography.* *Maximum risk (the risk with no preventive measures in place) and residual risk (the risk with the preventive measures in place) should be assessed for public health and environmental impacts e.g. assessment of harmful nutrient, salinity or sodicity build-up in any resource impacted by recycled water use and how this will be prevented, monitored and/or rectified.* *The risk assessment should identify actions for improvement such as introducing or enhancing preventive measures, as well as investigations to reduce uncertainties and further characterise risks. Actions identified in the risk assessment should be transferred to the Improvement Plan, prioritised and followed up.*	

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The outcomes of the Risk Assessment should be prepared in a report that must include: – *Listing of the team involved in the risk assessment;* – *A process flow diagram and description of the recycled water scheme (from source to end use) identifying the critical control points and monitoring points;* – *A risk register.* *As the proposed development will recycle wastewater generated from the poultry processing plant, there may be potential implications for food safety and biosecurity. NSW Health strongly recommends that DPIE Major Projects seek input on these risks from the Department of Primary Industries.*	
NSW Rural Fire Service	
The NSW RFS has received and reviewed the Environmental Impact Statement (EIS) and understands the development proposal is for an Integrated Poultry Processing Plant. *The subject land is not mapped bush fire prone land by Tamworth Regional Council.* *The NSW RFS has no objection and no recommendations for any consent granted.*	Noted.
NSW Roads & Maritime Services	
Roles and responsibilities *The key interests for Roads and Maritime are the safety and efficiency of the road network, traffic management, the integrity of infrastructure assets and the integration of land use and transport.* *It is noted that the subject land has frontage to the Oxley Highway, and that roads accessing the site will intersect with that road. The Oxley Highway is a classified (State) road under the Roads Act 1993 (Roads Act). Tamworth Regional Council (Council) is the roads authority for all public roads (other than freeways or Crown roads) in the local government area pursuant to Section 7 of the Roads Act.*	Noted.

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Roads and Maritime can exercise roads authority functions for classified roads in accordance with the Roads Act. Any proposed works on a classified (State) road will require the consent of Roads and Maritime and consent is provided under the terms of a Works Authorisation Deed (WAD). *In accordance with the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP), the Consent Authority is to be satisfied that the development is appropriately located and designed or includes measures to ameliorate traffic noise or vehicle emissions within the site of the development arising front he adjacent classified road. The proposed use meets the triggers contained in Schedule 3 of the ISEPP, and as such clauses 101 and 104 of the ISEPP apply.* ***Comments*** *Roads and Maritime has reviewed the EIS and submits the following comments to assist in the decision-making process:*	
1. *Roads and Maritime supports provision of the main access to the new facility from roads other than the Oxley Highway. However, it is noted that some restricted access is to be available to visitors and emergency vehicles directly from the Highway. It is requested that management measures be put in place to ensure that only those vehicles intended to access at that point (ie: visitors and emergency vehicles) can do so; particularly as the entry appears to lead directly to the large staff carpark.*	The existing access to Oxley Highway will be secured with a gate and signposted to ensure that this access is note available for general use. All staff, delivery drivers and contractors will be required to use the Workshop Lane access way as part of their respective agreements / contracts with the operator. An intercom and computerised gate will be utilised to permit occasional access by visitors or emergency personal as required. These restrictions can be conditioned as part of any Development Approval.
2. *The traffic data and outputs in the TIA are very general with no details of the impacts from the turning movements of large vehicles at key junctions. The determining authority should be satisfied that such movements can safely take place and will meet the Austroads warrants for turning traffic.*	The determining authority should be satisfied that such movements can safely take place and meet the Austroads warrants for turning traffic." The access roads for the site are those of the purpose-built West Tamworth Glen Artney industrial subdivision, which are approved for use by 25/26m B-doubles1 hence further assessment of their suitability to accommodate the heavy vehicles expected to be generated by the processing plant is not justified. With regard to Austroads warrants, it is noted that the intersections of Oxley Highway with Goddard Lane and Wallamore Road with Goddard Lane have both recently been upgraded and include channelised treatments in the major road for right turns, and auxiliary turn lanes in the major road for left turns. These current treatments represent those warranted by the highest combinations of turning and through traffic, and meet or exceed the treatments warranted by the long term peak hour forecast turning movements at those intersections

