



29 April 2022

Department of Planning, Industry and Environment Locked Bag 5022 PARRAMATTA NSW 2144

Attention: Mr Jeffrey Peng

Dear Jeffrey,

RE: RESPONSE TO AGENCY RECOMMENDATIONS FOR DEVELOPMENT APPLICATION SSD - 13855453

1. INTRODUCTION

We are writing with respect to SSD 13855453 concerning the proposed Grenfell Poultry Breeder Farm. As requested on 9 February 2022, please find outlined below a response to the matters raised by DPIE and other agencies following their initial assessment of the submitted application. This correspondence has been prepared to provide a consolidated response to all matters raised by each department.

Please note that, in response to ongoing detailed design processes, minor changes to the farm site plans have been incorporated and a revised set is included as **Attachment 1** of this response. These changes include:

- All farms have now adopted a consistent site layout, including the location of the two manager residences.
- The egg packing / coolroom building has been merged with the amenities building which has also enabled the removal of one linked passageway. These changes have decreased the width (North South) of each farm by 35.5m (i.e. a reduction of 14.5m associated with the egg packing room and 21.0m associated with the linked passage).
- Hard stand areas at both the western and eastern areas of the farms has been reduced by 5m (10m reduction in total).
- The water storage tanks are now placed in a single row instead of two, which has also reduced the overall complex width by a further 13.5m.

It is important to note that the above changes are minor only and are wholly accommodated within the impact area footprint identified in the EIS. As such, the proposed changes will not alter the proposed operations of the site or alter the assumptions used to prepare the submitted Environmental Impact Statement.

While the reduction in the farm footprint may result in some minor changes to the earthworks plans submitted in the EIS, they will be generally in accordance with that which is proposed and have minimal environmental impact. As such, these changes can be made as part of the preparation of detailed civil plans required as part of the Construction Certificate stage of development.

In addition to the Revised Site Plans, this response is also accompanied by the following attachments:

- Attachment 2: Site Entrance Concept Design
- Attachment 3: Waste Risk Assessment
- Attachment 4: Visual Amenity Assessment
- Attachment 5: Revised Noise Impact Assessment
- Attachment 6: Assessment against Weddin LEP



- Attachment 7: Revised Preliminary Hazard Assessment
- Attachment 8: Plant and Equipment List
- Attachment 9: Indicative Production Cycle and Traffic Generation

2. RESPONSE TO AGENCY SUBMISSIONS

Please find outlined below a response to matters raised in each of the Agency Submissions.

NSW DEPARTMENT OF PLANNING AND ENVIRONMENT (BIODIVERSITY, CONSERVATION AND SCIENCE DIRECTORATE)

COMMENTS APPLICANT'S RESPONSE conmental management actions should be auditable and this noted that the RDAR is accept

1. Environmental management actions should be auditable and enforceable

The Vegetation Management Plan (VMP) as referred to in Table 14 of the Biodiversity Development Assessment Report (BDAR) should assist operational staff to manage the identified threatened ecological communities (TECs) by providing a clear and concise environmental management framework that can be monitored internally and / or audited by external agencies.

The following recommendations aim to assist the proponent to produce management plans (including a Construction Environmental Management Plan) that are easy for operational staff to use and provide a clear, concise, and auditable environmental management framework.

Recommendations

- 1.1. Management actions should be presented in a tabulated format such as a Trigger, Action, Response Plan (TARP) with column headings addressing:
 - An environmental variable known to affect the condition of the vegetation community. i.e., Weed cover.
 - A specific and measurable target range is identified for each environmental variable. i.e., Less than 5% total groundcover comprised of weed species.
 - An achievable sampling strategy or monitoring regime has been designed for each target. i.e., Seasonal weed survey at each management zone.
 - A trigger (value outside of the target range) is established. i.e., Weed species comprise greater than 10% total groundcover.
 - A realistic management action has been identified that is likely to place the variable back within the target range.
 i.e., Spot application of herbicide in accordance with the weed control protocol.
 - Responsibility is assigned to a specific role(s) to carry out the sampling strategy, identify triggers, and commence the management action. i.e., Environment Manager will carry out the sampling strategy and Environmental Officer will enact the weed control protocol.

It is noted that the BDAR is accepted by the Biodiversity, Conservation and Science Directorate. The recommendations in relation to manages actions are noted and can be adopted within various management plans (CEMP, OEMP) which will guide construction and operation of the site.

NSW DEPARTMENT OF PLANNING AND ENVIRONMENT (BIODIVERSITY, CONSERVATION AND SCIENCE DIRECTORATE)

	COMMENTS	APPLICANT'S RESPONSE
-	A time frame is provided for the sampling strategy and management actions. i.e.,	
-	Management zones will be surveyed for weeds four times a year, once each during summer, autumn, winter, and spring.	
-	The weed control protocol will be implemented within one week (of appropriate weather) of a trigger being reported.	
	ironmental variables to be managed should include at a m the known threats to the Box-Gum Woodland CEEC. i.e.,	
-	Habitat loss; through long-term protection against development.	
-	Grazing pressure; including by over-abundant native species, livestock, and commercial apiaries.	
-	Degradation by pests; including weeds, and feral animals including predators and the Noisy Miner (Manorina melanocaphala).	
-	Human impacts such as harvesting of firewood, removal of groundcover, unauthorised access, and application of fertiliser.	
-	Altered fire regimes.	

NSW DEPARTMENT OF PRIMARY INDUSTRIES (AGRICULTURE)			
RECOMMENDATIONS	APPLICANT'S RESPONSE		
DPI Agriculture has the following comments on the proposal. Also attached are considerations in relation to the consent conditions for issues identified as requiring further attention to ensure the operations can be undertaken with minimal impacts.	A detailed response to each items raised by the Department of Primary Industries is provided below.		
The proposal notes the nearest farm/sheds are 50m from the boundary of neighbouring lands. The sheds located nearest to the boundary are in what is considered to be low risk land use conflict or biosecurity issues related to restricted buffers. Ideally setbacks from these boundaries should be maximised to provide the greatest practical buffer distances for the poultry operation to maximise biosecurity and reduce the risk of impact from neighbouring land use activity. This is a risk to the development that the proponent should be aware of.	 The location of each of the farms on site has been carefully based on consideration of a number of factors including: Physical constraints including topography, geology, flooding, stormwater flows, and other natural hazards. Constructability including minimisation of earthworks. Bushfire risk and maintenance of asset protection areas. Minimising impact on significant flora or fauna. Minimising impacts on cultural heritage. 		

NSW DEPARTMENT OF PRIMA	ARY INDUSTRIES (AGRICULTURE)
RECOMMENDATIONS	APPLICANT'S RESPONSE
	 Biosecurity including a minimum separation of 500m between farms and 50m to the site boundaries. Infrastructure and servicing provisions necessary for operation.
	 Separation distances to sensitive receptors to ensure no unacceptable amenity impacts including odour, dust and noise.
	As a result of the strict bio-security protocols adopted by each farm and the overall site, the surrounding land uses, and the fact that the birds are wholly contained within the sheds, the minimum 50m setback from the sheds to the boundary is sufficient to manage bio-security risks.
The flood impact assessment shows flooding will occur on road access routes and notes "flood risk management approaches should be adopted at the detailed design stage, with further consultation with NSW SES and council, to ensure occupants of the site are aware of their flood emergency management responsibilities and understanding of evacuation procedures". No provision is noted for impact of flooding on bird welfare if residents are required to evacuate to management and husbandry. Ideally these should be considerations at the design stage to help deal with these issues.	In order to protect the birds during a flood event the following steps have been undertaken: - All farms are located above the design flood level to ensure they are not directly impacted by flood waters. - Farm managers will remain on site during a flood event to ensure operations of the farms is not impacted. - The on-site silos will retain a minimum of storage level equating to 2 weeks of feed. - The on-site water storage infrastructure (which is unlikely to be impacted by flooding) will retain a minimum of 2ML on each farm for emergency supply. The above arrangements are in place at similar farms across NSW and have proved sufficient to maintain operations during significant flooding events.
Water 1ML of water will be required per day for the proposed development. Comment: It should be a consent condition that approval is gained from Central Tablelands Water to provide a minimum of 1ML/day, including assurances that this can be connected to supply reliable potable water at the volumed required at all times.	The 1ML per day referenced in the submitted EIS represents a worst-case scenario which would be a very hot summer day combined with peak bird numbers. During such an event, water required for evaporative cooling of the sheds and bird drinking water would at the maximum. For a majority of the year, water for shed cooling is not required and bird drinking water is much less. Based on data from a similar sized sheds operating in Tamworth, the total annual water demand for the project is anticipated to be in the order of 141 ML per year.

A breakdown in annual demand is shown in the following table.

ML / year

ACTIVITY

NSW DEPARTMENT OF PRIMARY INDUSTRIES (AGRICULTURE)		
RECOMMENDATIONS APPLICANT'S RESPONSE		NSE
	Bird Drinking	65.8
	Shed Cooling	65.8
	Manager Residences & Staff Amenities	5.1
	Shed Cleaning	0.2
	Landscaping / Tree Planting	4.0
	TOTAL	140.9
	Central Tablelands Water have conficorrespondence dated 3 March 202 supply of water will be available du and including Level 6 Restrictions.	2 that this annual
Noise Noise report state that providing recommendations detailed in this report are implemented, noise will be within permissible limits at sensitive receptors. Comment: Consent requirements should include the recommendations in the report to minimise noise impacts.	The Applicant will adopt the recom- outlined in the submitted Noise Imp and this can be conditioned accordi	oact Assessment
Odour Limited odour impacts are predicted on sensitive receptors. Where impacts do occur mitigation measures are noted to be available. Comment: Consent Conditions should include requirements for a plan to address odour issues that cause exceedances that impact sensitive receptors.	The Applicant will adopt the recom- outlined in the submitted Odour Im and this can be conditioned accordi	pact Assessment
Impact Management and Mitigation Measures The proposal includes a table of the impact management and mitigation measures proposed to be implemented in associated with the proposed development. Comment: These measures should be included in Consent Conditions.	The Applicant will adopt the recom- outlined in the submitted EIS and the conditioned accordingly.	

