OPERATION AND WASTE MANAGEMENT PLAN NJC STABLE DEVELOPMENT

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NEWCASTLE JOCKEY CLUB Broadmeadow

NJC Stables Development – Operation and Waste Management Plan

Introduction

This plan outlines the expectations of the NJC with regard to the management of the new complex and in particular:

1. Use of plastic 'Mega' Bins;
2. Floating horses to and from the new stable complex;
3. Horse movements for trackwork in the morning;
4. Logistics, materials handling and general cleaning
5. Pest Control
6. Staffing requirements
7. Waste Management

The design of the facility, its ongoing management and the daily/weekly operational routine(s) will be based on industry best practice and, at a minimum, will reflect the requirements of the ***"NSW Animal Welfare Code of Practice No 3 - Horses in riding centres and boarding stables"*** (refer Appendix One).

1. Use of plastic 'Mega' Bins

Critical to the movement of both bedding and waste throughout the facility will be the use of lightweight plastic 'Mega' Bins – already widely utilised in the racing industry at training centres. The specifications of the 'Mega' Bins are outlined in Appendix Two.

Image 1: Stackable 'Mega' Bins in use at Osborne Park training facility

Importantly, the type of 'Mega' Bins chosen will be solid (not vented) and with a tight lid that completely seals all odours and prevents access to either the bedding or waste by rodents or insects. The bins also allow for the transport of two bins at a time and the storage of up to three to four bins in a stack (as above).

2. Floating horses to and from the new stable complex

All calculations regarding horse movements to and from the new stable complex through the year will be based on 520 horses in total being housed in the facility, but on 500 horses that are actively racing and training (we will assume 20 horses will be 'stationary' for reasons of illness, injury, waiting to go to the paddock for a spell, have been sold etc.)

At the moment there are around 230 individual horses on average/day being trained at the facility, so we will further assume, for the sake of projecting future movements, that the current movements for 230 horses for racing/training represents 45% of what will happen for the 500 horses based at the facility in future.

The following assumptions apply based on current activity levels:

- There are approx. 3000 runners at tracks 'away' from Newcastle currently per season according to Racing NSW figures. There will be some seasonal vagaries, but we will average on a per day basis;
- Given the 230 horses at Newcastle currently generate 3000 starters at other tracks – so 500 horses will generate around 6666 starters at other tracks in future;
- This will result in 6666/365 = 18 starters/day travelling out to races elsewhere and then back again, which equals 36 outs/ins per day or 13,140 total for the year.
- The rule of thumb for horses 'in work' is that horses will have on average two 'preparations' per year. They will be 'in training' on average for 9 months of the year and 'spelling' (in the 'paddock') for the balance of 3 months of the year;
- So if we assume that the 520 horses housed on site will, on average, be delivered to the stables twice for a preparation and taken away twice for a spell each – then there is another 2080 outs/ins.

Total movements:

Total ins and outs for both racing and spelling therefore comes out at 13,140 (racing) + 2080 (arrivals/departures) = 15,220 trips. If we average this out on a daily basis it comes to 15,220/365 = 42 out/ins per day.

We will assume that 50% these trips are in a 2 -horse float (very conservative) – and the balance of trips in large floats either owned by the stables or supplied by float companies (eg Goldners etc) – so on that basis we would have around 20 car/double float arrivals/departures and approx. 5 larger (4 horse +) float arrivals/departures per day.

These movements would occur almost 100% of the time between 9am and 7.30pm.

Note: All vet/dental/chiropractic and farrier work will occur in the stables by suppliers that would park in the staff carpark, that currently has 94 spaces included. Again – except for the rare case of an emergency due to colic or unforeseen accident – 99% of those movements will be during normal working hours.

At present, the 230 horses stabled on site that use the facility, plus the 80 horses that are stabled off site that use the facility are floated in/out for trackwork every morning. It should be

noted that these movements will disappear with the establishment of the new stables as almost all horses trained at the facility will be housed on-course, and the new stables complex has direct access to the track.

Currently, all raceday starters at Newcastle Racecourse either walk to the new day stalls (if stabled on-course at the Beaumont Street end of the precinct) or are driven to the new day stalls entrance and carpark down Darling Street – so NONE of the previous raceday traffic will occur at the Chatham Street end of the facility in future.