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	(TTPP, 2019). Similarly, the long term peak hour forecast turning movements at the intersection of Goddard Lane with Armstrong Street would warrant the minimum left and right turn treatments in Goddard Lane, which is consistent with its current layout.
3. *Given that the proposal is for a 24/7 operation, Council should be asked to consider appropriate street lighting and way-finding for users of the site.*	Noted. Appropriate lighting will be provided along the access driveway connecting to Workshop Lane, internal roads, car parking and pedestrian areas. These recommendations can be conditioned as part of any development approval.
4. *Roads and Maritime has detected residue levels of PFAS adjacent to the Oxley Highway. It is noted that the EIS has also identified residue levels on the subject land. Council and the determining authority should be satisfied that roadworks and building works necessary to facilitate the new use can be safely undertaken and managed.*	A Site Contamination report was prepared and submitted as part of the Environmental Impact Statement. As outlined in Section 4.6.5.3 of submitted EIS: *"PFAS was detected within the watercourse sediment of Lot 101 to the east of the processing site. The PFAS was identified at a concentration below adopted investigation threshold levels for human health or ecological screening. The PFAS chemicals are considered at trace levels in the sediment retained in a small gully dam within the adjoining Council land. This trace PFAS concentration is considered most likely to occur onsite because of lateral migration from the upstream registered PFAS contaminated site, mainly the Tamworth Regional Airport. This migration pathway is not expected to impact directly upon the proposed poultry plant development site. No physical contact pathways are present between the gully and the development site, other than during a period where the proposed access road would be constructed.* *Based on the methodology adopted for this investigation, the development site does not contain contaminated land that would impact construction of the Oakburn Processing Plant or pose an unacceptable risk to human health or the surrounding environment."*
5. *Roads and Maritime is currently working with Council to investigate appropriate heavy vehicle access from the Oxley Highway into the industrial area, with work undertaken to date focused around Goddard Lane. Further information will be available in the coming months in respect to enabling heavy vehicle access in and around this area.*	Noted.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
6. *It should be noted that Workshop Lane is not an approved B-double route, and this should be rectified before use of that road is needed for larger design vehicles.*	Workshop Lane is currently a road stub only, and as such is not identified as a B-double route. However, Workshop Lane is constructed to a similar standard to Armstrong Street, is currently used by heavy vehicles, and is appropriate for the future use of heavy vehicles travelling to and from the Oakburn processing plant. An application will be made to RMS / Council to formally list Workshop Lane as an approved B-double route prior to commencement of the use and can be conditioned accordingly.
Tamworth Regional Council – Major Projects -	
The facility needs to comply with the NASF Guidelines in particular Guideline in relation to a facility located within 13 km of the airport. A written report from a consultant who is competent and qualified in assessments for the NASF guidelines should be obtained to satisfy the requirement that the development will not add or enhance hazards to the airport. *https://www.infrastructure.gov.au/aviation/environmental/airport_safeguarding/nasf/framework_factsheet.aspx* *An assessment by both Airservices Australia for airspace and air navigation effects, and with CASA in regards to safety of aircraft near the proposed facility.*	A Windshear and Wake Turbulence Impacts Report has been prepared by SLR Consulting Australia is included as **Attachment 4**. In relation to wind conditions experienced by aircraft landing from the northwest on Runway 12L, the assessment confirms: • The proposed development will have minimal/negligible impact in relation to the NASF-B mean wind speed deficit criteria, essentially no impact at wind speeds of practical interest. • NASF-B 4 kt turbulence level event exceedances are of the order of once per year with the proposed development – essentially the same as for existing conditions at the airport. This is attributed to the low profile of the proposed development buildings and low probability of occurrence of crosswinds of interest to this study (ie from the NE). Again, the proposed development will have minimal/negligible impact at wind speeds of practical interest on runway turbulence levels. It is noted that the Assessment was undertaken based on the previous building design. However, SLR Consulting were consulted and have confirmed that a revised assessment is not required for the proposed reduction in height / footprint associated with the re-design, noting the following: ***Note Regarding Building Envelope Changes*** *It is understood that the final design of the proposed development is currently being reviewed. Based on extensive studies undertaken by SLR and other Wind Engineering consultancies, the impacts identified in the present study would be an upper bound of expected changes to windshear and wake turbulence if any*

