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25 August 2020

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

Attention: Ania Dorocinska@planning.nsw.gov.au

Dear Ania,

RE: BAIADA INTEGRATED POULTRY PROCESSING FACILITY (SSD 9394) – REQUEST FOR ADDITIONAL INFORMATION FOR HUNTER NEW ENGLAND LOCAL HEALTH DISTRICT

I refer to your correspondence dated 5 August 2020 providing additional comments from the Hunter New England Local Health District (Hunter New England Population Health), hereby referred to as HNE. We note that the HNE requested that the proponent address a number of matters and a response to each of these matters has been provided below.

MATTERS RAISED	APPLICANT'S RESPONSE
Depending on reclaimed water quality, restrictions on end-uses are needed to control the exposure routes from residual pathogens and chemical contaminants to humans, food crops and/or livestock. It is therefore important that suppliers and users of reclaimed water work together to identify and assess the potential exposure routes associated with their reuse scheme. *The degree of risk from each of the above pathogen groups will depend upon the Class of reclaimed water and the reuse application. Potential impacts both to and from reclaimed water of pathogen regrowth and disease transmission need to be assessed and appropriately controlled. This is particularly relevant where contamination via "vectors", such as birds (that could be attracted to reclaimed water ponds) is concerned. If not controlled, pathogens have the potential to be transmitted to humans or stock by (i) direct routes (that is through skin contact, ingestion or inhalation) or (ii) indirect contact (that is consumption of contaminated food or feed).*	**Noted.** The water will be treated within the AWTP in accordance with the following NSW and Federal government guidelines: • NSW Food Authority – Water Reuse Guideline (May 2008); • NSW Government – Management of private recycle water schemes (May 2008); • NSW Department of Primary Industries – Recycled Water Management Systems (May 2015); • Australian Government (National Health and Medical Research Council, National Resource Management Ministerial Council) – Australian Drinking Water Guidelines. Following treatment, the recycled water will be stored in enclosed tanks prior to use within the facility. At no point will the recycled water be left in open air ponds which can be exposed to wildlife such as birds. The ponds shown on the proposed site plans are evaporation ponds for the by-product (brine stream) produced by the advanced water treatment process. The complete treatment process is shown on the Process Flow Diagram in the previously submitted AWTP Design Report.
Reclaimed water schemes that require particular attention for health risk assessment include: • *those that will result in consumption of reclaimed water (for example, indirect potable reuse);*	**Noted.** The recycled water will only be used within the processing plant and will not be accessible to the public. The Advanced Water Treatment Plant (AWTP) produces potable water that meets or exceeds the Australian Drinking Water Guidelines. Drinking quality water does not pose a risk to human health or to product quality or

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• *irrigation of readily accessible public areas with potential for direct exposure to reclaimed water (for example, via spray drift);* • *discharging reclaimed water to surface waters that are used for fishing, or water contact sports; and* • *industrial reuses where workers may either come into direct contact with reclaimed water or ingest aerosols.*	safety. The water will be stored in sealed tanks and used for processing poultry within the processing facility.
Hunter New England Local Health District Population Health acknowledges that recycled water comes from an inherently unsafe source, therefore prevention is an essential feature of effective recycled water quality management. Preventive measures, in the context of managing recycled water schemes, are the actions, activities and processes used to prevent significant hazards from being present in recycled water schemes or to reduce any hazards to acceptable levels.	The proposed advanced water treatment plant will meet or exceed the water quality requirements noted in the following documents: • NSW Food Authority – Water Reuse Guideline (May 2008); • NSW Government – Management of private recycle water schemes (May 2008); • NSW Department of Primary Industries – Recycled Water Management Systems (May 2015); • Australian Government (National Health and Medical Research Council, National Resource Management Ministerial Council) – Australian Drinking Water Guidelines. The AWTP will be operated in accordance with a Hazard Analysis and Critical Control Points (HACCP) Plan. Preparation and approval of the HACCP plan will be an integral part of the Food Authority approval process which is appropriately completed following detailed design and prior to production commencing. This can be reasonably and relevantly conditioned as part of a Development Approval.
Hunter New England Local Health District Population Health acknowledges that recycled water comes from an inherently unsafe source, therefore prevention is an essential feature of effective recycled water quality management. Preventive measures, in the context of managing recycled water schemes, are the actions, activities and processes used to prevent significant hazards from being present in recycled water schemes or to reduce any hazards to acceptable levels. *NSW Health strongly recommends that the proponent determine maximum risk levels;* *• the entire recycled water system, including the water source, its characteristics and proposed end uses;* *• existing preventive measures, from source(s) to the user of recycled water, for each significant hazard or hazardous event;*	It is important to note the AWTP will be utilising proven, existing technology which is already being used in two major poultry production facilities in Australia. The comprehensive Hazard Assessment Critical Control Point (HACCP) based quality management system will be completed and implemented for the AWTP as part of the overall facility HACCP plan and this will be an integral part of the Food Authority approval process. The hazard identification and risk assessment will be undertaken by the HACCP team and facilitated by independent water quality specialists during the detailed process and prior to commencement of operations. The comprehensive Risk Assessment report addressing all the issues raised in the Department's letter will be furnished by the proponent and at a minimum will include: • list of the team members involved; • a process flow diagram and description of the recycled water scheme (from source to end use)

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• *increased risk due to inadvertent or unauthorised actions;* • *ongoing operational monitoring needs to be identified (with response actions) to endure quality is maintained;* • *spatial aspects (these need to be considered when identifying preventive measures for environmental risks, because the sensitivity of receiving environments can vary over space);* • *areas where the use or discharge of recycled water is not appropriate due to, for example, environmental sensitivity or soil type or topography.* *Maximum risk (the risk with no preventive measures in place) and residual risk (the risk with the preventive measures in place) should be assessed for public health and environmental impacts e.g. assessment of harmful nutrient, salinity or sodicity build-up in any resource impacted by recycled water use and how this will be prevented, monitored and/or rectified.* *The risk assessment should identify actions for improvement such as introducing or enhancing preventive measures, as well as investigations to reduce uncertainties and further characterise risks. Actions identified in the risk assessment should be transferred to the Improvement Plan, prioritised and followed up. The Risk Assessment report must include:* • *a list of the team involved in the risk assessment;* • *a process flow diagram and description of the recycled water scheme (from source to end use) identifying the critical control points and monitoring points;* • *a risk register.*	identifying the critical control points and monitoring points; and • a risk register. The HACCP plan will be developed following a detailed hazard identification and risk assessment process based on the final AWTP detailed design. The detailed design phase for the AWTP will commence after development approval for the facility is granted. This can be reasonably and relevantly conditioned as part of a Development Approval.

I trust this information is of assistance. Please do not hesitate to contact me on (07) 3220 0288 should you have any questions or wish to discuss.

Regards,

David Ireland
Director – Planning

VERSION	DATE	DETAILS	AUTHOR	AUTHORISATION
V2	25 August 2020	FINAL	NICOLE BOULTON	 PROJECT DIRECTOR