1. Management Plan for Pasture-Raised Egg Production

Proponent: Robert Cass and Sarah James **Site Location:** Lot 192 Morrell Road, Fairbridge **Project Description:** Expansion of an existing pasture-raised egg production enterprise. Our system involves housing laying hens in mobile shelters that are regularly moved across designated pasture areas. This allows for even distribution of manure and provides chickens with continuous access to fresh forage, reducing concentrated nutrient buildup.

Operational Details:

- **Housing and Movement:** Hens are housed in mobile, purpose-built shelters that are moved every few days, or weekly to fresh pasture sections within defined paddocks. This rotational grazing system ensures uniform nutrient distribution and prevents localized manure accumulation.
- **Stocking Density:** Our stocking densities will adhere to a max of 500 birds, ensuring sufficient pasture area per bird. This continuous access to pasture supports natural foraging behaviour and reduces stress.
- **Feed and Water:** Feed is provided within the mobile shelters or in portable feeders that move with the shelters. Water is supplied via mobile watering systems. These systems are designed to minimize spillage and waste, preventing wet spots and attracting pests.
- **Egg Collection:** Eggs are collected daily from nest boxes within the mobile shelters, maintaining hygiene and egg quality.
- **Pasture Management:** We implement a rotational grazing strategy to allow pastures adequate rest and recovery periods, promoting healthy grass growth and maximizing nutrient uptake from deposited manure. Pasture health will be regularly monitored.
- **Biosecurity:** A comprehensive biosecurity plan is in place, including control of access to the farm, measures to prevent disease introduction, and protocols for managing sick birds. We have electric fences to keep campers away from the birds, and keep the birds in.
- **Staffing:** Sufficient trained staff will be on-site to manage daily operations, including moving shelters, feeding, watering, egg collection, and monitoring bird health and pasture conditions.

Waste Management Practice:

- **Manure Distribution:** The core of our waste management is the regular relocation of chicken shelters. This ensures that manure is evenly distributed across a wide pasture area, acting as a natural fertiliser rather than a concentrated waste product. This method eliminates the need for large-scale manure storage facilities typically associated with intensive shed-based operations.
- **Nutrient Cycling:** Manure deposited directly onto pastures quickly breaks down and integrates into the soil, enhancing soil fertility and stimulating pasture growth. This natural nutrient cycling minimizes the risk of nutrient runoff or leaching.
- **Litter Management (within shelters):** Minimal litter is used within the mobile shelters. What litter is present is moved with the shelters and naturally incorporated into the soil, or, if accumulation occurs, it is managed as part of the broader pasture nutrient management.

- **Feed Waste:** Feed spillage is minimised by feeder design and regular relocation. Any spilled feed is quickly consumed by the chickens or integrated into the pasture ecosystem.
- **General Waste:** Non-poultry specific waste (e.g., packaging) is managed through standard recycling and waste disposal methods.

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2. Environmental Management Plan (EMP) for Pasture-Raised Egg Production

This EMP addresses the nutrient impact and environmental considerations specific to our pasture-raised system, aligning with the principles of the Environmental Code of Practice for Poultry Farms in WA and WQPN 33.

2.1 Nutrient Impact Management – Pasture-Raised System Approach: Our pasture-raised system inherently provides a significant advantage in managing nutrient impact compared to static operations.

- **Nutrient Distribution, Not Accumulation:** The continuous movement of hens ensures that manure is dispersed over a large area, preventing the localised buildup of nitrogen and phosphorus that can lead to groundwater contamination or surface runoff in confined systems.
- **Direct Nutrient Uptake:** Manure is deposited directly onto the pasture, where nutrients are immediately available for uptake by growing grasses. This direct transfer minimizes losses to the environment.
- **Soil Health Improvement:** The integrated chicken grazing and manure deposition contribute to improved soil structure, organic matter content, and microbial activity, enhancing the soil's natural capacity to hold and cycle nutrients.
- **Monitoring:** Regular observation of pasture health and soil condition will be undertaken. Should any areas show signs of nutrient excess (e.g., specific weed growth or overly lush patches), pasture rotation will be adjusted to allow for recovery. Soil testing will be conducted periodically to monitor nutrient levels and soil health across different pasture sections. Murdoch University help monitor our nutrient levels across all our dams.

