

# Emu Hill Pastoral Feeding Facility Development Application Report



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# Development Overview

# 1.1 Executive Summary

This development application is presented by Emu Hill Pastoral Pty Ltd (EHP), to facilitate the development of an intensive cattle feeding facility at the property 'Emu Hill' located at 3821 Kondinin-Narembeen Road, South Kuminin in the Shire of Narembeen. Concurrently planning approval is being sort from the Shire of Narembeen and works approval is being sort from the Department of Water and Environmental Regulation (DWER) as prescribed under the Schedule 1 of the *Environmental Protection Regulations 1987*.

Bryon and Renee Lynch, trading as Emu Hill Pastoral Pty Ltd own and operate an established grain growing and livestock enterprise comprising 4000ha, owned and under long-term lease. Since 2013 core business has included lot-feed cattle, finishing up to 1200 head of cattle on a grain fed Angus yearling program for Coles and Harvey Beef.

Building on EHP's successful long-term partnership with Coles, they now seek to become accredited under the National Feedlot Accreditation Scheme (NFAS) and take up the opportunity to expand the business. EHP plan to build new feeding pen facilities to accommodate up to 10,000 (8,400 SCU) head of cattle and in the process decommission the existing feedlot pens. The facility will be developed in a staged manner over a five-year period with Stage 1 accommodating 2500 head of cattle. The new facility will be built to the specifications of the National Beef Cattle Feedlot Environmental Code of Practice (2<sup>nd</sup> Edition, 2012) and National Guidelines for Beef Cattle Feedlots in Australia (3<sup>rd</sup> Edition, 2012) as articulated throughout this proposal. The facility will operate to best in practice standards for animal production, animal husbandry and workplace health and safety with an overarching focus on sustainability. The facility will be operated under the NFAS including an annual audit to ensure compliance.

During consideration of the application please note that the proposed development:

- Supports sustained economic growth in the region both directly and indirectly, by providing an increase in local jobs and business opportunities.
- Represents innovative intensive agricultural land use that will enhance agricultural production, whilst maintaining a focus on animal welfare and sustainable farming practices.
- Is situated in an existing agricultural area, with no potential for conflict with residential land uses.
- All associated environmental impacts can be appropriately managed on-site.
- Will improve the community's drought resilience.

The proposed development is entirely consistent with the principles of orderly and proper planning, and therefore warrants approval. Accordingly, we respectfully request the Shire of Narembeen's support for this application.

# 1.2 Emu Hill Pastoral Pty Ltd

Emu Hill Pastoral is a family run farming enterprise focused on producing quality beef, grain and hay.

The enterprise comprises 4000ha, approximately one third of the property is rotated through a legume program for pasture and hay production while the remaining land produces Wheat, Barley and Oaten Hay. EHP has a 350 head Angus breeding herd, which is self-replacing and supplies the feedlot. Traded weaners are purchased in from the south-west land division to fill the feedlot quota. EHP feedlot contracts to Coles as part of the grain-fed Angus yearling program.

EHP's vision is a sustainable integrated farming system where innovation and diversification brings resilience and long-term profitability. The innovative enterprise builds internal capacity to achieve traceability and quality control.

# 1.3 Project Team

The project is being led by the Directors of Emu Hill Pastoral, Byron Lynch and Renee Lynch, in consultation with leading industry experts.

Byron Lynch has more than 20 years experience farming and 10 years lot feeding and is highly skilled in all aspects of farm business management, feedlot management, operations and animal welfare. He has experience in construction including earthworks and fabrication.

Renee Lynch has 15 years experience as a farm business manager. She has held senior roles in large multinational businesses and has extensive experience in growth strategy, governance, financial management and risk management. Renee is a graduate of the Australian Institute of Company Directors (GAICD), a Fellow of the Australian Rural Leadership Foundation (FARLF) and holds Bachelor degrees in Commerce and Arts (BCom BA).

EHP is a member of the West Australian Lot Feeders Association (WALFA) and the Australian Lot Feeders Association (ALFA).