SUBMISSION DETAILS	APPLICANT'S RESPONSE
	proposed changes to the development result in a decrease of bulk envelope (especially height-wise) in the main operational building.
Tamworth Regional Council	
Water • *Baiada has recognised that water scarcity in the region is a significant issue and sought to reduce the impact of the proposed development through the inclusion of a water recycling system which would reduce the demand on the town water supply from 8ML/day to 2ML/day.* *For clarity, Council notes that it has not made provision within its existing reticulation network to deliver 8ML/day to the site of the Baiada Integrated Processing Facility (the proposed development). Consequently, it should not be assumed that 8ML/day would be available at the site without significant augmentation of the water reticulation network. In addition, Baiada should investigate contingency arrangements for the provision of water for the development in the event that there is a failure in the water recycling system.*	Based on current estimates, at full operation, the Oakburn processing plant will consume up to 8ML of potable water per processing day. As the processing plant will result in closure of operations at Out Street, the overall increase in potable water demand will be approximately 6ML per processing day. Recognising sustainability, climate change, seasonal variability and the development's dependence on potable water, Baiada is proposing to use advanced water treatment technology to treat the wastewater and allow up to 90% to be re-used by the facility. This will mean that the overall water use at the facility will be approximately 800KL per processing day which is less than the existing processing plant. Water will initially be sourced from Tamworth Regional Council's potable water supply (up to 8ML). However, with the operation of the Advanced Water Treatment Plant, 100% of the water will be treated and approximately 90% (7.2ML) will be treated to a potable standard and will be reused within the processing plant. With respect to contingencies: • The AWTP is split into two parallel process trains for operational redundancy to allow maintenance of operations in the event of breakdown or scheduled maintenance; • Following treatment by the AWTP, potable water is retained in potable water storage tanks capacity for 3 processing days (24 ML); and • The facility has a reticulated supply which could be used in emergency situations (subject to agreement with Tamworth water).
Wastewater - Reverse Osmosis Concentrate • *The Environmental Impact Statement (EIS) states, in a number of locations, that the reverse osmosis concentrate stream "will have a high concentration of dissolved salts" and "is intended to be discharged to the municipal sewer."*	The Advanced Wastewater Treatment Plan (AWTP) has been redesigned and is documented in the revised Waste Water Treatment Report included as **Attachment 3.** As well making 90% of the water suitable for re-use on site, the

