



WASTE DISPOSAL SUPPORT TOOL FOR AUSTRALIAN EGG FARMERS

Management of waste streams is critical to limiting the incursion and spread of infectious pathogens. This tool is designed to help guide Australian egg farmers with decisions related to managing farm waste, however the following farm and situation-specific factors will also need to be taken into consideration:

- The volume of waste
- The type of waste
- Whether there exists the capacity to manage the volume of waste on-property
- Whether there is a known infectious pathogen present on the property, and whether that agent is notifiable
- Legal requirements to minimise biosecurity risks as well as the risk to the environment and people

Australian Eggs is invested in projects to help farmers navigate these factors. This Waste Disposal Support Tool provides farmers with guidance on defining waste types and waste removal options and can be used as a preliminary step when dealing with the disposal of farm waste.



Types of waste on Australian egg farms

Waste type	Definition	Inorganic/organic
Cardboard	Material made of cardboard or paper, including egg fillers and packaging	Inorganic/organic
Chemicals and medications	Disinfectants and hazardous chemicals, including chemical packaging and medications such as vaccines	Inorganic/organic
Dead birds	Birds that have died from disease or other causes, including culling	Organic
Disposable clothing, footwear	Material that may be single use or single-premises use	Inorganic
Dust	Particulate matter captured in filters or on equipment, may include bird materials e.g. feathers, dander	Organic
Feed	Materials stored and provided to the birds as feed, including in the silo and within the shed	Organic
Litter	Material used for bedding, which could be used or unused	Organic
Manure	Raw faecal-based effluent from the birds	Organic
Metal	Metal components or old equipment and machinery that may not be able to be adequately cleaned and sanitised.	Inorganic
Other Organic material	Material that is organic such as grass/tree clippings, soil, compost	Organic
Plastics	Material made of plastic, including egg fillers and packaging	Inorganic
Poultry products	Materials produced by the birds that is to be discarded e.g. broken or unusable eggs, including table and hatching eggs	Organic
Water	Water provided to the birds for drinking and ventilation, prior to or after cleaning, including external and header tanks	Organic

Viable disposal options for most Australian egg farms

Note that several farm/situation-specific constraints will need to be taken into consideration to determine if an option is actually viable.

Landfill/burial

Refers to the process of burying waste material, either on-site or off-site and includes dumping and disposal via required avenues for chemical and medical wastes.

Composting

Refers to the process of decaying organic waste through a process that involves the generation of heat by microbes. May involve the material be managed in situ.

Processing

Refers to commercial processing, including pasteurisation of egg pulp and in-plant processing of birds.

Rendering

Refers to the process of using high temperatures to convert waste from animal production into fat and protein meal product.