EHP has worked closely with industry experts to ensure compliance to all relevant legislation, industry standards, and construction standards. Contributing parties include:

- Jeff House, Technical Services Officer for *Meat and Livestock Australia / Australian Lot Feeders Association*;
- Claire Coffey, Agribusiness Development Consultant for *Department of Primary Industries* and Regional Development / Executive Officer at West Australian Lot Feeders Association;
- Ben Cooper, Managing Director of *Cooper* Agencies;
- Curwin Boltman, General Manager Liquid Labs;
- Adam Taylor, Managing Director of *TC Drainage*.

# 1.4 Project Scope

The purpose of the development is to increase feeding capacity, install improved cattle handling and feeding facilities and demonstrate compliance to industry standards through the attainment of accreditation to the National Feedlot Accreditation Scheme.

Feeding capacity will be increased through the construction of four rows of pens, each with the capacity to hold 2,500 head of cattle (2,100 SCU). Pens will be constructed to at a minimum meet MLA standards and guidelines to fulfill NFAS requirements. Construction will allow for the installation of shade at a future date. Project fulfillment includes the decommissioning of the existing feed pens.

New cattle yards and an expansion of existing feed management facilities will accommodate the increased cattle numbers. The design of the cattle handling facilities follows low stress cattle handling principals; and human to cattle contact will be minimised through use of automation, a reflection of EHP's safety first approach.

The construction of the new facility will allow EHP to meet the standards required to achieve accreditation to NFAS. EHP currently utilise much of the NFAS operating systems and procedures in the running of the existing feedlot however it is not viable to amend the pen facilities to reach standard. Accreditation to NFAS is a demonstration to the consumer and community that the feedlot is built and run to the best practice standard with an annual audit confirming continued compliance. EHP seek to achieve this industry standard to; give confidence to our community; grow relationships; drive business growth; and look to engage in emerging product lines such as sustainable beef.

# 1.5 Project Drawings



# 1.6 Planning merit

The proposed feeding facility has merit as it would bring economic growth, innovation and diversification, and drought resilience to the surrounding communities; while managing all environment impacts onsite and avoiding conflict with residential land uses.

The development supports sustained economic growth in the region both directly and indirectly. The feeding facility will increase local employment opportunities, at full capacity it may employ 10 FTE, and provide training opportunities and qualification pathways. EHP are an equal opportunity employer and have a demonstrated history and a continued commitment to employing women on a 50:50 ratio.

EHP preference responsible local procurement, with a history of supporting and partnering with local businesses.

The feeding facility represents innovative intensive agricultural land use. The value adding facility will enhance agricultural production and diversification of industry; whilst maintaining a focus on animal welfare and sustainable farming practices.

Proximity to an intensive feeding facility will improve the community's drought resilience.

The proposed site is situated in an existing agricultural area where a feedlot has been operational for 10 years with no complaints received from surrounding residents. The site significantly exceeds the separation calculations and there is no potential for conflict with residential land uses.

All associated environmental impacts can be appropriately managed on site and the by-products of the feedlot used to enhance EHP's grain and hay production.

The directors of EHP are community minded and aim for the feeding facility to be a driver of growth and opportunity for the community.

# Land Use

# 2.1 Location

The proposed site is located at 3821 Kondinin-Narembeen Road, South Kuminin and is 10km's south of Narembeen townsite. The land is located in the Shire or Narembeen and is zoned rural under the Shire of Narembeen Local Planning Scheme No 1. The surrounding land use is agriculture.

Photo of proposed site taken 18<sup>th</sup> October 2023, view to the south.





AUSTRALIA

TITLE NUMBER Volume Folio 2957 565

#### **RECORD OF CERTIFICATE OF TITLE** UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

WESTERN

Barroberts REGISTRAR OF TITLES





LAND DESCRIPTION:

LOT 803 ON DEPOSITED PLAN 413065

#### **REGISTERED PROPRIETOR:** (FIRST SCHEDULE)

PETRYNE PARK NOMINEES PTY LTD OF POST OFFICE BOX 9, GRASS PATCH (AF 0010680) REGISTERED 18/10/2018

#### LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS: (SECOND SCHEDULE)

MORTGAGE TO RURAL BANK LTD REGISTERED 7/3/2017. 1. N570349

A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Warning: Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: PREVIOUS TITLE: PROPERTY STREET ADDRESS: LOCAL GOVERNMENT AUTHORITY:

DP413065 1078-930 3821 KONDININ-NAREMBEEN RD, SOUTH KUMMININ. SHIRE OF NAREMBEEN



LANDGATE COPY OF ORIGINAL NOT TO SCALE 23/10/2023 06:43 AM Request number: 65755222

# 2.2 Separation distance

Consideration has been given to community amenity and the s-factor calculation (*National Guidelines for Beef Cattle Feedlots in Australia,* MLA 2012) used to quantify the required separation distance between a feedlot and sensitive receptors.