SUBMISSION DETAILS	APPLICANT'S RESPONSE
Figure 16 of the EIS (page 87) states that the volumetric flow of the Reverse Osmosis (RO) Concentrate will be 2000m3/day, with Total Dissolved Solids (TDS) in the order of 5450mg/L. As noted in the EIS, a trade waste approval will be required before any trade waste, such as the concentrate stream, can be discharged to Council owned sewers and then for further treatment. The NSW Government's Department of Planning, Industry and Environment must grant concurrence to any trade waste application before Council can issue an agreement. Council's Environment Protection Licence (EPL) for the discharge of effluent to its 100% Effluent Reuse Farm has a TDS limit of 600mg/L and the proposed discharge of the RO Concentrate to TRC's sewerage system will result in TRC not being able to comply with its EPL limit for TDS. As a result, a Trade Waste Approval could not be issued under the proposed arrangements. *Council will continue to work with Baiada in relation to this issue however as the RO Concentrate cannot be accommodated within TRC's sewerage system under existing arrangements, the environmental assessment should include alternative methods for the disposal of the RO Concentrate.*	AWTP will also negate the need to discharge trade waste to Council's wastewater treatment plant. Following the treatment process, the AWTP will generate a concentrated brine stream which is held on site in accelerated evaporation ponds, before being dried out and periodically taken offsite to a licensed disposal facility. Efforts will be made to mine the remaining material for minerals as the technology becomes available. The advanced waste water system and evaporation ponds are shown on the revised development plans included as **Attachment 1.**
Wastewater - Secondary Effluent Discharge • *The Environmental Impact Statement states that "Up to 50% of Influent Flow", or 4 ML/day, of Secondary Effluent may be discharged, depending on the volume of wastewater intended to be recovered for re-use. However, there is no indication of where this Secondary Effluent is to be discharged to.* *Council advises that it has not made provision for this discharge in either its sewerage reticulation system, its wastewater treatment system, or its effluent disposal system. To make provision for an additional 4ML/day of trade waste, significant augmentation of Council's sewerage system, including treatment and disposal components, would be required. Additionally, as with the limitations which would need to be in place for the RO Concentrate, limitations may be needed on the Secondary Effluent to ensure that Council could meet its EPL limits.* *In order to fully assess the environmental effects of the proposed development, the Environmental Impact Statement should identify the end point for the disposal of the 4ML/day discharge and assess the impact of such a discharge on the receiving environment.*	The Advanced Wastewater Treatment Plan (AWTP) has been redesigned and is documented in the revised Waste Water Treatment Report included as **Attachment 3.** The revised waste water treatment will see all wastewater from the rendering facility treated separately at the existing wastewater treatment plant which is operational, and has been designed to accommodate additional volumes requested in this EIS. Treated wastewater from the rendering plant wastewater treatment plant will continue to be discharged to sewer in accordance with a trade waste agreement with Council. Water from the proposed processing plant will be treated by the AWTP treat 90% of the water to a potable standard, suitable for re-use within the processing plant. The AWTP will also negate the need for additional SBR and CAL Lagoons to be constructed on site. Following the treatment process, the AWTP will generate a concentrated brine stream which is held on site in accelerated evaporation ponds, before being dried out and periodically taken offsite to a licensed disposal facility.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
	Three 10,000 m2 evaporation lagoons, with a minimum depth of 1.5m are proposed to be constructed on site to accommodate the concentrated brine discharged from the AWTP. The ponds will include a minimum freeboard of 500mm in order to accommodate the 7-day RDRD (rare design rainfall depth) for a 1 in 2000-year event, of approximately 480mm. The ponds will require raised banks to avoid ingress of stormwaters which fall outside the pond footprint. The ponds will be lined with HDP Plastic or clay to ensure that no leakage occurs. The advanced waste water system and evaporation ponds are shown on the revised development plans included as **Attachment 1.** Further details are provided in the revised Waste Water Treatment Report included as **Attachment 3.**
Wastewater - Sludge • *The process flow diagrams provided for the wastewater treatment system in the EIS indicate that there will be sludge from the Covered Anaerobic Lagoon, the Sequencing Batch Reactors, and the Secondary Solids Removal DAF. Section 4.14.3 indicates that the wastewater treatment system generates "a very small amount of solid material" and this "solid material is biological in nature, with some trade elements (mostly phosphorus) and is suitable for the beneficial application to land." Although the EIS states that this waste stream is "suitable" for beneficial land application, it does not specifically advise where the waste sludge streams will be disposed of, nor does it make a commitment to disposing of this waste by beneficial application to land.* *Currently, a significant amount of DAF sludge from existing Baiada facilities is disposed of to Council's Forest Road Landfill each year.* *The environmental assessment should identify each of the sludge streams, provide expected volumes produced by each, and nominate the final disposal points for each stream, so that the impact of the proposed disposal may be properly understood and assessed.*	Sludge from the DAF and Membrane bioreactor will be dewatered and collected on site before being transported (daily) for composting at a licensed facility. At full operation, it is estimated the sludge produced will be approximately 40 Tonnes (1 -2 truck loads).
Wastewater - Domestic Sewage • *The Environmental Impact Statement should confirm that the trade waste and the domestic sewage wastewater streams from the development are to*	The revised waste water treatment plan will see all wastewater from the rendering facility treated separately at the existing wastewater treatment plant which is operational, and has been designed to accommodate additional volumes requested in this EIS. Operation and monitoring of the existing waste