NSW FIRE & RESCUE

RECOMMENDATIONS

It is noted that a Fire Safety Study and Emergency Response Plan are recommended by FRNSW.

FRNSW have reviewed the EIS and associated documents, particularly the State Environmental Planning Policy No.33 (SEPP 33) assessment report and Preliminary Hazard Analysis and make the following recommendations:

The Applicant will undertake the Fire Safety Study and Emergency Response Plan prior to commencement of operations and this can be conditioned accordingly.

APPLICANT'S RESPONSE

- To ensure that the fire prevention, detection, protection, and firefighting measures are appropriate to the specific fire hazards and adequate to meet the extent of potential fires, a comprehensive Fire Safety Study (FSS) is recommended to be undertaken.
- That the FSS is developed in accordance with the requirements of Hazardous Industry Planning Advisory Paper No.2 (HIPAP No.2).
- That the FSS is required to be developed in consultation with FRNSW and to the satisfaction of the operational requirements of FRNSW. FRNSW recommend that the development of a FSS be a condition of consent.
- That the development of the FSS considers the operational capability of local fire agencies and the need for the facility to achieve an adequate level of on-site fire and life safety independence.
- Should a fire or hazardous material incident occur, it is important that first responders have ready access to information which enables effective hazard control measures to be quickly implemented. Without limiting the scope of the Emergency Response Plan (ERP), the following matters are recommended to be addressed:
 - That a comprehensive ERP is developed for the site.
 - That the ERP specifically addresses foreseeable on-site and off-site fire events and other emergency incidents, (e.g. uncontrolled release/fires involving LPG, bushfires in the immediate vicinity or potential hazmat incidents).
 - That the ERP detail the appropriate risk control measures that would need to be implemented in order to safely mitigate potential risks to the health and safety of firefighters and other first responders (including electrical hazards). Such measures would include the level of personal protective clothing required to

	NSW FIRE & RESCUE		
	RECOMMENDATIONS	APPLICANT'S RESPONSE	
	be worn, the minimum level of respiratory protection required, decontamination procedures, minimum evacuation zone distances and a safe method of shutting down and isolating power (either in its entirety or partially, as determined by risk assessment).		
0	Other risk control measures that may need to be implemented in a fire emergency due to any unique hazards specific to the site should also be included in the ERP.		
0	That two copies of the ERP (detailed in recommendation 6 (a) above) are stored in a prominent 'Emergency Information Cabinet' which is located in a position directly adjacent to the site's main entry point/s.		

HERITAGE NSW – ABORIG	INAL CULTURAL HERITAGE
RECOMMENDATIONS	APPLICANT'S RESPONSE
The ACHAR recommendations concerning Aboriginal cultural values within the study area include:	The Applicant will adopt the recommendations outlined in ACHAR including the development of an ACHMP and this can be conditioned accordingly.
- Following development consent of the project, the proponent will develop an Aboriginal Cultural Heritage Management Plan (ACHMP), which is to be agreed to by the Registered Aboriginal Parties (RAPs) and the Department of Planning, Industry and Environment (DPIE) (with input from Heritage NSW), to manage Aboriginal cultural heritage associated with the project. The ACHMP will include the salvage methodology, long-term management of any artefacts, an unanticipated finds protocol, an unanticipated skeletal remains protocol and heritage site inductions for staff and contractors.	
 Following approval of the ACHMP, the portion of Wallah Wallah Creek-OS1 in the impact footprint should be subject to the surface collection methodology set out in Section 9.2.1.1; 	
 The excavation methodology set out in Section 9.2.1.2 and 	
 Fencing outlined in Section 9.2.1.3. The salvaged objects should be managed in accordance with the agreed long-term management option detailed in Section 9.2.1.4. 3. 	
- All land disturbing activities must be confined	

to within the study area. Should the parameters of the proposed work extend beyond this, then further archaeological

assessment may be required.

TRANSPORT NSW			
RECOMMENDATIONS	APPLICANT'S RESPONSE		
TfNSW's preliminary review of the application is generally supportive of an intersection upgrade at Gooloogong Road however further information in the form of a concept plan is required for the continued assessment. It is requested that the concept plan of the proposed infrastructure upgrade be submitted with the following design considerations:	A Concept Plan showing the proposed site entrance has been prepared by MPN Consulting Engineers and is included as Attachment 2 . The proposed intersection takes into account the specified design considerations specified by TfNSW.		
 Design speed of Gooloogong Road (i.e. 110km/h), 			
 Accommodate the design vehicle (i.e. a A- Double) for both passing through movements and turning movements, and 			
 Topographical constraints (e.g. embankments, stormwater management, 			

WEDDIN SHIRE COUNCIL		
RECOMMENDATIONS	APPLICANT'S RESPONSE	
Council recognises the importance of the development to the local shire and is supportive of the proposal, subject to appropriate measures being implemented to limit impacts on the local environment and the amenity of the surrounding area. As outlined in the Land Use Conflict Risk Assessment, Council considers that appropriate conditions should be included in any consent to ensure that mitigation measures relating to the following issues are implemented and continually monitored: O Visibility Odour Dust Noise Stormwater drainage Traffic Waste management	The submitted EIS documented the proposed mitigation and management measures to be applied to the EIS to ensure that the project will be operated as forecast and that it will not result in any unacceptable impacts environmental or amenity impacts. The management and mitigation measures outlined in the submitted EIS can be conditioned accordingly.	
With regards to the Waste Management Plan submitted with the application, it is noted that certain waste streams are proposed to go to landfill. Councils would like to ensure that appropriate considerations are given to the limitations which exist with Councils small waste	As documented in the EIS, the site will generate minimal waste streams which will be directed to Council's landfill facility. The only waste likely to be transported to Council's facility will be domestic waste from the 8 managers' residences and refuse from on-site workers which cannot be recycled.	

vegetation, etc.)

WEDDIN SHIRE COUNCIL		
RECOMMENDATIONS	APPLICANT'S RESPONSE	
facility in Grenfell, if the applicant intend to utilise this facility.	As outlined in the EIS, a majority of the "wastes" produced by the operation are a valuable resource with beneficial reuse potential, such as the use of poultry manure as a fertilizer and processing of organic wastes at the company rendering plant to create protein based products. In addition, recyclable materials and packaging will be separated to minimise landfill. With consideration of the above factors, the proposed development is not expected to result in a significant increases in waste volume being received at Council's landfill facility.	
Access to the development will be gained via Gooloogong Road, which is a classified road. While Transport for NSW is likely to have as number of requirements for vehicular access to the property, Council considers it important that any access to the site is adequately sealed and compliant with Austroads standards, in particular encroachments of vehicle turning paths at the intersection.	A Concept Plan showing the proposed site entrance has been prepared by MPN Consulting Engineers and is included as Attachment 2 . The proposed intersection takes into account the specified design considerations specified by TfNSW.	
The development will require plumbing and drainage works associated with the poultry sheds, amenities buildings and managers residences. Council requests that the following conditions be included in any development consent: The applicant is to obtain all relevant approvals to carry out sewerage work, to carry out stormwater drainage work and to carry out water supply work from Weddin Shire Council prior to commencing works and comply with any conditions of that permit. All work shall be carried out by a licensed plumber and drainer and to the requirements of the Plumbing Code of Australia. The licensed plumber or drainer must submit a Notice of Works form to Council prior to the commencement of any plumbing and drainage works and a Certificate of Compliance at the completion of the works.	Council's plumbing and drainage requirements are noted and these can be conditioned accordingly.	

WEDDIN SHIRE COUNCIL		
RECOMMENDATIONS	APPLICANT'S RESPONSE	
The plumbing and drainage works must be inspected by Council at the time specified below: - Internal Drainage: When all internal drainage work is installed and prior to concealment. Pipes should be under water test.	Council's plumbing and drainage requirements are noted and these can be conditioned accordingly.	
 External Drainage: When all external drainage work is installed and prior to concealment. Pipes should be under water test. 		
 Water Supply: Hot and cold-water supply pipework when the pipework is installed and prior to concealment. Pipes should be under pressure test. 		
 Stormwater: When the stormwater and roof water drainage system has been completed. 		
The Applicant is to obtain all relevant approvals to Install and Operate an On-Site Sewage Management System from Weddin Shire Council prior to commencing works to install the system and comply with any conditions of the approval.	An application under section 68 of the <i>Local Government Act 1993</i> will be obtained from Council prior to the installation of the required for the on-site sewerage waste management systems for the managers' residences. This can be conditioned accordingly.	
All work must be carried out by a licensed plumber or drainer and to the requirements of NSW Environment and health Protection Guidelines, Plumbing Code of Australia and Australian Standard/ New Zealand Standard 1547:2000 On-Site Domestic Wastewater Management. The licensed plumber or drainer must notify Weddin Shire Council at least 48 hours before each required inspection needs to be carried out.	All plumbing and drainage works will be undertaken by licensed contractors in accordance with the applicable standards. This can be conditioned accordingly.	

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT		
RECOMMENDATIONS	APPLICANT'S RESPONSE	
Based upon the Department's review of the information of the EIS, the Department considers further information is required to clarify matters and addresses inconsistencies within the documentation. The Department's comments are detailed as follows. Please see response below.		

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT

RECOMMENDATIONS

APPLICANT'S RESPONSE

Water Supply

1. The EIS claims the site has access to adequate and reliable water supply for the anticipated operational demand. However, the EIS also notes further detailed design, in consultation with Central Tablelands Water, is required to confirm the necessary upgrades to the existing infrastructure. It is requested details of all necessary water supply infrastructure be provided in the RTS, including details of the supporting water balance analysis and infrastructure arrangement required to extract, transfer, treat and store water during normal operating and emergency conditions. A contingency plan for supporting and managing water requirements during times of low flow or drought is also required.