# SINGLE RURAL DWELLING

D= √N x S where N = feedlot capacity in SCU = 8300 SCU D = separation distance (m) S = composite site factor = S1 X S2 X S3 X S4 X S5 S1 = design and management factor = 62 (<750mm rainfall, 11 m<sup>2</sup>/SCU) S2 = receptor factor = 0.3 (single farm or rural dwelling) S3 = terrain factor = 1.0 (flat terrain) S4 = vegetation factor = 1.0 (crops only, no effective tree cover) S5 = wind direction factor = 1.0 (normal wind conditions) S = S1 X S2 X S3 X S4 X S5 = 18.6 $D = \sqrt{8300 \times 18.6}$ = 1694 m

Therefore the minimum separation distance of the feedlot of 10,000 head (8300 SCU) is 1694m from the nearest single farm or rural dwelling. The actual distance to the nearest single farm or rural dwelling is 3,800m (refer to Map X in Section 8).

# MEDIUM TOWN (>125-500 PEOPLE)

 $D = \sqrt{N \times S}$ where N = feedlot capacity in SCU = 237 SCU D = separation distance (m) S = composite site factor = S1 X S2 X S3 X S4 X S5 S1 = design and management factor = 62 (<750 mm rainfall, 11 m<sup>2</sup>/SCU)S2 = receptor factor = 1.1 (medium town >125-500 persons) S3 = terrain factor = 1.0 (flat terrain) S4 = vegetation factor = 1.0 (crops only, no effective tree cover) S5 = wind direction factor = 1.0 (normal wind conditions) S = S1 X S2 X S3 X S4 X S5 = 68.2 D = √8300 x 68.2 = 6213 m

Therefore the minimum separation distance of the feedlot of 10,000 head (8300 SCU) is 6213 m from the nearest town of Narembeen. The actual distance to Narembeen is approximately 10,200 m.

# <u>SUMMARY</u>

Compliance of the nearest receptors with the s-factor calculation.

	Distance & Direction from the feedlot	Type of receptor	Compliance with s-factor
1.	3.8 km to the S	Single farm or rural dwelling	Yes
2.	5.3 km to the E	Single farm or rural dwelling	Yes
3.	4.6 km to the N	Single farm or rural dwelling	Yes
4.	10.2 km to Narembeen townsite to the NE	Medium town (>125-500 persons)	Yes



# 2.3 Site Access

Access to the proposed site is via Kondinin-Narembeen Road. This access point has been used since the inception of the existing feedlot for cattle carting and is the designated heavy vehicle access point for the farming operation, there have been no known impacts to traffic or the road surface in this time. At full capacity the proposed facility would produce up to 160 additional truck movements annually.

# 2.4 Water

# Surface Water

The proposed site falls within the Avon River system and is in a proclaimed surface water area under the RIWI Act 1914 (Source: <u>https://catalogue.data.wa.gov.au/dataset/riwi-act-surface-water-areas-and-irrigation-districts</u>) The proposed site is in the Swan Avon – Lockhart catchment and the Wakeman Creek sub-catchment (Source: <u>https://catalogue.data.wa.gov.au/dataset/hydrographic-catchments-subcatchments</u>). Distance to the nearest watercourses is:

- 2.85km to Wakeman Creek.
- 3.15km to another significant stream located to the west of the proposed feedlot.

# Ground Water

The proposed site sits within the Westonia groundwater area, which is proclaimed under the RIWI Act 1914.

# Access to Water

Water used for the watering of cattle at the proposed site will be supplied by a combination of dam water and groundwater bores with two 113,000L water storage tanks to be installed for holding capacity.

The site will be serviced by an existing 15,000 cubic meters of dam water comprising four interconnected dams. Should additional dam meterage be required at a later date there is no prohibitive factors preventing a new construction.