That is usually around 3200 starters/season (44 meetings at an average of 73 starters per raceday – Racing NSW figures) – so 6400 outs/ins that previously occurred there on racedays/season will no longer occur at that Chatham Road end.

3. Horse movements for morning trackwork

Trackwork times

Trackwork is currently available 6 days a week (Monday to Saturday) with the tracks closed on a Sunday. The track is open on Public Holidays which do not fall on a Sunday. Trackwork commences at 3:30am, and is generally complete by 8:30am.

Expected horses in trackwork per day

It is expected that no more than 375 horses will work on any one day due to the rider availability, the hours which are worked by riders, and general vacancy rates due to horses off site spelling and at race days. The maximum duration for any one horse working on the track is 15 minutes per morning.

Capacity of tracks for morning trackwork

For the 2 x Training Tracks, the capacities are driven by rider availability, however due to the width of the tracks and the varying degrees of work (trot, canter 1/2pace, gallop etc) there would be no more than fourteen (14) horses working on any one track at any one time.

The Course Proper and Beaumont Track are used on average twice a week between the two tracks. Restrictions are put in place to manage the wear on the tracks and use is very weather dependent. These tracks are restricted to fast work only, so would have no more than eight (8) horses on these tracks at any one time.

Management of morning trackwork

NJC will continue to employ two (2) trackwork attendants to supervise trackwork to ensure there are no congestion issues during morning trackwork.

4. Logistics, Materials Handling and General Cleaning:

Bedding Distribution and Waste Removal from Stables to Removal Store with 'Mega' bins:

The maximum quantities of waste produced and the consequent frequency of cleaning (to industry standard of twice per day), storage and removal of same – are based on the assumptions outlined in Appendix Three – Horse Waste calculations and logistics review.

- Each trainer's stable staff muck out stables twice per day – morning and afternoon – this involves removing soiled material only;
- Stable staff fill available 'mega' bins with waste – the same 'mega' bins that were delivered to the stables with bedding the prior day and subsequently emptied;
- The full 'mega' bins are moved around by Walkie Stacker or Pallet Jack (see picture overpage) to dedicated bin stores at front of each stable – by stable staff;
- On the basis of industry averages – a maximum of 12 x 'mega' bins will need to be removed per 40-horse stable block each day i.e. 6 x bins per 20-horse "breezeway";
- The stable design specifically provides ample capacity for this, with space for 24 x 'mega' bins per 40-horse stable – 12 for bedding and 12 for waste i.e. 12 x bins per 20-horse "breezeway";

Image 2: Walkie Stacker or Pallet Jack

NJC Forklift movements:

Once the waste has been placed in the 'mega' bins, the full bins are then moved by NJC Staff with forklifts on a daily basis to the Removal Store for collection by Private Contractor.

NJC Staff will deliver full bedding bins from Supply Store to each 20-stable unit;

- maximum of 12 per day for 40-horse stable / 6 per day for 20-horse breezeway

NJC Staff will remove full waste bins from 20-stable to Removal Store;

- maximum of 12 per day for 40-horse stable / 6 per day for 20-horse breezeway

Forklifts will drop off clean bins and pick up dirty bins in one run or "cycle."

It is anticipated that there will be 4 x dedicated forklifts operated by NJC Staff which can handle 2 x full bins (stacked) at a time:

FORK 1: Ground Floor Stables:

- Total 240 horses maximum (6 x 40-horse stables)
- Total 72 bins (maximum)
- Total 36 forklift cycles (maximum)

FORK 2: First Floor Stables:

- Total 280 horses maximum (7 x 40-horse stables)
- Total 84 bins (maximum)
- Total 42 forklift cycles (maximum)

FORK 3: Distributing bins to / from Goods Storage Shed to Materials Hoist

- Total 42 forklift cycles (maximum)

FORK 4: Distributing bins to / from Materials Hoist to Upper Loading Zone

<u>Materials Hoist Movements:</u>

- Currently sized to carry 2 x bins (double stacked):