The 1ML per day referenced in the submitted EIS represents a worst case scenario which would be a very hot summer day combined with peak bird numbers. During such an event water required for evaporative cooling of the sheds and bird drinking water would at the maximum. For a majority of the year, water for shed cooling is not required and bird drinking water is much less

Based on data from a similar sized sheds operating in Tamworth, the total annual water demand for the project is anticipated to be in the order of 141 ML per year.

A Breakdown in annual demand is shown in the following table.

ACTIVITY	ML / year
Bird Drinking	65.8
Shed Cooling	65.8
Manager Residences & Staff Amenities	5.1
Shed Cleaning	0.2
Landscaping / Tree Planting	4.0
TOTAL	140.9

Central Tablelands Water have confirmed in their correspondence dated 3 March 2022 that this annual supply of water will be available during periods up to and including Level 6 Restrictions.

Utilities and Services

2. It is understood significant electricity infrastructure upgrades are required to cater for the proposal. It is requested the Applicant provide evidence that appropriate arrangements have been established with relevant authorities for the adequate provision of electricity to the proposal.

Electrical services are to be provided in accordance with the requirements of Essential Energy and will be co-located with the internal access road.

Baiada has engaged EDC Electrical who are progressing a Request for a Major Customer - Detailed Connection Enquiry for High Voltage Power, allowing connection to connecting to Essential Energy's existing 11KV power line (GNF42) servicing the site. The next steps in the process are EE confirm connection conditions for pricing and detailed design.

Animal Welfare and Biosecurity

Baiada is fully committed to its animal welfare and biosecurity policies, which have been endorsed at the highest level by the Managing Director. These contain not only moral and ethical obligations, but also recognised that for any animal husbandry enterprise to be viable, those animals require optimum care and management, as well as provision of the very best housing and equipment available on the market. This is indeed what the Grenfell development will provide. This infrastructure will be supported by skilled and experienced husbandry managers, trained staff, optimum diets formulated by specialised poultry nutritionists, health monitoring by qualified veterinarians and

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT	
RECOMMENDATIONS	APPLICANT'S RESPONSE
	service personnel as well as technical support from subject matter experts to ensure all legal and company requirements are met. As Baiada operates across 5 States within Australia, all systems that assist managers to control animal welfare and biosecurity risks are applied on a national basis. There is an extensive management system in place that is designed to meet legal and husbandry requirements which ensures a consistent application of standards throughout the Livestock sector of the business. These management practices not only meet the Codes of Practice, Acts and Regulations and Guidelines, but strive to meet what is considered to be Best Practice in the industry.
3. Several submissions have raised concerns about animal welfare and the potential risk of zoonotic diseases. It is requested the Applicant provide site-specific information to demonstrate how the proposal will comply with relevant codes of practice and guidelines.	The primary function of the National Farm Biosecurity Manual for Poultry Production, as issued by the Dept of Agriculture, Fisheries and Forestry is "To prevent the introduction of infectious disease agents to poultry." With respect to proposed development, the greatest risk is infectious agents being introduced to the birds from outside agents such as wild birds, vermin, people, equipment, vehicles, water and feed. The relevant codes of practice which will be applied to the farm include the National Farm Biosecurity Manual (NFBM) and Guidelines issued by DAFF, The NFBM for Chicken Growers issued by Australian Chicken Meat Federation (ACMF), Baiada's own Biosecurity Manual and Baiada's National Livestock Animal Welfare and Biosecurity Manual, the relevant breed guidelines "Breeder Management Guide", as well as all legal requirements governing animal welfare and biosecurity including: • The Prevention of Cruelty to Animals (Land Transport of Livestock) Standards 2013 • Model Code of Practice: Domestic Poultry • National Water Biosecurity Manual – DAFF • National Animal Welfare Standards - ACMF • Land Transport of Poultry – Model Code of Practice for the Welfare of Animals
The RTS should address, as a minimum, the following considerations: - Stocking density (in terms of weather, shed design and climate control capabilities),	The maximum stocking density for breeders in tunnel ventilated sheds is 30kg per square meters of shed floor space. There is a regular automated calculation made based on daily bird numbers and weekly body weights. This is predicted via initial placement numbers, based on breed standard body weight profiles and predicted liveability rates, and are set so as not to exceed the maximum stocking density. Baiada has an internal reporting system to escalate where a shed's stocking density is forecast to exceed the standard and allow planning and execution of the required corrective actions to be promptly taken. The stocking density is specific to Baiada's shed design, being fully tunnel ventilated with automated mechanical temperature monitoring and control. The standard prescribes different densities for design housing types; however, with optimum

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT	
RECOMMENDATIONS	APPLICANT'S RESPONSE
	insulation properties and state of the art climate-controlled systems, the weather has little bearing on the internal shed environment.
- equipment	Feeder space will be available at 15cm per bird which exceeds the Model Code's recommendation of 10cm per bird. Drinkers will be available at 11 birds per drinker nipple, which is much less than the maximum of 15 birds per nipple prescribed.
- lighting	Lighting consists of 4 rows of dimmable LED lights in each shed and is designed to provide a minimum of 20 lux in 'light on' periods, controlled by automated time clocks to meet the prescribed lighting program and to provide a minimum day length of 8 hours.
- ventilation	Each shed will have 12 x 50" exhaust fans for full tunnel ventilation mode, plus suitably sized cool pad walls at each side of the opposite ends of the shed. This system is able to produce an internal air speed of over 3m/s. The minimum standards in this respect require ventilation systems which can achieve a humidity of less than 80% when temps are over 33 deg Celsius. The proposed operating systems can maintain such conditions, and have demonstrated shed temperatures can be retained below 27 deg. C, with ambient temperatures over 45 deg. C. Each farm will also have a backup generator on auto start in case of a mains power failure. Each shed will also have internal thermostats monitoring shed temperatures and connected to a back to a base alarm system to notify farm staff when any of the specified parameters are close to being exceeded.
- noise	Noise associated with the normal operation of any shed equipment does not affect the birds. Sudden unusual noises could cause low levels of distress. Staff are trained to avoid causing such noise, but if unavoidable, bird behaviour is monitored and actioned undertaken to minimize stress or stressed behaviour, like dimming lights or cooling the shed to get birds to settle if unavoidable noise is caused (e.g. essential repairs using power tools).
- food and water supply	Baiada has 4 feed mills which can supplement one other should any be inoperable for a period of time. Each farm will have enough feed storage capacity for minimum of 2 weeks, plus have the ability to transfer feed between silos and farms. Each farm will also 2ML of water stored in tanks providing over 2 week's supply of drinking and cooling water in the event that mains supply is unexpectedly restricted. Both the feeding and water-supply systems are fully enclosed to prevent access to and contamination from external agents like wild birds, vermin or domestic stock.
- litter quality	The minimum requirement specified in various standards is that floor litter is maintained dry and friable at all times. All management objectives are geared towards achieving this, as wet

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT	
RECOMMENDATIONS	APPLICANT'S RESPONSE
	litter can pose a risk to bird health and welfare. Where caked litter is observed it will be remediated through rotary hoeing, and any wet litter can be removed and replaced with dry material. Litter inspection is part of the mandatory daily inspection requirements for farm staff and is subject to regular verification, including submission of photographic evidence from Baiada Field Officers to validate the conditions.
- inspections	The minimum requirement applied to the proposed farm is that 2 inspections per shed per day must be undertaken by suitably trained and experienced personnel. Staff must be able to identify and report unusual bird behaviour and be able to carry out actions to mitigate issues. Feeders and drinkers within the sheds are also inspected, and the shed environment assessed on a daily basis. Mortalities are removed daily, and any ill or unthrifty birds are also removed and humanely euthanised if deemed the pertinent course of action. All such actions and instructions if required, are documented so that trends and early identification of any emerging issues can be made.
- poultry transportation	Poultry transport is subject to its own Model Codes and requirements including <i>The Prevention of Cruelty to Animals (Land Transport of Livestock) Standards 2013</i> and the <i>Land Transport of Poultry – Model Code of Practice for the Welfare of Animals.</i> The Model Codes specify minimum requirements which need to be met during transport of birds, including the densities within transport containers, consideration of bird comfort due to prevailing and/or predicted weather conditions, repairs and maintenance of containers to protect welfare and cleaning and sanitation of containers and vehicles between sites. All staff and contractors associated with the transportation of poultry are aware of and will adhere to the specified requirements.
- shed personnel and bird handling requirements in its discussion of animal welfare management	Baiada operates under its National Animal Welfare System that is based on based on the relevant Codes of Practice, legislation and best practice guidelines. Specifically, the company's animal welfare system consists of the following components: 1. Animal Welfare Policy 2. Animal Welfare Standards ▶ Third party reviewed 2020 ▶ Commenced third party auditing 2021 3. KPI trending & benchmarking 4. Incident reporting system ▶ Including a 'See Something, Say Something' hotline ▶ Incident response investigation and management process 5. Induction & training systems These systems are supported by:

DEPARTMENT OF PLANNING, INDUSTRY & ENVIRONMENT	
RECOMMENDATIONS	APPLICANT'S RESPONSE
	 Animal welfare culture surveys Trial of the 'Revelian' pre-employment screening tool when engaging new staff Diversity targets for livestock staff 'Every Chicken Counts' training and awareness program Animal Welfare Officer (AWO) training Animal welfare induction video Animal welfare officers will be trained and appointed one per farm at Grenfell as per Baiada standards Portable CCTV to monitor catching activities
 including contingency measures when: site managers are required to be evacuated during floods events feed/water supply is restricted farm workers are unable to attend the site to attend to husbandry operations. 	Site managers are required to be evacuated during floods events prior to a flood event. In the unlikely event that this situation occurs, and flocks have been unable to be moved out prior to such an event, feed and watering systems can be set to dispense automatically on timers. In Baiada's long history, there has not been an instance of flock loss due to flooding. Where accesses to a specific site have been impassable, alternate routes have been used, or in worst case scenario, helicopters can be used to transport feed. Prior to a forecast such a flood event, plans would be made for removing and relocating some or all of the stock. As demonstrated in the submitted EIS, the proposed farms are all constructed well above the 1% AEP flood events and as such managers and other minimum level farm staff can remain on the property during such an event if necessary. Again, considering worst case scenario, staff can be helicoptered into the site if critical to support operation. Feed/water supply is restricted. As part of standard operations, the on-site silos will retain a minimum of storage level equating to 2 weeks of feed to cater for such events. The on-site water storage infrastructure (which is unlikely to be impacted by flooding) also retains a minimum of 2ML on each farm for emergency supply. If required, water and feed can be transferred between sites to assist in meeting demand until normal deliveries re-commence. As outlined above in a worst case scenario, feed can also be helicoptered into the farm. Farm workers are unable to attend the site to attend to husbandry operations. As all farms and farm manager residence are located above the design flood level, they are unlikely to be directly impacted by flood waters. As such, it is expected that farm managers will remain on site during a flood event to ensure operations can continue. With respect to workers who do not reside on the farm, in the event that their access is limited, due to the presence of auto nests in the production sheds and automation

DEPARTMENT O	F PLANNING, INDUSTRY & ENVIRONMENT
RECOMMENDATIONS	APPLICANT'S RESPONSE
	husbandry processes, operations at the site can be maintained lower staffing levels, within minimal risk to the flock. Again, in a worst case scenario, workers and support staff could be helicoptered into the farm if necessary.
b) biosecurity and disease management practices and procedures to be implemented at the proposed development, including the identification of viable treatment and disposal options in the Central West region.	As outlined above, the relevant codes of practice which will be applied to the farm include the National Farm Biosecurity Manual (NFBM) and Guidelines issued by DAFF, The NFBM for Chicken Growers issued by Australian Chicken Meat Federation (ACMF), Baiada's own Biosecurity Manual and Baiada's National Livestock Animal Welfare and Biosecurity Manual, the relevant breed guidelines "Breeder Management Guide", as well as all legal requirements governing animal welfare and biosecurity including: • The Prevention of Cruelty to Animals Regulation 2012
	 The Prevention of Cruelty to Animals (Land Transport of Livestock) Standards 2013
	Model Code of Practice: Domestic Poultry
	National Water Biosecurity Manual – DAFF
	National Animal Welfare Standards - ACMF
	 Land Transport of Poultry – Model Code of Practice for the Welfare of Animals
	In accordance with the above requirements, Baiada undertakes a site-specific risk assessment for each specific farm site identifying vectors and agents of infectious disease incorporating:
	a. Moving poultry between sites
	b. Dead bird management
	c. Wild birds, vermin, stock
	d. People
	e. Equipment
	f. Vehicles
	g. Air (air borne pathogens)
	h. Water supply (quality and security)i. Feed
	Quarantine rules are then put in place regarding:
	a. Physical segregation of the production area from the general farm area
	 Restricted access to the production area of people, equipment, domestic stock, wild birds and vermin
	c. Hierarchy of visitation – for example 24hr, 48hr, 72hr, weekly stand downs between sites
	d. Shower in and change clothes for staff
	Sanitation of vehicles and equipment entering production area
	Additional controls that are identified from the risk assessment are also put in place including:

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	a. Staff trained in risks, controls and consequences
	b. Minimum Facility standards in place for:
	 Physical controls and barriers
	 Dead bird freezers provided and maintained away from the production areas.
	 Exclusion of wild birds, vermin (rodent control), other stock
	 People, showers, hand wash basins, foot baths, laundered clothes on site
	 d. Wheel washes for vehicles and equipment coming into the production area
	e. Water sanitation
	f. Closed feed supply system
	 g. Full clean out and disinfection of all sheds between batches – all in, all out system applied
	c. Monitoring and notification
	d. Auditing to the required standards
	program is put in place, which is overseen by the company veterinarians. A routine health monitoring program is also put in place, which is again determined by qualified and experienced company veterinarians. The treatment and disposal options for waste streams including mortalities was identified in the EIS. With respect to general mortalities and egg waste, these are collected from the sheds on a daily basis and stored in freezers on-site for collection. The mortalities will be taken to the company rendering plant located at either Griffith or Tamworth for rendering while egg waste can be taken to composting facilities located in the Riverina. In the event of a large mortality event, Baiada will implement its mass mortality protocols. In the unlikely event of a notifiable disease outbreak on the any of the farms, the Department of Primary Industry (DPI) will be contacted as soon as the outbreak is suspected. In most instances, the DPI will assume control of the site and order appropriate management actions to be undertaken. Existing transport and collection contractors have the capacity to
	remove large volumes of bird carcasses from site at short notice. In the event that rendering of the birds is not possible or not supported by the DPI, Baiada has an existing legal agreement with an EPA Licensed composting facility in the Riverina to take up to 5,000T per annum of mortalities. This would have the capacity to take up all birds from the Grenfell Farm if required.
	There are also generic procedures for composting litter on a site if there is a direction from the DPI that material cannot leave the site due to a disease outbreak. Should an exclusion zone exist and

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	mortalities and litter be unable to be moved, disposal will be as directed by the relevant authorities. Should this occur, Baiada is aware of a portable composting business that can be imported to the site which has the capacity to process both carcasses and litter at reasonably short notice.
Waste Management 4. The following additional information regarding the generation and management of waste is requested in the RTS: a) A revised waste assessment that clearly identifies, characterises, and categorises operational waste streams (including but not limited to general daily waste, green waste, hazardous waste, poultry litter and dead birds) in accordance with the EPA Waste Classification Guidelines b) Details of intended methods of waste management for each identified waste stream, including any on-site waste treatment and storage option(s), disposal site(s) and a contingency plan for mass mortality events c) Details regarding the proposed wastewater system to treat and dispose of wastewater from the operation of development is required, including its process overview, location, components, land area proposed for irrigation and design drawings.	A revised Waste Risk Assessment is provided in Attachment 3 . The Waste Risk assessment includes the waste classification and disposal options. 3 septic systems will be installed for the treatment and disposal of sewerage associated with each of the farms including: • 1 system for each manager's residence (2 in total). • 1 system for staff amenities on the farm. This wastewater will be treated by the waste water system and the treated water will be disposed of via poly pipe, drip irrigation systems. For the managers' residences, this poly pipe will be installed around the fence line of the dwelling to irrigate boundary planting. For the staff amenities, the pipe will run along the landscape / buffer planting to irrigate the planted trees and support growth. Weddin Shire Council has confirmed that section 68 applications under of the <i>Local Government Act 1993</i> will be required for the on-site sewerage waste management systems and this can be conditioned accordingly.
Odour	A response from Astute Environmental has been provided below.
 5. Concerns have been raised by the public in relation to odour and the following information is requested to confirm the validity of the odour impact assessment: a) Details of modelled variation in total shed odour emission rates over time to demonstrate worst-case emission scenarios have been appropriately considered in the odour impact assessment 	Variations in emissions Sections 3.5 and 7.3 of the submitted Odour Impact Assessment provide additional information in relation to this matter. In these sections. Astute examined emissions from the farm. The breeder farm emissions were relatively constant over time, as expected due to the large number and overall mass of birds present. The rearer farms were more cyclical as day old birds are placed and grown out before transitioning and being managed as breeder birds. The emissions between the units are therefore inherently linked, in that the rearer units feed into the breeder units. Therefore, it is unlikely that all are full at the same time due to each farm's are

unlikely that all are full at the same time due to each farm's age and time in the cycle. Figure 3.7 in the submitted Odour Impact Assessment shows emissions for the various units, and how three of the farms were assumed to be at or near peak density (purple,

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	green and red lines) over winter. This means that three of the farms were at peak emissions over most of the year. Adding a rearer farm to this would change the emissions marginally, in line with the peak period for the rearer farm. Concerning rearer farms, we note that emissions are often linked to bird activity rather than time of day and bird age. That is, the sheds can be blacked out to stop light entering the sheds. By doing so, bird activity can be regulated, and as observed elsewhere, less bird activity leads to lower emissions, particularly overnight when poor dispersion occurs. Our modelling did not incorporate these lower emissions at night. By adopting a K factor of 2.2 for the sheds (especially the breeder farm units which dominate the site), emissions are approximately double what would be expected to actually occur. Therefore, any variation in emissions over a year would be encompassed in the use of this conservative K factor. If a K=1 were used for the breeder units, and the rearer unit was varied to an unrealistic placement schedule, it is unlikely that the predicted impacts would significantly change. Therefore, the modelling has considered realistic worst case emission scenarios as the actual emissions are expected to be lower than modelled. As noted in the report, the odour criterion adopted was 5 ou even though following EPA's method the criterion would be 7 ou. We note that other rearer farms have recently been approved with a
b) Details of odour impacts likely to be associated with cold air drainage effects on all identified and potentially affected receivers.	Section 7.2 of the Odour Impact Assessment discussed the definition of cold air drainage (also referred to as slope flows or katabatic drift) and how it had been assessed in the modelling. As detailed in the report, the use of CALPUFF includes slope flows in the modelling process. If we had used other models, such as AUSPLUME or AERMOD cold air drainage would not have been handled as well as using CALPUFF. Specifically, CALPUFF is recommended for conditions where low wind speed dispersion is critical, under said conditions, AUSPLUME and AERMOD are not recommended. Therefore, the modelling is consistent with the Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (NSW EPA, 2016). When assessing cold air drainage in areas with low frequencies of calm winds (i.e. here we have ~0.5% calm winds under 0.3 m/s), it needs to be remembered that the potential for cold air drainage will be a function of those winds and also other factors in the area, i.e. the influence of drainage off larger terrain elements in the area. Therefore, for the over 8,760 hours assessed in the modelling, the potential for slope flows has been included for each hour where the wind speeds were low enough. This was enhanced by adopting the EPA preferred SVMIN setting of 0.2 m/s which