EHP have commissioned four water bores on the property located 2kms from the proposed site. There is no known data documenting the underground aquafers in the area however in the experience of our water drilling contractor, John Flockhart, local aquafers span approximately 300 meters. As the surrounding farm land is owned by EHP there is no potential for communal use of the aquafers. The four bores are producing saline water with one bore producing water that is within the feedlot cattle watering standards with an estimated salinity of 3600mg/L. It is a depth of 35m and has a capacity of 35,000L per 24 hours. The remaining three bores are producing excellent water flow however water use would require desalination.

As emergency capacity; EHP owns a 35,000L water tanker and there are two standpipes located with 10kms of the proposed site.

The proposed site has four scheme water meter connection points to two mains water lines.

# 2.5 Climate

The Shire of Narembeen has an annual rainfall of 336mm, sourced from the Bureau of Meteorology.

In accordance with the Australian National Construction Code the site is located within Zone 4 described as hot dry summer, warm winter.

Prevailing winds for Narembeen at 9am and 3pm are described below, sourced from Bureau of Meteorology.

### Rose of Wind direction versus Wind speed in km/h (01 Jan 1965 to 12 Sep 2022)

Custom times selected, refer to attached note for details

NAREMBEEN Site No: 010612 • Opened Jan 1927 • Still Open • Latitude: -32.0656° • Longitude: 118.3956° • Elevation 276m

An asterisk (\*) indicates that calm is less than 0.5%.

Other important info about this analysis is available in the accompanying notes.





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# Rose of Wind direction versus Wind speed in km/h (01 Jan 1965 to 12 Sep 2022)

#### Custom times selected, refer to attached note for details NAREMBEEN

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# 2.6 Geology and Soils

Sourced from Data Mapping WA's Soil Landscape Mapping published by DPIRD, there are two soillandscape zones present on the site:

- Kellerberrin 3 non-saline phase (Code 258Kb\_3ns): Areas of reddish, powdery surfaced, "Morrel soils", often adjacent to salt lakes.
- Bendering 2 aeolian phase (Code 258Bn\_2a): Very smooth convex to linear gently undulating rises with calcareous aeolian deposits forming red and brown calcareous loams that overprint various substrates (eg gravel plain and granite), with York, Salmon, Gimlet and Morrel vegetation.

# 2.7 Environmental and Heritage Considerations

Environmental due diligence investigations indicate that the subject site:

- Has no known European or Aboriginal heritage significance;
- Is not a registered contaminated site;
- Is not located within an Environmentally Sensitive Area (ESA);
- Does not contain any Bush Forever sites, nor are there any Bush Forever sites in the immediate of the subject site;
- Is not a known habitat for conservation significant flora or fauna;
- Is not at risk of Acid Sulfate Soils (ASS).

The subject site has long been used for grain production and would not require a vegetation clearing permit.

# 2.8 Bushfire Risk

As described by the DFES State Map, the subject site is located outside the identified bushfire prone areas.

# Feedlot Design

# 3.1 Cattle Yards

The feedlot design incorporates a set of cattle yards in the north-east corner of the facility. The cattle yards will be constructed on the permeability pad within the controlled drainage area. They cover an area of approximately 1,500 m2.

# 3.2 Feed lanes

The feedlot incorporates four feed lanes with one positioned at the high point (front) of each run of pens. The feed lanes are 5 meters wide and run north-south with turning capacity at each end. There will be no cattle access to the feed lanes. The feed lanes will be constructed on the permeability pad with the controlled drainage area.

# 3.3 Cattle lanes

The feedlot incorporates five cattle lanes. One cattle lane is positioned at the low point (back) of each run of pens, they are 6 meters wide, run north-south and are gated at each end. Another cattle lane is positioned on the north side of the pens, it is 10 meters wide and runs east-west connecting each pen run to the cattle yards. The cattle lanes will be constructed on the permeability pad within the controlled drainage area.