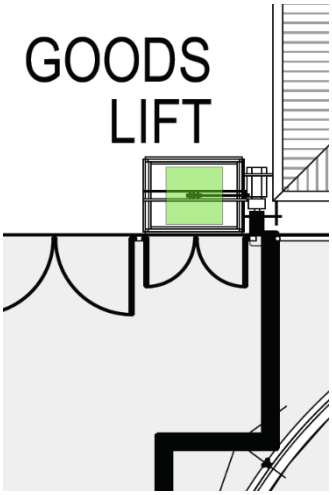

Image 3: Mega bin area shaded green on Goods Lift

- Based on 2 x bins / hoist movement, this would require a maximum of 42 x hoist movements / day to move the 84 maximum bins required

  - 42 x lifts "up" with 84 x clean bedding bins
  - 42 x lifts "down" with 84 x dirty waste bins

- Fork 4 will move clean "supply" bins from hoist, leave in Loading Zone for Fork 2, and load dirty "waste" bins onto hoist:

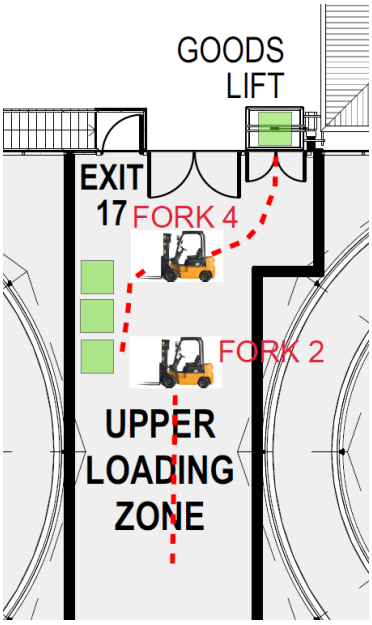

Image 4: Materials handling at Upper Loading Zone

- We will plan based on trackwork being finished by 8:30am (Note: participants currently are finished by 8.30am but this planning assumes that trackwork may finish later in the future – which is a strategy being pushed by some trainers at the present time), meaning movement of materials can safely commence from 9.00am to 9:30am.

- Based on the above figures being <u>maximum</u> quantities to handle, it is anticipated that the Bedding Distribution / Waste Removal activity can generally be completed between the period of 9:30am – 2:00pm.

  - 42 x cycles @ average 6mins / cycle = 252 minutes = 4.2 hours

<u>Bedding Delivery / Waste Removal to / from Site:</u>

- 2 x deliveries / removal activities per day during business hours via 45ft articulated semi-trailer
- Maximum of 80 bins to deliver / remove per truck
- Bedding bins unloaded by NJC staff on forklifts to Supply Store
- Once unloaded, truck is loaded with a maximum of 80 x full waste bins from Removal Store
- Truck leaves site to reuse waste at off-site facility
- This is managed by private contractor (to be appointed post-DA approval)
- The contract will be tendered by NJC on circa 3-year Agreements with renewal options.

Feed Deliveries:

- Different suppliers may be involved given each trainer may have their own preferences for feed/hay brands and/or varieties;
- Trainers will be advised to coordinate their deliveries to arrive at the same time and via one delivery company;
- 1 x delivery per day via rigid pantec – 5 x deliveries / week is anticipated to be sufficient to cater for 520 horses;
- Truck and trailer (shown below) can deliver 22 pallets at a time;
- Mega-Bin load for truck is 78;
- All feed palletised for ease of delivery, storage and distribution;
- Feed is distributed by NJC Staff via forklift to Stables – typically between 3pm – 5pm (after bedding distribution / waste removal activity is complete); and
- Stable Staff then move feed from pallets into Feed Store of each 20 x Stable block using pallet jacks

General Waste/Cleaning:

- Anticipated to have 3 x collections per week from the General Waste Bin Area
- NJC will utilise a mobile sweeper (see below) for general clean up around the facility and engagement of external cleaning contractors for office/wet areas.

Image 5: Mobile sweeper

5. Pest Control

It has already been stated that the Mega-Bins are sealed so that the potential for rodents to access the stored bedding and/or collect waste is eliminated. In addition – standard practices for pest control (as per Appendix Four) will be applied.

6. Staffing Requirements

NJC Staff associated with Stables:

Morning Trackwork (3:30am to 8:30am):

It is proposed to maintain the employment of the 2 x existing Trackwork Supervisors.