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	enhances the model for periods where calm wind and stagnation events may be significant.
	As shown in Figure 7-2 of the report, when the maximum contours are examined, the 'fingers' in the contours show that the peak events in the modelling are dominated by terrain elements indicating that slope flow has been included.
	In terms of odour impacts <i>likely to be associated with cold air drainage effects</i> , the EPA mandated reporting methodology is the use of the C99 1sec contours. These take into account the top 88 hours of impact. These can occur under conditions of cold air drainage, or other more neutral high wind conditions. The contours were shown in the report in Figure 5-3 and Figure 5-4 and demonstrate compliance for the C99 1sec concentrations.
Visual Amenity 6. An assessment of the potential visual impacts on the nearest property identified as Lot 2 DP595663 is required, including an evaluation of the effectiveness of the proposed landscape buffer (at different plant maturity	To confirm the visibility of the proposed farms from the Munjal homestead and other public vantage points, representatives from Baiada placed a 6m tall white post on each site with a solar light on top ensure the farms could be identified. The owners of Munjal where invited to review the farms sites from the homestead as well as travel on site and look back towards their residence from the farm locations.
conditions) on the magnitude of visual impact.	 As confirmed during these activities: Farm 1 was not visible due to intervening topography and existing vegetation.
	 Farm 4 was not visible due to intervening topography and existing row for trees to the west of the site.
	 Farm 2 will be visible from Munjal and as such 3D Visualisation was prepared.
	 Farm 3 was very difficult to locate due to the intervening topography, existing vegetation and distance to the site.
	As outlined above, Farm 2 will be the most apparent farm from the Munjal Homestead and as such, 3D Environment were engaged to prepare realistic visualisation of the Farm 2 site from Munjal Homestead. At the request of the residence, the photos were taken from the edge of fenced area to avoid garden trees. This imaged are shown in Images 1 and 2 in Attachment 4 .
	Farm 2 is setback approximately 1.5km from the Munjal Homestead and is visible from the property. Image 1 shows the proposed farm without the buffering vegetation proposed in the EIS. Image 2 show the impact on the proposed buffer vegetation and reduction in visibility of the proposed farm.
	This planting would consist of 3 rows of, endemic native trees (if these can be readily sourced) to create a visual buffer. The screens will be placed at the edge of the farm pads and will also function as a Vegetated Environmental Buffer (VEB) to reduce odour and dust emissions. An example of similar buffer between

the road and a meat chicken (broiler) farm in Tamworth is shown below. Details of the proposed buffer including species selection

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and planting can be provided prior to DPIE prior to issue of a construction certificate and can be conditioned accordingly.



Additional 3D images have also been prepared for the project where the proposed farms are partially visible from public vantage points.

As shown in Images 3 and 4, Farm 1 is momentarily visible for traffic travelling south on Gooloogong Road. Screening planting is proposed in between in front of Farm 1 site to limit visual intrusion. It is noted that as Gooloogong Road has a speed limit of 100km / hour, it is not expected to have significant impacts on the views from passing motorists.

Similarly, Farms 2, 3, 4 (as shown in Images 5 and 6) are mostly obscured by intervening topography and are setback a minimum of 1.4km from Gooloogong Road. Again, this farm is not expected to result in significant impacts on the views from passing motorists.

As noted in the submitted EIS, all planted screens are proposed in between all farms and potential public vantage points to minimise visual impacts even further.

Noise

- 7. Concerns have been raised by the public regarding acoustic impacts and the following additional information is requested in the RTS:
- a) Details of noise monitoring survey and long-term noise monitoring data, which must be provided in the noise and vibration impact assessment (NVIA) in accordance with reporting requirements established in the Australian Standard AS 1055:2018 and the EPA Noise Policy for Industry
- b) Please provide details of in-house noise emission measurements referred confirm model input assumptions and a

A Revised Noise Impact Assessment has been prepared by Reverb Acoustics and an Addendum Letter responding to the specific items raised by DPIE is provided in **Attachment 5**. A brief response to these matters is provided below with additional information provided in the addendum letter.

a) The long term noise monitoring results are provided in Attachment 5.

b) Noise levels produced by activities/equipment associated with the proposal were sourced from information supplied and/or

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clear description of how noise would be generated by the proposed activities	the library of technical data. Ground contours were obtained from topographical maps of the site and surrounds.
c) Maximum noise level assessment of construction and operational vehicle movements along Gooloogong Road at the most-affected residential receiver(s)	c) A truck under acceleration will produce a noise level of 56dB(A) at the facade of nearest residences, which equates to 46dB(A) within the residence with the window open by approximately 20% to provide natural ventilation. In comparison a decelerating truck under compression braking will produce 50dB(A) within a bedroom. In summary:
	 A typical façade with windows open sufficient to provide adequate ventilation will attenuate ≥10dB(A) or depending on the structure. Based on an external noise level of 56dB(A), Lmax, this equates to ≤46dB(A), Lmax inside a residence. Internal noise levels are below the 50-55dB(A) limit which is considered the threshold when awakenings may occur. No internal noise levels will reach 65-70dB(A), Lmax Based on the above maximum noise levels from trucks on Gooloogong Road are expected to be at acceptable levels and comply with the RNP.
d) Operational noise contours	d) Due to the small number of nearby residential receivers, production of noise contours has not been carried out. Rather single-point calculations have been modelled. This methodology complies with the requirements of the EPA Noise Policy for Industry and are suitable for assessment of the proposed development.
e) Construction noise predictions which are representative of the worst-case cumulative emission scenarios rather than assuming individual plant would operate in isolation	e) All construction equipment at the site is not expected to operate at the same time. In saying this, several machines or processes are possible simultaneously at the same time during each stage of construction. Worst-case scenarios were identified and assessed as part of the Noise Impact Assessment.
f) Justification for the exclusion of all annoying noise characteristics.	f) A detailed justification is provided in the Addendum Letter prepared by Reverb Acoustics and included in Attachment 5.
Community Engagement 8. Provide details and outcomes of further engagement with public authorities and the community during or after the exhibition period.	 Additional engagement activities undertaken during and subsequent to the exhibition period included the following: A Newspaper Article was published in the Grenfell Record on 21 February 2022 following completion of the exhibition period. Baiada was requested and provided comment to the paper which was subsequently published. In-person meetings were held between Baiada representatives and the nearest neighbour to discuss the location of the proposed farms and potential visual impacts. As part of these discussion, a 6m tall pole was placed on the site of each farm

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	 to demonstrate the location of each farm, and the impact of intervening topography, vegetation and the proposed planted screens. Discussions in relation to water supply arrangements have been held with Central Tablelands Water (CTW) to confirm the annual and maximum daily water demand for the site. These discussions culminated with CTW confirming in their correspondence dated 3 March 2022 that this annual supply of water will be available during periods up to and including Level 6 Restrictions.
Consideration of Relevant Planning Instruments 9. The EIS has only provided an assessment of the proposed development against the provisions set out in the Weddin Shire Development Control Plan 2014. It is requested additional information be provided to clearly demonstrate how the proposed development has addressed the provisions of the Weddin Shire Local Environmental Plan 2011 for intensive livestock agriculture.	A response to Section 5.18 of the LEP is provided in Attachment 6 .
Hazards and Risk 10. The preliminary risk screening assessment undertaken by the Applicant identified that the storage of Liquid Petroleum Gas (LPG) exceeded the threshold quantities in the guideline on Applying SEPP 33. Given the submitted SEPP 33 assessment is based on a semi-quantitative analysis, it is requested the following comments be addressed in the RTS: a) description of the effects of flashfires, taking into consideration established risk assessment practice b) all credible scenarios that may result in an off-site impact in undertaking a semi-quantitative risk assessment, noting that the release rate of LPG should be based on hole sizes used in established risk assessment practice (e.g., Failure Rate and Event Data for use within Risk Assessments, HSE, 2017) and consequence distances evaluated, as a minimum, for the atmospheric stability conditions of F1.5 (representing night conditions)	Revision D of the Preliminary Hazard Assessment is provided in Attachment 7, which addresses the matters raised by DPIE.

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c) a conservative level of 100% should be used in the modelling of all BLEVE events for tanks given that some LPG vessels are grouped such that a knock- on effect may occur with adjacent full LPG vessels	
d) when evaluating the consequences from a road tanker, consideration should be given to a larger road tanker capacity of LPG (21 tonnes, triple-axle) The event frequency should be compared to the risk criteria found in HIPAP No.4 if any of the hazardous events are found to affect surrounding land uses.	
Construction and Operational Details of the Development The following information is required in the RTS to clarify construction and operational details of the proposed development: 11. The indicative levels and amount of cut and fill, duration of earthworks and potential for dust impacts.	Indicative fill levels, existing and finished ground levels are shown on the Civil Engineering Plans included within Appendix 4 of the EIS. For all farms, cut and fill has been balanced to minimise the need for import of materials. Earthworks required to create a level building (both cut and fill) transition back to natural ground using batters with a maximum slope 1 in 4. Earthworks associated with each farm is expected to take in the order of 10 weeks. In accordance with standard construction practices, dust from earthworks will be managed through the use of water trucks to wet exposed material. Dust control measures will be documented in a Construction Environmental Management Plan (CEMP) and can be conditioned accordingly.
12. Details of mechanical plant, machinery, and equipment (including technical specification, plant schedule and siting plan).	A Plant and Equipment List has been prepared by the Applicant and is included as Attachment 8.
13. Variability in traffic generation pattern across the anticipated production cycles.	As the production cycles of the 4 farms will be spread evenly across the year, there is not expected to be significant variation in traffic generation patterns across the calendar year. A realistic production schedule for the operation has been prepared and is included as Attachment 9 . As shown, in Attachment 9 , the peak for Heavy Vehicle Traffic is expected to be in Week 6 (82 Trips) which equates to 12 Trips per day (6 trucks incoming / 6 trucks outgoing). With respect to Light Vehicles, the peak is expected to be in Week 35 (394 Trips) which equates to 56 trips per day (28 cars incoming / 40 cars outgoing). Please note the daily average for heavy vehicles trips is 7.7 trips (4 incoming / 4 outgoing) and for light vehicles is 41.3 trips per day (21 incoming / 21 Outgoing).