# 3.4 Pens

The feedlot facility has a total pen capacity of 10,000 head of cattle, with an average weight of 465kg, equally 8,300 Standard Cattle Units (SCU). The design includes four runs of pens with each pen run holding 2,500 head of cattle (2,075 SCU) at a stocking density of 12m2/head (14.5m2/SCU). Each pen run will comprise:

- 8 x 'A' type pens 54m x 48m, designed to hold 225 head of cattle;
- 5 x 'B' type pens 36m x 48m, designed to hold 150 head of cattle;
- 1 x 'H' type pen 12m x 48 x 6m, designed as a hospital pen.

Pens will include feed and water troughs with a 2.5m concrete apron and slope away from the troughs. The pens will be constructed on the permeability pad within the controlled drainage area.

# 3.5 Permeability Pad

In compliance with the National Guidelines for Beef Cattle Feedlots in Australia (3<sup>rd</sup> Edition, MLA, 2012) a relatively impermeable liner will be formed under the feedlot infrastructure including the pens, cattle lanes, cattle yards, solid waste storage, drains and evaporation ponds.

The liner will be constructed from insitu clays and placed in layers of 150mm with each layer tined, wetted and compacted. The liner will have a minimum depth of 300mm after compaction and will have a maximum permeability of 1x10-9 m/s. Verification of permeability will be measured by testing at Liquid Labs an NATA accredited testing facility to the standard AW1289.6.7.2 using a modified compaction method to 95% compaction. As part of the site identification process insitu clays have been tested to confirm suitability. Further testing will occur during construction at a rate of one test per 2ha of hardstand constructed and one test and 0.2ha of pond liner constructed to verify the permeability standard is met.

EHP has engaged TC Drainage as a consultant to develop the construction methodology. Construction will be completed by EHP under the supervision of TC Drainage and both parties will inspect and approve the permeability pad on completion.

# 3.6 Drainage system

The feedlot facility incorporates a controlled drainage area including drains and an evaporation pond to achieve the protection of surface water by containing wastewater.

Drains are located on the downslope side of each run of pens and associated infrastructure, with the 3-5% pen slope towards the drain promoting runoff from the pens into the drains. The drains direct all wastewater from the controlled drainage area into the evaporation pond.

There is no sedimentation system planned for the feedlot facility as the feedlots operational plans outline regular cleaning of the pens and drains and in combination with the low rainfall environment this produces a very low risk of solid waste reaching the evaporation ponds.

The eastern side of the feedlot will be raised above natural ground level creating a diversion drain to prevent water from entering the controlled drainage site.

Breakdown of the controlled drainage area for proposed site is shown below:

Description	Area
Pen area	120,000m2
Feed lanes	12,500m2
Cattle lanes	17,480m2
Cattle yards	1,1517m2
Drains	8,244m2
Stockpile area	14,400m2
TOTAL AREA	174,141m2

# 3.7 Evaporation Pond

The following evaporation pond information and calculations have been supplied by DPIRD.

The feedlot facility will include an evaporation pond with an area of 10,780m2, and a total depth including freeboard of 2.52m.

Given the low rainfall location of the proposed facility the determinate when sizing the evaporation pond is storms as opposed to the typical consideration in the south-west land division of winter rainfall.

Storm based calculation – a 1:20 Average Recurrence Interval (ARI) 48-hour storm event is the sole design basis. The sum of annual evaporation and storm rainfall determines the pond depth. Evaporation area is calculated based on the total inflow volume from the catchment (at a runoff coefficient of 1) divided by the pond depth.

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Method A Evaporation Pond Calculation Report			
Controlled Drainage Area	Ac	174259.32	m²
Pond Depth Safety Factor	K <sub>PA</sub>	10%	[-]
Pond Area Safety Factor	K <sub>PD</sub>	10%	[-]
Annual Evaporation	E*Ed	1.996	m
1:20 ARI 48 hour storm event	Р	0.112	m
Total storm flow	Qs = Ac x P	19560.97	m³
Required Evaporation Area	Ap = (Qs / E) x (1 + Kpa)	10779.99	m²
Required Working Depth	Dw = (E + P) x (1 + Kpd)	2.32	m
Freeboard	F	0.20	m
Total Depth including Freeboard	D = Dw + F	2.52	m

# 3.8 Construction timeline

EHP propose that the feedlot facility construction will reach completion by February 2028. The construction process will be fulfilled in stages using the principals outlined in Beef Cattle Feedlots: design and construction, Meat and Livestock Australia 2016.

