

**Hunter New England Local Health District  
Hunter New England Population Health  
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Ania Dorocińska  
Senior Environmental Assessment Officer  
Industry Assessments Department of Planning, Industry and Environment  
Level 29, 320 Pitt Street, GPO Box 39, Sydney NSW 2001

Dear Ania,

**Baiada Oakburn Poultry Processing Plant (SSD-9394)**

I refer to the request for comments on the Environmental Impact Statement (EIS) that is currently on exhibition for the development of Baiada Oakburn Poultry Processing Facility at 1154 Gunnedah Road, Westdale in the Tamworth Local Government Area (LGA).

It is noted that the proponents intend to consider “a concept design for a Wastewater Treatment Plant (WWTP) followed by Advanced Water Treatment Plant (AWTP)” on the proposed site.

The system is designed based on the staged production and processing up to 3 million birds per week.

- Based on current estimates and processing technology, the facility will require up to 8 million litres of potable water per day.
- The Advanced Water Treatment Plant is designed to treat up to 8 million litres of water per day and allow recovery of up to 6 million litres (75%) for reuse.
- Reuse of wastewater will have a significant impact on the water supply.
- The AWTP will generate a concentrate stream produced by the final process stages of disinfection and salt reduction.
- The Total Dissolved Solids (TDS) concentration at maximum recovery of water (i.e. 75%) will be approximately 5500 mg/L, which at the maximum design flow (8 ML/day), equates to 11,000 Kg TDS per day in 2 ML of water.
- The TDS mass discharged from the site will be same regardless of the flow treated in the AWTP.
- The advanced water treatment plant (AWTP) process has been operating successfully at two poultry processing plants in Australia for over 10 years. We would recommend the proponent address the following issues in particular:

Hunter New England Local Health District Population Health recommends that the proponents adhere to, amongst other relevant legislation and guidelines, the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1).

System analysis and management;

1. Assessment of the recycled water system
2. Preventive measures for recycled water management
3. Operational procedures and process control
4. Verification of recycled water quality and environmental performance
5. Management of incidents and emergencies

These guidelines set out a preventive risk-based approach to managing health and environmental risks associated with water recycling. The approach involves systematically assessing where and how hazards or hazardous events may arise and find their way to the point of use and how to protect consumers and the environment.

Recycled water comes from an inherently unsafe source, sewage, therefore prevention is an essential feature of effective recycled water quality management. 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 identification and planning of preventive measures should always be based on system specific hazard identification and risk assessment, to ensure that the level of protection to control a hazard is proportional to the associated risk. When identifying existing preventive measures, or developing new measures, the following aspects must be considered:

NSW Health strongly recommends that the proponent determine maximum risk levels (using frequency and consequence descriptors as detailed in the Australian Guidelines for Water Recycling: Managing Health and Environmental Risks – Phase 1) considering:

- the entire recycled water system, including the water source, its characteristics and proposed end uses;
- existing preventive measures, from source(s) to the user of recycled water, for each significant hazard or hazardous event;
- increased risk due to inadvertent or unauthorised actions;
- spatial aspects (these need to be considered when identifying preventive measures for environmental risks, because the sensitivity of receiving environments can vary over space);
- areas where the use or discharge of recycled water is not appropriate, due to, for example, environmental sensitivity or soil type or topography.

Maximum risk (the risk with no preventive measures in place) and residual risk (the risk with the preventive measures in place) should be assessed for public health and environmental impacts e.g. assessment of harmful nutrient, salinity or sodicity build-up in any resource impacted by recycled water use and how this will be prevented, monitored and/or rectified.

The risk assessment should identify actions for improvement such as introducing or enhancing preventive measures, as well as investigations to reduce uncertainties and further characterise risks. Actions identified in the risk assessment should be transferred to the Improvement Plan, prioritised and followed up.

The outcomes of the Risk Assessment should be prepared in a report that must include:

- listing of the team involved in the risk assessment;
- a process flow diagram and description of the recycled water scheme (from source to end use) identifying the critical control points and monitoring points;
- a risk register.

As the proposed development will recycle wastewater generated from the poultry processing plant, there may be potential implications for food safety and biosecurity. NSW Health strongly recommends that DPIE Major Projects seek input on these risks from the Department of Primary Industries.

Should you require any additional information in relation to the above, please contact Mr Glenn Pearce, Senior Environmental Health Officer on 67648000.

Yours sincerely



Dr David Durrheim  
**Director - Health Protection**  
**Hunter New England Population Health**