DEPARTMENT OF PRIMARY INDUSTRIES – ANIMAL WELFARE

RECOMMENDATIONS

APPLICANT'S RESPONSE

We have reviewed the EIS, and while Grenfell/Baiada have indicated they will comply with all minimum legislative requirements and, in their Appendix 14, state they will 'strive to exceed these minimum standards' we note that they could reference additional legislative requirements on page 11 of the EIS.

On Page 11 of the EIS, where Animal Welfare is discussed, they have only listed legislative requirements for transport and slaughter. They need to also consider the relevant legislative requirements for the welfare laws which pertain to having/growing the animals on site, for example:

- The welfare of poultry in NSW is protected by legislation and supporting Codes and Standards.
- The Prevention of Cruelty to Animals
 Regulation 2012 is mandatory and provides
 minimum requirements for laying fowl.
- The Prevention of Cruelty to Animals (Land Transport of Livestock) Standards 2013 is prescribed under the Prevention of Cruelty to Animals Act 1979 (POCTA). It is a mandatory requirement that people involved in the care and welfare of poultry comply with this document.
- Although not mandatory, the Model Code of Practice: Domestic poultry is prescribed under POCTA. It may be used as evidence of an offence in court proceedings.

Baiada is fully committed to its animal welfare and biosecurity policies, which have been endorsed at the highest level by the Managing Director. These contain not only moral and ethical obligations, but also recognised that for any animal husbandry enterprise to be viable, those animals require optimum care and management, as well as provision of the very best housing and equipment available on the market. This is indeed what the Grenfell development will provide. This infrastructure will be supported by skilled and experienced husbandry managers, trained staff, optimum diets formulated by specialised poultry nutritionists, health monitoring by qualified veterinarians and service personnel as well as technical support from subject matter experts to ensure all legal and company requirements are met.

As Baiada operates across 5 States within Australia, all systems that assist managers to control animal welfare and biosecurity risks are applied on a national basis. There is an extensive management system in place that is designed to meet legal and husbandry requirements which ensures a consistent application of standards throughout the Livestock sector of the business. These management practices not only meet the Codes of Practice, Acts and Regulations and Guidelines, but strive to meet what is considered to be Best Practice in the industry.

The relevant codes of practice which will be applied to the farm include the National Farm Biosecurity Manual (NFBM) and Guidelines issued by DAFF, The NFBM for Chicken Growers issued by Australian Chicken Meat Federation (ACMF), Baiada's own Biosecurity Manual and Baiada's National Livestock Animal Welfare and Biosecurity Manual, the relevant breed guidelines "Breeder Management Guide", as well as all legal requirements governing animal welfare and biosecurity including:

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DEPARTMENT OF PRIMARY INDUSTRIES – ANIMAL WELFARE

RECOMMENDATIONS

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RECOMMENDATIONS

APPLICANT'S RESPONSE

AIR QUALITY AND ODOUR:

Odour Model Uncertainty

The Odour and Dust Assessment has modelled the four farms of 10 sheds each being stocked at day 1 of the calendar year. The modelling has assumed that a two-year period was simulated within a single year. However, it is unknown if this modelled bird placement regime results in the maximum odour emissions coinciding with the worst case meteorological conditions, which would represent worst-case odour impacts.

Although the proposed breeder/rearing farm will have a longer stocking regime than broiler farms, the odour modelling should include additional scenarios to ensure the prediction of worst-case odour impacts. These additional scenarios should assume a suitable offset period to account for variability of emissions and to model odour impacts over a greater set of meteorological conditions. The offset used to model broiler farms (i.e. 2 weeks) may not be suitable for breeder farms and the offset used should be adequately justified.

The EPA recommends that the proponent revises the modelling to include additional scenarios with offset stocking start dates to capture worst case impacts. Adequate justification for the assumed offset stocking dates must be provided.

A response from Astute Environmental has been provided below.

Sections 3.5 and 7.3 of the submitted Odour Impact Assessment provide additional information in relation to this matter. In these sections, Astute examined emissions from the farm. The breeder farm emissions were relatively constant over time, as expected due to the large number and overall mass of birds present. The rearer farms were more cyclical as day old birds are placed and grown out before transitioning and being managed as breeder birds.

The emissions between the units are therefore inherently linked, in that the rearer units feed into the breeder units. Therefore, it is unlikely that all are full at the same time due to each farm's age and time in the cycle. Figure 3.7 in the submitted Odour Impact Assessment shows emissions for the various units, and how three of the farms were assumed to be at or near peak density (purple, green and red lines) over winter. This means that three of the farms were at peak emissions over most of the year.

Adding a rearer farm to this would change the emissions marginally, in line with the peak period for the rearer farm. Concerning rearer farms, we note that emissions are often linked to bird activity rather than time of day and bird age. That is, the sheds can be blacked out to stop light entering the sheds. By doing so, bird activity can be regulated, and as observed elsewhere, less bird activity leads to lower emissions, particularly overnight when poor dispersion occurs. Our modelling did not incorporate these lower emissions at night.

By adopting a K factor of 2.2 for the sheds (especially the breeder farm units which dominate the site), emissions are approximately double what would be expected to actually occur. Therefore, any variation in emissions over a year would be encompassed in the use of this conservative K factor. If a K=1 were used for the breeder units, and the rearer unit was varied to an unrealistic placement schedule, it is unlikely that the predicted impacts would significantly change.

Therefore, the modelling has considered realistic worst case emission scenarios as the actual emissions are expected to be lower than modelled.

As noted in the report, the odour criterion adopted was 5 ou even though following EPA's method the criterion would be 7 ou. We note that other rearer

As outlined above, the modelling has considered realistic worst case emission scenarios and has demonstrated clear compliance with todour impact sond provided with the inherent uncertainty in odour modelling means the results presented do not provide for adequate evaluation of impacts and that no offensive odour risk of the proposal enables further evaluation of the potential for odour impacts from the proposal. It is important for the proponent to understand the odour risk of their project as it is the proponent's responsibility to comply with Section 129 of the POED Act. Further, a facility with no contingency measures is a high-risk project compared to a facility which does have contingency measures that could be implemented if odour becomes an issue. Section 6.2 of the Technical Framework – Assessment and management of odour impacts and includes the additional feasible mitigation measures that could be implemented if odour sixes occur or if surrounding land use changes. The EPA recommends the proponent evaluates additional reasonable and feasible mitigation and	NSW EPA			
Odour Risk and Additional Mitigation Measures Not Provided As outlined above, the modelling has considered realistic worst case emission scenarios and has demonstrated clear compliance with odour impact sessment predicts less than 4 odour units (OU) at the nearest receptor. However, there is significant variability of odour emissions from the activities and only a limited staged stocking regime is modelled. These issues combined with the inherent uncertainty in odour modelling means the results presented do not provide for adequate evaluation of impacts and that no offensive odour beyond the boundary will occur. Compliance with the odour criterion is just one tool to indicate acceptable impacts. Demonstrating an understanding of the odour risk of the proposal enables further evaluation of the potential for odour impacts from the proposal. It is important for the propient as it is the proponent's responsibility to comply with Section 129 of the POEO Act. Further, a facility with no contingency measures is a high-risk project compared to a facility which does have contingency measures that could be implemented if odour becomes an issue. Section 6.2 of the Technical Framework – Assessment and management of odour from stationary sources in NSW lists the information required to determine likely acceptability of odour impacts and includes the additional feasible mitigation measures that could be implemented if odour issues occur or if surrounding land use changes. The EPA recommends the proponent evaluates the odour risk of the activities and identifies additional reasonable and feasible mitigation and	RECOMMENDATIONS	APPLICANT'S RESPONSE		
Modelling of odour impacts in the Odour and Dust Assessment predicts less than 4 odour units (OU) at the nearest receptor. However, there is significant variability of odour emissions from the activities and only a limited staged stocking regime is modelled. These issues combined with the inherent uncertainty in odour modelling means the results presented do not provide for adequate evaluation of impacts and that no offensive odour beyond the boundary will occur. Compliance with the odour criterion is just one tool to indicate acceptable impacts. Demonstrating an understanding of the odour risk of the proposal enables further evaluation of the potential for odour impacts from the proposal. It is important for the proponent to understand the odour risk of their project as it is the proponent's responsibility to comply with Section 129 of the POEO Act. Further, a facility with no contingency measures is a high-risk project compared to a facility which does have contingency measures that could be implemented if odour impacts and includes the additional feasible mitigation measures that could be implemented if odour impacts and includes the additional feasible mitigation and surrounding land use changes. The EPA recommends the proponent evaluates the odour risk of the activities and demonstrated clear compliance with the NSW EPA dour footprint) at the NSW EPA logo foso is shown in Figure 28. The modelling shows clear compliance with the NSW EPA odour IAC of 50u. As noted, the highest predicted concentration at the nearest sentive receptor (using the conservative K factor of 2.2) is 3-9ou. Regardless of the demonstrated compliance, a number of Odour Management and Mitigation on easures have been identified in Section 5 of the EIS to ensure the site operates as predicted and adopts best management practice is considered the best approach to odour management as opposed to engineered solutions. In the unlikely event that the farm results in unacceptable odour impacts, despite best practice farm management, good sh		,		
does have contingency measures that could be implemented if odour becomes an issue. Section 6.2 of the <i>Technical Framework – Assessment and management of odour from stationary sources in NSW</i> lists the information required to determine likely acceptability of odour impacts and includes the additional feasible mitigation measures that could be implemented if odour issues occur or if surrounding land use changes. The EPA recommends the proponent evaluates the odour risk of the activities and identifies additional reasonable and feasible mitigation and	Modelling of odour impacts in the Odour and Dust Assessment predicts less than 4 odour units (OU) at the nearest receptor. However, there is significant variability of odour emissions from the activities and only a limited staged stocking regime is modelled. These issues combined with the inherent uncertainty in odour modelling means the results presented do not provide for adequate evaluation of impacts and that no offensive odour beyond the boundary will occur. Compliance with the odour criterion is just one tool to indicate acceptable impacts. Demonstrating an understanding of the odour risk of the proposal enables further evaluation of the potential for odour impacts from the proposal. It is important for the proponent to understand the odour risk of their project as it is the proponent's responsibility to comply with Section 129 of the POEO Act. Further, a facility with no contingency measures is a high-risk project compared to a facility which does have contingency measures that could be implemented if odour becomes an issue. Section 6.2 of the <i>Technical Framework</i> – Assessment and management of odour from stationary sources in NSW lists the information required to determine likely acceptability of odour impacts and includes the additional feasible mitigation measures that could be implemented if odour issues occur or if surrounding land use changes. The EPA recommends the proponent evaluates the odour risk of the activities and identifies additional reasonable and feasible mitigation and	realistic worst case emission scenarios and has demonstrated clear compliance with odour impact (odour footprint) at the NSW EPA Impact Assessment Criteria (IAC) of 5ou is shown in Figure 28. The modelling shows clear compliance with the NSW EPA odour IAC of 5ou. As noted, the highest predicted concentration at the nearest sensitive receptor (using the conservative K factor of 2.2) is 3.9ou. Regardless of the demonstrated compliance, a number of Odour Management and Mitigation measures have been identified in Section 5 of the EIS to ensure the site operates as predicted and adopts best management. Good shed and litter management practice is considered the best approach to odour management as opposed to engineered solutions. In the unlikely event that the farm results in unacceptable odour impacts, despite best practice farm management, engineered solutions could be considered such as impact walls, stacks or additional		
controls that could be applied should odour the sheds with overlapping, bushy, foliage to act as a		In response to the EPA Request, the proposed Vegetated Environmental Buffers (VEBs) have been clearly identified on the development plants included in Attachment 1 . The VEBs will be planted and maintained around the sheds as soon as practicable following construction. VEBs reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition and odour dispersion. The VEB will consist of 10m (3 rows) of native trees (if these can be readily sourced), along the fan ends of		