The first stage will encompass the cattle yards, evaporation pond, a row of pens and corresponding lanes, drainage and proportionate solid waste pad area. Each subsequent stage will encompass one pen run and corresponding lanes, drainage and proportionate solid waste pad area. At completion of each stage EHP will seek a license to operate from DWER and accreditation to NFAS. Planned delivery timeline is:

- Stage One completion July 2024
- Stage Two completion February 2026
- Stage Three completion February 2027
- Stage Four completion February 2028

# **Feedlot Operations**

# 4.1 Washdown of equipment and vehicles

There will be no washdown of equipment or machinery at the feedlot facility.

# 4.2 Storage of fuels and chemicals

There are no fuels or chemicals stored at the feedlot facility.

# 4.3 Maintenance and Recording

Feedlot standards, operations, record keeping, processes and training requirements are explicitly outlined by NFAS and annually audited by AUS-MEAT. EHP has commenced the AUS-MEAT process towards achieving a NFAS desktop audit and upon completion of the first stage of construction EHP will seek accreditation. EHP are committed to achieving NFAS and it is a requirement for the continued relationship with Coles that this standard is met.

The feedlot maintenance program will include;

- Feedlot pens to be scrapped clean every 12 weeks. No water is used in the cleaning of feedlot pens.
- Drains are scraped clean alongside the pens to ensure that manure build up doesn't impede efficient drainage.
- The evaporation pond will be cleaned when the sludge impedes storage.
- In the case that the freeboard is compromised, excess liquid waste will be transported offsite by a licensed waster contractor.
- All manure and sludge removed from the pens, drain and pond will be taken to the compost area.
- A visual check of the pen surface, yards, drains and evaporation pond will be made weekly.
- Any odour complaints received by the applicant will be correlated with weather conditions and the operations at the feedlot facility at the time and a register will be kept.

# 4.4 Solid Waste Management

Manure is a natural by-product from a cattle feedlot and is a valuable commodity in the farming system. The feedlot pens will be cleaned every 12 weeks using a front-end loader and a box scraper for under fence cleaning. Manure will be stored in rows in the solid waste management area and a compost turner utilised to produce a consistent compost which will subsequently be spread over the 4000ha grain growing property adhering to the rates defined in the feedlots license.

The following nutrient budget has been supplied by DPIRD based on EHP's grain production history and is indicative only demonstrating EHP have the area required to dispose of all compost produced through the operation of the feedlot. Calculations are based on the facility operating for 10 months a year, at the full 10,000 head of cattle (8,400 SCU) capacity. Nutrients in (created by the operation of the feedlot, based on composted manure) – 45,000 kg N/year and 28,000 kg P/year. Nutrients out options detailed in the summary below:

Crop and Yield	Compost manure	Carcass compost spreading	Area (ha)
	spreading rate (ton/ha)	rate	
Winter cereal hay	1.2	3.0	2049
at 4 ton/ha yield			
Grain wheat at 2	0.8	2.0	3074
ton/ha yield			
Grain barley at 2.3	0.7	1.7	3564
ton/ha yield			

# Application Rate Summary

# Application Process

- The area that receives the compost will likely change each year, as the farms cropping/pasture rotation changes each year.
- Processed manure won't be applied within 25m of the property boundary and dams, 50m from watercourses, 50m from bores.
- The effluent utilisation areas are harvested at least once every 12 months.
- If animals are ever allowed to access the paddocks that have received the processed manure, there will be a withholding period of at least 3 weeks between spreading and grazing.

# 4.5 Mortality management

Mortalities are immediately removed from the pen using a telescopic handler. The mortality will be taken to a designated area of the compost pad where it is placed on at least 1m of compost and then covered with 2-3m of compost. The mortality compost poles are never turned allowing carcasses to break down without disturbance. Once decomposed the compost product is treated as per the process above. A 0.5% mortality rate is expected.

# 4.6 Backgrounding

On occasion EHP may buy in lighter weight cattle and background them on paddocks used for grain or hay production post-harvest. Typical backgrounding total weight gain is 25 kilograms per animal at a rate of 300 grams per day. Broadacre cropping paddocks are on average 150ha with no feed bunkers are insitu.

END