Anaerobic digestion

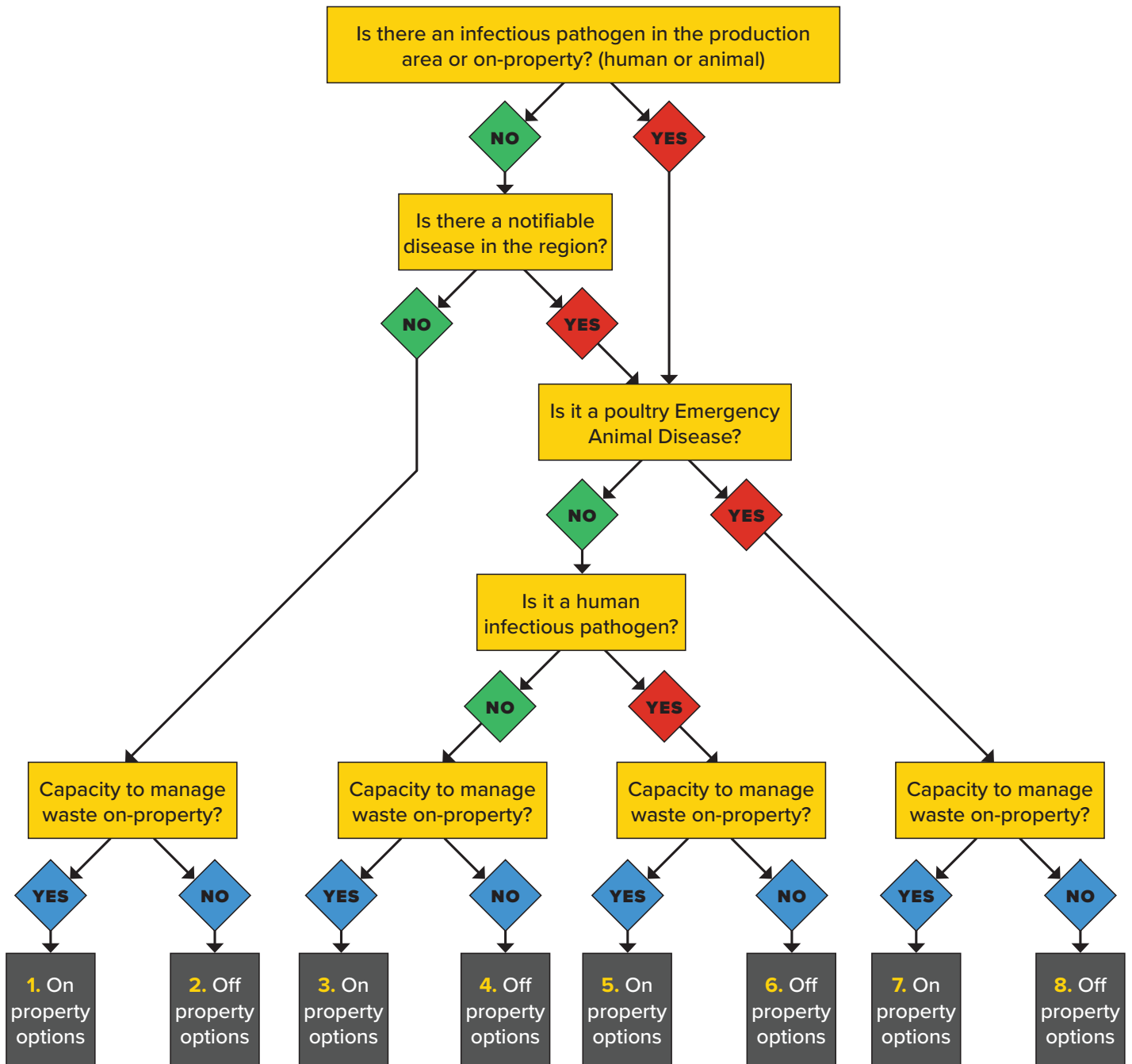
Refers to the process of decaying organic waste using bacteria in the absence of oxygen.

Incineration/burning

Refers to the combustion of waste using controlled conditions at high temperature.

Define the scenario

Use the decision tree, and the accompanying tables, to determine the scenario which will influence management of risks associated with disposal of wastes.



Possible scenarios

1. No infectious pathogen in production area or on-property; capacity to manage waste on-property
2. No infectious pathogen in production area or on-property; waste must be managed off-property
3. Non-EAD poultry infectious pathogen in production area or on-property; capacity to manage waste on-property
4. Non-EAD poultry infectious pathogen in production area or on-property; waste must be managed off-property
5. Poultry waste infected with a human-infectious pathogen is in the production area or on-property; capacity to manage waste on-property
6. Poultry waste infected with a human-infectious pathogen is in the production area or on-property; waste must be managed off-property
7. Poultry EAD in production area or on-property; capacity to manage waste on-property
8. Poultry EAD in production area or on-property; waste must be managed off-property

Which waste disposal option?

Risks associated with waste disposal will be specific to the scenario and the farm, as will the ability to manage the disposal of the waste on the property. These risks should be identified, and relevant farm-specific management procedures documented for each scenario to manage risks associated with:

- biosecurity (e.g. minimising spread of a disease-causing organism)
- environmental impact
- occupational health and safety
- social impact
- resource and equipment availability

On-property disposal options

Waste type	Landfill/ burial	Composting	Digestion	Burning/ incineration
Cardboard				
Chemicals and medications				
Dead birds				
Disposable clothing, footwear				
Dust				
Feed				
Litter				
Manure				
Organic material				
Plastics				
Poultry products				
Water				

Other waste disposal options were either off-property only or not considered viable.

Off-property disposal options

Waste type	Landfill/ burial	Processing	Rendering	Composting	Digestion	Burning/ incineration
Cardboard						
Chemicals and medications						
Dead birds						
Disposable clothing, footwear						
Dust						
Feed						
Litter						
Manure						
Organic material						
Plastics						
Poultry products						
Water						

Other waste disposal options were not considered viable.