Details of the proposed VEBs, including species selection and planting can be provided prior to DPIE prior to issue of a construction certificate and can be conditioned accordingly.

odour".

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RECOMMENDATIONS

APPLICANT'S RESPONSE

Dust Management

The EPA considers that the Project has the potential to cause dust emissions. This can be mitigated through adhering to best management practice and maintaining good housekeeping in accordance with relevant guidelines.

The Proponent is recommended to implement all reasonable and feasible measures to proactively minimise dust emissions from the premises, including but not limited to access roads during both construction and operation.

Dust impacts from the proposed development were assessed and modelled by the have been assessed using the Approved Methods (NSW EPA, 2016) for assessment the impacts from dust generating activities. Particulate emissions from the proposed sheds and other activities were based on data collected at a meat chicken farm in New South Wales as well as theoretical considerations. The modelling shows that no exceedances of the applicable criteria (24 hour PM10) were predicted to occur at any of the sensitive receptors.

Regardless of the demonstrated compliance, a number of Dust Management and Mitigation measures have been identified in Section 5 of the EIS to ensure the site operates as predicted and adopts best management.

In response to the EPA Request, the proposed Vegetated Environmental Buffers (VEBs) have been clearly identified on the development plants included in **Attachment 1**.

The VEBs will be planted and maintained around the sheds as soon as practicable following construction. VEBs reduce the magnitude and frequency of any adverse air quality impacts by effectively slowing and filtering air movement, which enhances dust deposition and odour dispersion.

The VEB will consist of 10m (3 rows) of native trees (if these can be readily sourced), along the fan ends of the sheds with overlapping, bushy, foliage to act as a natural filter. The VEB is to achieve a porosity of 50% for best performance.

Details of the proposed VEBs, including species selection and planting can be provided prior to DPIE prior to issue of a construction certificate and can be conditioned accordingly.

WATER AND WASTEWATER:

The EIS considers water impacts and associated management procedures for both construction and operation.

Construction

The EPA acknowledges that a suite of sediment and erosion control measures are discussed in the EIS, including the installation of a series of sediment basins to capture stormwater runoff during construction. The EPA reminds the Proponent that appropriate sediment and erosion controls must be in place prior to the commencement of construction

The Stormwater Management Plan prepared by MPN Consulting Engineers was included as Appendix 6 of the submitted EIS and documents the strategy for Erosion and Sediment Control during the construction phase of the project (See Section 5.3.4). Erosion and Sediment Control Plans showing the treatment measures have also been prepared by MPN and were included in the EIS (see plans ES.0.01 – ES.4.02).

Broadly the approach adopted for the construction phase involves the use temporary ESC Measures such as clean water diversion bunds and sediment fencing to initial earthworks. This will be followed by construction of the sediment basins as the first stage

NSW EPA

RECOMMENDATIONS

activities and adapted as required as the project progresses.

Detail on the capacity, sizing, design rain event, catchment and management of the sediment basins are not provided. The EPA reminds the proponent that it is an offence under section 120 of the POEO Act to pollute any waters. The project is unlikely to include a license to discharge to waters. In that regard, the proponent must ensure that any discharges to waters meet ambient water quality or the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018). This includes Total Suspended Solids and any pollutants that might be present during construction.

The EPA requires further information on the capacity, sizing, design rain event, catchment, and management of the sediment basins.

Operation

The Proponent identifies that during operations stormwater runoff from the Premises will be managed via natural drainage which ultimately results in a discharge to waters. It is identified that water quality will be treated in accordance with the levels required by Weddin Shire Council and industry best management practice. It is unclear how the sediment basins installed during construction will be managed during operation, and whether any wastewater will be generated from activities relating to the cleaning out of sheds.

The EPA reminds you that it is a strict liability offence under section 120 of the POEO Act to pollute any waters. The Project is unlikely to include a license to discharge to waters. In that regard, the Proponent must ensure that any discharges to waters meet ambient water quality or the trigger values identified in ANZG 2018. This includes total suspended solids, nutrients such as total nitrogen, ammonia, total phosphorus, and any other pollutants that might be present from the Premises.

Where the water is unlikely to meet ambient water quality of the ANZG trigger values, the Proponent must look for alternative measures to manage the waters to avoid pollution of waters and protect the Water Quality Objectives for the receiving waters of Wallah Creek and Warranderry Creek. This may include, but need not be limited to consideration of:

APPLICANT'S RESPONSE

of earthworks for building pads. The sediment basins will ultimately become the detention basins for the operational phase of the project.

The detention basins have been sized using DRAINs computer software based on runoff flows for the Annual Recurrence Intervals from 5 to 100 years and durations of 5 minutes to 2 hours to ensure that peak runoff flows from the proposed development would not exceed peak runoff flows from the existing site. Further details provided in Section 5.3.2 of the submitted Stormwater Management Plan.

As the basins have been sized to cater for the run off from the completed building pads, sheds and other farm infrastructure, they will have sufficient capacity to function as sediment basins during construction.

A detailed Erosion and Sediment Control Plan will be provided with the necessary Construction Certificate required prior to commenced of works and can be conditions accordingly.

1. Stormwater Quality

With respect to stormwater quality, it is important to note that the proposed poultry sheds are constructed on an elevated pad and concrete slab and surrounded by a waterproof blockwork at the base of the insulated panel wall. As such internal shed areas are entirely separated from interaction with stormwater or roof water. Any stormwater runoff from the site is therefore expected to be of high quality, similar to the quality of water runoff from the surrounding area, and as such not capable of generating issues of water contamination in waterways or water dependent ecosystems.

In order to reduce overall post-development

pollutant loads and concentrations being discharged from the farm sites, treatment solutions have been provided to remove hydrocarbons, suspended solids and nutrients prior to being discharged from site. Stormwater runoff from the sheds will be treated by grassed swales and the bioretention/detention basins prior to discharge to receiving waters. Stormwater runoff from the internal roads will be treated by a roadside swale proposed along the low side of the road. Full details of this treatment plan are provided in the Stormwater Management Plan submitted with the EIS (See Appendix 6, section 5.3.3).

MUSIC Modelling was undertaken to assess the percentage-based pollutant load reductions at the

NSW EPA

RECOMMENDATIONS

- use opportunities such as irrigation or site outlet against the
- 1. Beneficial reuse opportunities such as irrigation or dust suppression
- 2. Installing appropriate clean water diversions to reduce the volumes of stormwater generated on the Premises
- 3. Implementing enhanced sediment and erosion controls to reduce the pollutants generated during wet weather
- 4. Capturing polluted stormwater onsite and managing appropriately to avoid a discharge to waters

The EPA requires further information regarding the management of waters during operation to avoid pollution of waters. Specifically, the EPA requires further information on:

- 1. The management of stormwater generated on the Premises to avoid pollution of waters, giving consideration to the above advice
- 2. Details on any wastewater generated from cleaning activities including volume, quality, and management to avoid pollution of waters
- 3. Details of the fate of sediment basins installed during construction after construction has ceased

site outlet against the relevant Water Quality
Objectives for the receiving waters. The assessment
concludes that the proposed treatment train, as well
as management practices to be implemented at each
of the farms will achieve the relevant pollutant
reduction targets.

APPLICANT'S RESPONSE

Given the controlled environment in which the proposed poultry development will operate, along with the approval development conditions it will need to comply with, the proposed farm will pose a minimal risk with respect to stormwater quality.