SUBMISSION DETAILS	APPLICANT'S RESPONSE
be kept separate, and nominate the volume, flowrate, method and location of the disposal of the domestic sewage to Council's sewer.	water treatment ponds will continue in accordance with existing approvals and trade waste agreements. Domestic sewage from staff amenities (estimated to be 1,176 on-site staff at full operation) will be discharged directly into Council's reticulated sewerage system via the services corridor nominated along the southern boundary of the site.
Waste • *Baiada currently contributes 10 - 15% of waste landfilled at Forest Road Landfill each year. Consequently, a three-fold increase in Baiada's processing capacity is of particular concern to Council. Baiada's three largest categories of waste in descending order of volume are Offal, DAF Sludge, and Commercial Non-recyclable. DAF Sludge has been discussed in the Wastewater comments above.*	Noted. Please see responses to the other matters raised.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
Solid and Packaging Waste • *The anticipated annual volumes of recyclable and non-recyclable waste should be provided.*	**EXISTING OPERATIONS:** **Out Street Processing Plant:** Analysis of the current operations at Out Street Processing Plant (18/19 Financial Year) has shown that the current processing operation generates a yearly volume of: • 450T non-recyclable waste to of landfill (~8T per week); • 72T of recyclable materials (primarily packaging); and • 3,078T of DAF sludge (which is compostable). Total landfill percentage diversion was 87% (with DAF sludge) or 14% (without sludge). Currently, Out Street generates 8.5 Tonnes/week commercial waste, however the vast majority of this is plastic liners from bones (from Ipswich / Pendle Hill). These are transferred at Out Street prior to being sent to rendering. This process will cease as with the new processing plant. **Oakburn Rendering:** Analysis of the current operations at Oakburn Rendering has shown that the current processing operation generates: • 2,340T of DAF sludge each year. In the past, 100% of the DAF Sludge was sent to landfill. With the de-commissioning of the existing DAF, DAF Sludge will reduce from 45 Tonnes per week to ~3 Tonnes per week (i.e. SBR biomass sludge with remain at 3T/week). Baiada will be seeking an exemption to apply to land for beneficial re-use or compost, effectively negating the need for land fill. This strategy will be maintained in the future. **PROPOSED OPERATIONS:** **Oakburn Processing Plant / Rendering Plant:** It is currently projected that the Oakburn processing plant will generate the following yearly volumes of wastes and recyclables: • 520T non-recyclable waste to of landfill (~10T per week); • 78T of recyclable materials (primarily packaging); and • 10,556T of DAFF sludge which us compostable. As outlined above, Baiada will be seeking an exemption to apply the Rendering Sludge (~3t / week) to land for beneficial re-use or composting.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
	With respect to the AWTP DAF and bioreactor sludges, it is intended to be will be dewatered and collected on site before either being used for beneficial reuse (which would require an exemption) or transported (daily) for composting at a licensed facility.
Processing Wastes • *The Environmental Impact Statement implies in section 4.14.2 that solid waste, such as offal, will be fully recycled, as there is discussion of this recycling and no indication that any of this waste would remain to be disposed of. The EIS should provide more detail on the types of solid waste generated on site, the amounts generated, the amount, if any, of this waste that will be disposed of offsite, and the method for disposal.* *Council recognises the economic development potential of this development for the City of Tamworth and will work with the developer to find solutions for the water, wastewater and waste issues identified.*	The onsite Rendering Plant currently processes and will continue to process all poultry "waste" materials including offal, blood and feathers from the processing plant as well as farms in the region (mortalities). Material is transported in sealed containers to the site where it is weighed before being unloaded within the internal raw material handling area. The different raw material streams are unloaded into different collection bins and will be processed on separate rendering lines to create different products. The Rendering Plant will continue to operate as per current arrangements, with the exception of the material being transported via pipe from the proposed processing plant to the Rendering Plant. Other recyclable and non-recyclable waste streams are discussed above.
Section 7.12 (Indirect) Development Contributions • *Contributions pursuant to section 7.12 of the Environmental Planning and Assessment Act 1979 should be levied in accordance with the Tamworth Regional Council Section 94A (Indirect) Development Contributions Plan 2013. It is noted on page 35 of the EIS that "For the purposes of calculating any contributions payable under the Tamworth Regional Council Section 94A (Indirect) Development Contributions Plan 2013, a levy of 1% of development costs (the costs of erecting a building) would be payable based on $132,947,020 which excludes equipment costs and consultant fees.* *As the total cost of the development is $208,545,901, a cost breakdown demonstrating how the $132,947,020 figure was calculated in relation to the Tamworth Regional Council Section 94A (Indirect) Development Contributions Plan 2013 is requested.*	An Amended Capital Investment Value Report has been prepared and is included as Attachment 11. The Capital Investment Value (CIV) of the above is $221,808,742 (Excl. GST) comprised of $215,980,752 of works and equipment plus an allowance for consultant's fees of $5,827,990.
Section 64 Water and Sewer Headworks	Noted.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
• *Contributions pursuant to Section 64 of the Local Government Act 1993 would be levied, based upon water usage and wastewater discharge.* *Water and Sewer Headwork's contributions would be calculated based on adopted rates under Councils Annual Operation Plan. Revised rates adopted in subsequent Annual Operation Plans will apply to Headworks Contributions paid in later financial years.*	
Teys Tamworth	
Teys support the proposed development, as the proposed use does not conflict with that which already exists in this industrial area. Westdale is an established and thriving industrial hub, responsible for major contribution to the regional economy. There continues to be investment into industrial purpose within Westdale from mostly private industry and it is on that basis that Teys welcomes further industrial development. *Teys is committed to taking a role as a sustainability leader; continually improving energy and water productivity and creating sustained value for our customers and shareholders including the communities in which we operate.* *Teys understands that the proposed development may generate some undesirable impact, and increased burden on environmental aspects such as Odour Nuisance and Potable Water Availability. Notably:-*	Noted.
1. *The odour generated by the proposed process may cumulate with impacts from existing nearby livestock intensive industries and this can have a detrimental impact on residential experience; and,*	The subject site is located within a livestock and food processing hub identified by Council for the purpose of locating businesses such as poultry production at the edge of Tamworth. The EIS is supported by an Odour Impact Assessment which has identified the addition of the Poultry Processing Facility modelled along shows the predicted odour impact does not largely exceed the NSW EPA odour criteria of 5 odour units beyond the site boundary. The results are below the odour criteria at the nearest sensitive receptor and that the proposed Poultry Processing Facility is unlikely to cause adverse odour impacts under normal conditions within the assumptions made. Furthermore, the modelling is almost certainly overstated as it considers all proposed and existing odour sources including treated odours