2.2 Water Quality Protection:

- **No Concentrated Effluent:** As there is no concentrated wash-down water or liquid effluent from a pasture-raised system, the risks of nutrient-rich water discharge into wetlands or waterways are negligible.
- **Buffer to Waterways:** We maintain natural vegetated buffers around any existing waterways or wetlands on the property. Livestock access to these areas is controlled to prevent direct contamination and bank erosion. The movement of chickens is managed to ensure they do not congregate near sensitive water bodies.
- **Chemical/Fuel Storage:** All chemicals, fuels, and potentially hazardous materials are stored securely in bunded areas, away from water bodies and in accordance with relevant safety standards, to prevent any risk of spills or contamination. An emergency spill kit is readily accessible.

2.3 Odour and Dust Management:

- **Natural Attenuation:** Due to the dispersed nature of the operation and the constant movement of hens, the potential for significant odour or dust generation is inherently low. Manure is quickly assimilated into the pasture, reducing the opportunity for anaerobic decomposition that causes strong odours.
- **Good Pasture Management:** Healthy, well-managed pastures absorb nutrients and reduce dust. Regular movement of shelters also prevents the concentration of dust-generating activities.
- **Air Circulation:** The open-air environment of a pasture-raised system provides natural ventilation, preventing the accumulation of odours often associated with confined housing.

2.4 Dead Bird Management:

- A protocol for daily mortality checks is in place. Dead birds will be removed promptly and disposed of via deep burial for small numbers. Records of mortalities and disposal will be maintained.

2.5 Emergency Response:

- An emergency plan will be maintained to address potential incidents such as large-scale mortality (e.g., due to extreme weather), fire, or chemical spills, outlining contact details for relevant authorities and internal procedures.

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3. Justification for Alternative Buffer Distances

We understand and acknowledge the Environmental Protection Authority's (EPA) recommended minimum buffer of 300m to sensitive land uses. However, given the unique characteristics of our pasture-raised egg enterprise, we respectfully request consideration for an alternative buffer based on the following justifications:

- **Absence of Concentrated Sources:** The EPA's buffer recommendations are primarily designed to mitigate impacts from large-scale, stationary poultry farms with high concentrations of birds, significant manure accumulation, and associated odour, dust, and nutrient runoff challenges. Our system fundamentally differs as it does not involve stationary sheds with continuous, concentrated waste generation.
- **Regular Relocation Mitigates "Large Building" Issues:** As noted in our initial discussion, our mobile shelters are regularly relocated. This means that "large building" issues, such as the continuous emission of odour or dust from a fixed point, do not occur. Instead, any minor emissions are transient and dispersed across a wide area.
- **Nutrient Assimilation in Pasture:** Manure is deposited directly onto actively growing pasture. The soil and vegetation act as a natural biofilter, rapidly incorporating and utilising the nutrients. This prevents the anaerobic conditions and nutrient leaching often associated with manure stockpiles or saturated disposal areas that typically necessitate large buffers.

- **Minimal Odour and Dust Footprint:** Due to the open-air environment and the continuous movement of hens, coupled with healthy pasture cover, the generation of significant odours or dust plumes (which buffers primarily aim to manage) is inherently minimal and transient. Odours are quickly diluted and absorbed by the surrounding environment.
- **Reduced Fly and Pest Attraction:** The dispersed nature of manure and the presence of healthy pasture reduces areas of concentrated wet litter, thereby minimizing the attraction and breeding grounds for flies and other pests that can be a nuisance to neighbours.
- **Good Neighbour Practices:** Our operational strategy emphasizes good land stewardship and neighbourly relations. We are committed to proactive management to ensure our activities do not negatively impact surrounding properties.

Given these operational differences, which significantly reduce the typical environmental impacts associated with conventional poultry farming, we believe a strict adherence to the 300m buffer recommendation is disproportionate to the actual risk posed by our pasture-raised system. We are committed to discussing a more appropriate, risk-based buffer distance that reflects our lower environmental footprint while still providing adequate protection for sensitive land uses.

We are confident that the detailed management practices outlined above, combined with the inherent benefits of a pasture-raised system, demonstrate that our expansion can operate with minimal environmental impact and without detriment to our neighbours.

We look forward to discussing these plans further with you and providing any additional information required to support our application.

Kind regards,

Robert