Opportunities for water re-use will be limited to direction of some of the stormwater flows to the planted screening vegetation. Water storage on-site for irrigation and dust suppression acts as an attractant for water fowl and introduces unacceptable bio-security risk to the operation of a breeder / rearing farm.

2. Cleaning Activities

With respect to cleaning, once the birds are removed from the sheds, they are swept and vacuumed cleaned with the remaining floor litter taken off site via a covered truck. Following dry cleaning, the sheds are sanitised using a high pressure spray to minimise water use. The sheds are then left open for any excess water to evaporate, before being set up for the next batch.

Again, as the sheds are constructed on a concrete slab and surrounded by a waterproof blockwork wall there is minimal risk of interaction between the internals of the sheds and external stormwater.

3. Sediments Basins

The sediment basins will ultimately become the detention basins for the operational phase of the project.

NOISE AND VIBRATION:

The Proposal identifies that some exceedances of the noise levels identified in the Interim Construction Noise Guidelines (ICNG) are expected during major construction. The Proponent identifies that nearby neighbours should accept some periods of high noise, considering the relatively short term nature of louder construction activities.

The EPA considers that all reasonable and feasible mitigation measures must be implemented to address these periods of excessive noise. Where noise levels cannot be achieved, the Proponent must consider effective stakeholder engagement,

A Revised Noise Impact Assessment has been prepared by Reverb Acoustics and an Addendum Letter is provided in **Attachment 5**.

With respect to construction noise, the letter provided by Reverb Acoustics provides the following response regarding construction noise.

It is noted that the nearest residence is more than 1500 metres from the site and the cumulative noise impact during each stage of construction is expected to be compliant with the criteria. However, the cumulative noise impact from several machines operating simultaneously, while predicted to be compliant with the criteria, has the potential to

NSW EPA			
RECOMMENDATIONS	APPLICANT'S RESPONSE		
including but not limited to consideration of respite periods and alternative accommodation as appropriate.	exceed limits, particularly pile boring, mobile plant and equipment associated with major concrete pours. The ICNG recommends that as a first course of action, consideration should be given as to whether any alternate feasible or reasonable method of construction is possible.		
	The ICNG further recommends that when alternate feasible and reasonable options have been considered the proponent then should communicate with the impacted residents by clearly explaining the duration and noise level of the works, and any respite periods that will be provided.		
	It should be noted that calculations are based on plant items operating in exposed locations and at full power, with no allowances made for intervening topography or shielding provided by intervening structures. Cumulative impacts, from several machines operating simultaneously, may be reduced when machines are operating in shielded areas not wholly visible to receivers. In saying this, if two or more machines were to operate simultaneously on the site, received noise levels would be raised and higher exceedances may occur. For instance, a concrete agitator, concrete pump and support truck, in exposed locations, will produce a combined noise level of 36-38dB(A),Leq at nearest residences. Initial earthworks are expected to employ 1 or 2 excavators, a front end loader and 2-3 dump trucks. The combined acoustic power level of these machines, assuming normal contractor's machines up to 10 years old in reasonably good condition, is expected to be in the range 104 to 108B(A),Leq. However, the machines will typically be spread over the site, and noise at any receiver is typically dominated by the few closest machines, such as an excavator loading a truck, while a second truck reverses into position to be loaded by an excavator. With a combined acoustic power level of 105 dB(A) for 3 typical machines operating at full power, up to 37dB(A) is expected at the closest residence during peak activity.		
	Constructing temporary barriers or mounds of excess fill, etc, at least 2m high, at the perimeter of the construction site (or at least adjacent to noisy plant items) may be considered for mitigating some of the construction noise at nearest receivers. With barriers in place, worst case construction will reduce by 5dB(A) or more, although, as previously stated, these noise levels are expected to occur for a relatively		

NSW EPA			
RECOMMENDATIONS	APPLICANT'S RESPONSE		
	short time and reduce as work progresses to a new area. It should be acknowledged that construction activities that produce higher noise for a shorter period are often more desirable than alternate construction techniques that produce lower noise for a much longer period. This combined with noise control strategies such as co-ordination between the construction team and neighbours will ensure that minimum disruption occurs.		
WASTE MANAGEMENT The Proponent identifies that waste will be managed in accordance with a Waste Management Plan during both construction and operation. The EPA reminds the proponent that all waste must be classified in accordance with the NSW EPA's Waste Classification Guidelines and disposed of at a facility that can lawfully accept it.	A revised Waste Risk Assessment is provided in Attachment 3 . The Waste Risk assessment includes the waste classification and disposal options.		
CHEMICAL STORAGE The Proponent identifies that there will be a range of chemicals stored at the Premises during operations. The EPA recommends that all chemicals, including hydrocarbons, dangerous goods and other chemicals are bunded in accordance with relevant Australian Standards. The EPA also recommends that the Proponent develops a procedure to maintain and monitor chemical storage areas to detect leakages and prevent spills. This procedure should include consideration of maintaining capacity within bunded areas following rain events.	Chemical handling and storage procedures will be undertaken in accordance with the applicable Safety Data Sheets (SDS), good manufacturing practice and all relevant Australian Standards. Chemical handing, use and storage procedures will also be documented in a comprehensive Environment Management Plan which will be prepared for the site.		

DEPARTMENT OF PLANNING AND ENVIRONMENT - WATER			
COMMENTS	APPLICANT'S RESPONSE		
DPE Water and NRAR have reviewed the EIS and have concerns regarding water access and impact assessment(s) for any additional water infrastructure that may be required.			
1.0 Water Take and Compliance 1.1 Recommendations – Prior to Determination	The 1ML per day referenced in the submitted EIS represents a worst-case scenario which would be a very hot summer day combined with peak bird		

DEPARTMENT OF PLANNING AND ENVIRONMENT - WATER

COMMENTS

The proponent should:

- Confirm the requirement for additions or modifications to the water supply infrastructure for the project and complete an impact assessment of its installation and operation.
- Progress formal discussions with Central Tablelands Water to ensure there are no issues in accessing water for the project.

1.2 Recommendations - Post Approval

The proponent should:

- Prepare a Construction Environmental Management Plan (incorporating a Soil and Water Management Plan) prior to commencement of activities.
- Design the sediment basins in accordance with Managing Urban Stormwater: Soils and Construction (Landcom 2004) and will need to meet an excluded work definition in Sch 1(3) of the Water Management Regulation 2018 to be exempt from water licensing requirements.
- Ensure watercourse crossings and other works within waterfront land are in accordance with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).

1.3 Explanation

The water demand of 1ML/d (365ML/yr) is to be sourced under an agreement with Central Tablelands Water (CTW). The EIS indicates preliminary discussions with CTW have identified the ability to supply the necessary water quantity and quality, however this is yet to be confirmed. Securing an agreement with CTW is critical to the viability of this project.

The EIS references further work is required in consultation with CTW to finalise the design and to determine the need for upgrades to the water supply infrastructure. It is recommended any additional infrastructure required for this project be detailed and assessed as part of this current SSD process to prevent the need for additional regulatory processes.

A number of minor watercourses are evident within or adjacent to the disturbance footprint. Managing runoff from these watercourses will need to ensure water is diverted in a stable manner around the

APPLICANT'S RESPONSE

numbers. During such an event, water required for evaporative cooling of the sheds and bird drinking water would at the maximum. For a majority of the year, water for shed cooling is not required and bird drinking water is much less.

Based on data from a similar sized sheds operating in Tamworth, the total annual water demand for the project is anticipated to be in the order of 141 ML per

A breakdown in annual demand is shown in the following table.

ACTIVITY	ML / year
Bird Drinking	65.8
Shed Cooling	65.8
Manager Residences & Staff Amenities	5.1
Shed Cleaning	0.2
Landscaping / Tree Planting	4.0
TOTAL	140.9

Central Tablelands Water have confirmed in their correspondence dated 3 March 2022 that this annual supply of water will be available during periods up to and including Level 6 Restrictions.

The Applicant will adopt the recommendations and necessary modifications outlined in the Recommendations – Post Approval and this can be conditioned accordingly.

DEPARTMENT OF PLANNING	AND ENVIRONMENT - WATER
COMMENTS	APPLICANT'S RESPONSE
development sites and into the downstream waterways. A third order watercourse is noted on the southern side of Farm 3. A vegetated buffer needs to be established in this area consistent with the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018). The flood impact assessment predicted increased afflux upstream of the bridge and increased velocity downstream of culverts. The detailed design will need to minimise hydraulic and hydrological impacts and to develop appropriate mitigating measures. Implementation of the Guidelines for Controlled Activities on Waterfront Land (NRAR 2018) will assist in managing these issues. The proponent has committed to preparing Erosion and Sediment Control Plans in accordance with the guideline; Managing Urban Stormwater: Soils and Construction (Landcom 2004). This is supported.	
2.0 Groundwater Management 2.1 Recommendation – Post Approval	The Applicant will adopt the recommendation for a groundwater monitoring bore as outlined in the
The proponent should: - Incorporate construction and ongoing monitoring of at least one groundwater monitoring bore within the Water Management Plan for the development. The bore should target alluvial groundwater and be located on the project site, down-gradient of treated water discharge locations. Adequate baseline data should be obtained prior to commencement of operation.	submitted Recommendation – Post Approval and this can be conditioned accordingly.
2.2 Explanation	
The site boundaries extend over two water sharing plans including fractured rock and alluvial groundwater sources which include nearby water users. Surface water treatment is proposed via a series of channels and detention basins, presenting a potential risk for seepage of nutrients into groundwater. Monitoring of the groundwater is	

I trust this information is of assistance. Please do not hesitate to contact me on 07 3220 0288 or via email nicole@psaconsult.com.au.

Regards,

appropriate response.

recommended to detect changes to groundwater quality and enable the proponent to initiate an

Barton

Nicole Boulton Principal Planner PSA Consulting Pty Ltd

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
V4	29 April 2022	FINAL	Nicole Boulton	DILL
				David Ireland