SUBMISSION DETAILS	APPLICANT'S RESPONSE
	and odours of different characters that do not combine in the atmosphere and tend to be observed individually.
2. *The net increase of 6ML of potable water per day places undue burden on already impacted water availability – Tamworth LGA have recently implemented Level 4 water restriction for existing usage and have advised this is likely to worsen based on forecast weather and water scarcity. It is noted that Baiada proposed implementation of an advanced water treatment system however this will not impact the net daily demand on potable, town water.*	Based on current estimates, at full operation, the Oakburn processing plant will consume up to 8ML of potable water per processing day. As the processing plant will result in closure of operations at Out Street, the overall increase in potable water demand will be approximately 6ML per processing day. Recognising sustainability, climate change, seasonal variability and the development's dependence on potable water, Baiada is proposing to use advanced water treatment technology to treat the wastewater and allow up to 90% to be re-used by the facility. This will mean that the overall water use at the facility will be approximately 800KL per processing day which is less than the existing processing plant.
Teys understand these concerns are shared by other key industrial facility operators within Westdale, as the proposed impact on these aspects may constrain future growth of existing industrial use and investment within the Westdale area. Teys makes supplication to the Department for careful consideration of these aspects when preparing development consent.	Noted.
Transport for NSW	
TfNSW has reviewed the relevant documentation within the exhibited Environmental Impact Statement (EIS) and has no comments on the subject development application.	Noted.
WaterNSW – Major Projects	
The proposal is not located near any WaterNSW land, assets or infrastructure, therefore we have no particular comments or requirements regarding the proposal. WaterNSW requests the Department continues to consult with WaterNSW for any development that may impact on our assets, infrastructure or land.	Noted.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
People for the Ethical Treatment of Animals (PETA)	
It is proposed that up to 3 million birds would be slaughtered at this facility every week, triple the number currently killed at the Out Street plant. As noted in the environmental impact statement (EIS), the existing facility uses an average of 2 megalitres of water per processing day, and it is estimated that the proposed facility would consume up to 8 megalitres of potable water per processing day when operating at full capacity. Like much of New South Wales, Tamworth is in drought, and much of the area is currently subject to water restrictions. In December 2019, the state government cut off the Peel River, which supplies water to Tamworth, in order to prevent the entire river from running dry. This left five chicken farms – which supply the vast majority of poultry to Baiada's processing plants – without water, and judging by media reports, the issue seems to be as yet unresolved. Meanwhile, the EIS prepared by the applicant states that an additional 300 broiler sheds would be required in order to supply the new processing facility. Like all forms of animal agriculture, poultry farming is a thirsty industry, and planning to expand such operations in a town that's already so dry is senseless. Water is essential to life – eating chicken is not.	Based on current estimates, at full operation, the Oakburn processing plant will consume up to 8ML of potable water per processing day. As the processing plant will result in closure of operations at Out Street, the overall increase in potable water demand will be approximately 6ML per processing day. Recognising sustainability, climate change, seasonal variability and the development's dependence on potable water, Baiada is proposing to use advanced water treatment technology to treat the wastewater and allow up to 90% to be re-used by the facility. This will mean that the overall water use at the facility will be approximately 800KL per processing day which is less than the existing processing plant. Any further development of poultry operations within the Tamworth Region would be subject to the legislative requirements and provisions under NSW's planning legislation, the *Environmental Planning and Assessment Act 1979*. Potential impacts associated with these developments would be assessed as part of the relevant assessment processes, prior to approvals being issued.
The proposed facility would operate 24 hours a day, seven days a week. Because three times as many birds would be processed in the area, there would be extra traffic, which would not only put pressure on existing infrastructure but also increase noise pollution on the routes between chicken farms and the proposed processing plant. According to Section 4.10.4 of the EIS, one of the busiest periods for traffic generation would be in the middle of the night, with up to 236 vehicle trips per hour between midnight and 1 am.	As noted in the Traffic Report submitted with the EIS confirms that *"the existing road network has sufficient capacity to accommodate the traffic generated by the processing plant with acceptable impacts on the operation of the key intersections".* The Revised Acoustic Report included as **Attachment 6** has assessed road noise impacts associated with the development and confirmed compliance with the EPA's Road Noise Policy. In particular, the acoustic assessment states "*The RNP also recommends that the increase in road traffic noise levels due to redevelopment of an existing land use development not exceed 12dB(A) during the day and night for freeways and arterial roads. As can be seen by the results in the above Tables, the relative increase due to the development is not expected to be more than 8.8dB(A) during the day and 9.7dB(A) at night and considered acceptable."*
Operations at the facility – as well as the chickens' waste and the bodies of dead chickens – would likely produce strong odours, which could disturb local residents	A revised Air Quality Impact Assessment, including an Odour Management Plan has been prepared by The Odour Unit and is included as **Attachment 7**.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
and other businesses and have a negative impact on their quality of life. For years, Tamworth residents have complained of the smell of the existing Baiada facility. Expanding operations would mean exacerbating odour problems.	The Air Quality Impact Assessment has found: - The predicted odour impact for Protein Recovery Plant and Poultry Processing Facility (including the waste water treatment plant) is below the NSW EPA Odour Impact Assessment Criteria; - The results are below the Odour Impact Assessment Criteria at the nearest sensitive receptor; - The odour contour encroaches beyond the site boundary marginally to the north and marginally to the south. - The proposed Poultry Processing Facility is unlikely to cause adverse odour impacts under normal conditions within the assumptions made for this assessment; - An Odour Management Plan (OMP) is to be adopted as part of any approval. An OMP is a documented operational management system. The OMP is designed to eliminate, prevent or minimise the potential odour generation through a hierarchy of controls through engineered, administration and/or management practices.
According to Section 4.5.5.1 of the EIS, in order to construct the proposed development, approximately 0.83 hectares of Box-Gum Woodland and 0.51 hectares of planted native vegetation would be removed. Bushfires have already decimated the habitats of native species in New South Wales, and animals such as koalas and bats are moving outside their normal territories in search of shelter and food. Removing native vegetation from the area at this crucial time of ecosystem recovery could have negative consequences for koala populations, which are already in decline in the New England area.	The Biodiversity Development Assessment Report prepared to assess the impact of the development upon biodiversity states "There is some limited habitat connectivity between the subject land and surrounding areas, including planted vegetation associated with Boltons Creek…". With respect to the survey methods undertaken for koalas, the BDAR states "*Surveys were undertaken for all remaining species credit species. None of these species were recorded within the subject land, and none are considered likely to occur… Nocturnal spotlighting was undertaken… Call playback was undertaken using a recording of the Squirrel Glider and Koala calls and involved playing the call for five minutes*." With respect to the survey methods undertaken for bats, the BDAR states "*Searches of the subject land failed to detect any bats roosting. Furthermore, targeted surveys for microbats failed to detect the species utilising the subject site in any capacity and it is therefore unlikely the species is reliant on these structures or that they are using the site as anything other than occasional foraging and roosting habitat.*"

SUBMISSION DETAILS	APPLICANT'S RESPONSE
	Despite these survey methods, none of these bats or koalas were sighted or heard. Regardless of this, there are several mitigation measures recommended in the BDAR, which are: • Construction mitigation measures – timing of construction works, delineation of clearing areas, pre-clearance surveys, sedimentation control measures, weed management; • Mitigation measures for prescribed impacts – human made structures, non-native vegetation, connectivity of different areas of habitat that facilitates movement across a species' range, movement of threatened species that maintains their lifecycle, vehicle strike; and • Adaptive management of uncertain impacts – vehicle strike.
The proposed facility does not align with the aims of the New England North West Regional Plan 2036,7 specifically goals 1, 2, and 4. *o **Goal 1 – a strong and dynamic regional economy:** The word "dynamic" means "characterized by constant change, activity, or progress". Building another chicken processing plant and potentially another 300 broiler sheds in an area that is already dominated by animal agriculture is just the opposite of dynamic.* *o **Goal 2 – a healthy environment with pristine waterways:** Expanding a facility that is so water-intensive during a time of drought is not consistent with responsible water use, let alone the maintenance of "pristine" waterways. Furthermore, the odour issues discussed above deny local residents a healthy environment.* *o **Goal 4 – attractive and thriving communities:** The proposed development is a very large structure and would have a significant impact on views of the local area. Few people would consider a poultry plant attractive, and owing to its proximity to Tamworth Airport, it would likely be one of the first and last things that visitors to the area would see and smell. Since operations would take place 24 hours a day, noise caused by truck movements to and from the plant in the early hours of the morning would have the potential to disrupt the sleep of local residents every day of the week.*	The vision for the region contained in the plan includes the following statements which align with the core objectives of the proposed development: • *Growth in agriculture, agribusiness, livestock meat production, mineral resource development, renewable energy, health and education is providing jobs and supporting thriving local communities.* • *Primary production, intensive agriculture and food processing sectors take advantage of the rich soils and climate.* • *Strategically located, with close links between some of Australia's fastest growing areas – South East Queensland, Newcastle and Sydney - is attracting industry investment.* A comprehensive assessment of the facility demonstrating its clear alignment with the New England North Wes Regional Plan is provided in Section 4.1.3 of the Submitted EIS.

SUBMISSION DETAILS	APPLICANT'S RESPONSE
Finally, the facility would cause immense suffering to the chickens who would be slaughtered there at less than 2 months of age. Chickens are intelligent, social animals who can feel pain and distress. Last year, a PETA exposé of Baiada found widespread cruelty in its abattoir and breeding facility. Despite the presence of CCTV cameras at the abattoir, workers punched chickens in the head and bashed them against metal railings before shackling them by the legs. One worker told the eyewitness that he would "just start smashing birds". The eyewitness saw another worker repeatedly tearing birds' heads off – and even putting a severed head on his finger and wiggling it about like a finger puppet. In order to kill 3 million birds a week at the proposed facility, the slaughter line would be extremely fast-paced, meaning that many birds would still be conscious as their throats were slit and that workers would likely endure inhumane conditions.	As noted in the EIS, Baiada have in place a *National Livestock Animal Welfare and Biosecurity Manual* and an approved *Animal Welfare Policy* which states that the treatment of all birds will be ethical and humanely treated throughout all stages of production. Both of these documents were included in the EIS documentation. Furthermore, Baiada is committed to meet or exceed the standards of care detailed in the following Primary Industries Standing Committee documents: - *Model Code of Practice for the Welfare of Animals – Land Transport of Poultry (2006); and* - *Model Code of Practice for the Welfare of Animals – Livestock at Slaughtering Establishments (2002).*

ATTACHMENT 1: REVISED PLANS

AP01

ATTACHMENT 2: LANDSCAPE PLAN

AP02

ATTACHMENT 3: ADVANCED WATER TREATMENT DESIGN REPORT

AP03

ATTACHMENT 4: WINDSHEAR REPORT

AP04

ATTACHMENT 5: REVISED HAZARD ASSESSMENT

AP05

ATTACHMENT 6: REVISED ACOUSTIC REPORT

AP06

ATTACHMENT 7: REVISED ODOUR IMPACT ASSESSMENT AND ODOUR MANAGEMENT PLAN

AP07

ATTACHMENT 8: REVISED STORMWATER MANAGEMENT REPORT

AP08

ATTACHMENT 9: REVISED BIODIVERSITY DEVELOPMENT ASSESSMENT REPORT

AP09

ATTACHMENT 10: TRAFFIC IMPACT ASSESSMENT ADDENDUM

AP10

ATTACHMENT 11: REVISED CAPITAL INVESTMENT VALUE REPORT

AP11

ATTACHMENT 12: REVISED MANAGEMENT AND MITIGATION MEASURES

AP12