General Daytime (8:30am to 5:00pm):

- Stables Office Staff (delivery coordination, orders, day-to-day tenant and NJC staff management)
    - Currently, this is managed as required by existing NJC Administration staff
    - The new facility will require 1 x Full-time dedicated coordinator / manager

- Stables Logistics Staff (deliveries, materials handling)
    - Currently, there are no NJC staff dedicated to existing stables facility, but NJC staff occasionally attend to miscellaneous maintenance and minor issues as required.
    - The new Stables facility will require:
        - 4 x Forklift Operators / general labour (as per NJC Management Plan)
        - 1 x Hoist Operator / general labour (as per NJC Management Plan)

Trainer's staff associated with Stables:

Morning Trackwork (3:30am to 8:30am):

- There is an average of 1 strapper / stablehand per 3.5 horses (depends on individual trainer - some could sit at 1 staff / 3 horses, others 1 staff / 4 horses, so for calculation purposes, we will assume an average of 1 person per 3.5 horses)
    - This would be a maximum of 107 strappers / stablehands maximum per morning peak, assuming 1 x strapper / stablehand per 3.5 horses (107 staff x 3.5 horses = 375 horses – rounded to the nearest horse)
    - This does not include trackwork jockeys
        - Approximately 35 trackwork jockeys would be required to exercise the 375 maximum horses per morning
    - This does not include Trainers
        - There would be around 10 trainers attending trackwork on any given morning
    - This means morning trackwork Trainer's staffing when a maximum of 375 horses are attending trackwork would be 152:

        - 107 strappers / stablehands + 35 trackwork jockeys + 10 trainers = 152 total.
    - The current number of horses using NJC facilities for morning trackwork is 310 made up of:
        - 230 stabled on site which are floated from Lowe Street to Chatham Street each morning, then are floated back on completion of trackwork, plus
        - 80 stabled off site which are floated in each morning from their respective stables, then are floated off site on completion of trackwork.
    - Of these 310 horses, there are around 230 that attend morning trackwork each morning.
        - The proposal significantly reduces the requirement for floating of these horses 230 horses each morning from Lowe Street to Chatham Street for training, and then from Chatham Street to Lowe Street on completion of training, as horses will now be stabled adjacent "the crossing", providing them with direct track access with no floating necessary.
        - Therefore, based on a maximum of 375 horses training on any given morning in the new facility, morning trackwork numbers will increase by 145 horses. The current courses can handle these increased numbers, and the management of the additional horses in the morning is not significantly greater than the current scenario, particularly considering the efficiencies gained by having the benefit of direct track access.

General Daytime (8:30am to 5:00pm):

- Based on <u>maximum occupancy</u> (which is unlikely on any given day), there will be 1 x stablehand per 3.5 horses across 520 horses per day.
    - This would equate to 149 stablehands maximum required to be employed for the fully-occupied facility (149 stablehands x 3.5 horses = 521 horses)
    - However, staff are not on site at any one time
    - As per the current scenario, there will be 2 x shifts per day:
        - Shift 1: 3:30am to 8:30am (morning trackwork)
            - 107 stablehands as per figures for maximum Trackwork attendance above
        - Break: 8:30am - 1:00pm - very few Trainer's staff - facility is managed by NJC personnel mentioned above.
        - Shift 2: 1:00pm to 5:00pm (general daytime stable maintenance / horse walker / pool exercise etc)
            - 42 stablehands (average of 3.2 stablehands per 40-horse stable)
        - So, of the 149 stablehands required at <u>maximum occupancy</u>:
            - 107 are in attendance during morning trackwork (Shift 1)
            - 42 are in attendance in the afternoon (Shift 2)

NJC Staff associated with Track / Grounds Maintenance:

There will be no requirement to increase the current NJC staff for Track / Grounds Maintenance. They will simply move into the new facility, accessed off Chatham Street.

10 - 15 Track / Grounds staff will be generally be required per day (this changes depending on the required trackwork maintenance for any given day)

7. Waste Management

General Waste:

As noted in the previous sections, it is anticipated that General Waste will be collected 3 times per week, from the General Waste Bin Area. This will likely be by private collection from the NJC's existing contractor. The General Waste Area will comprise a combination of both General Waste and Recycling bins, and will be located off the main drop-off / pick-up zone, accessed from the corner of Chatham and Darling Streets, as indicated in Image 6 below.

General waste and recycling bins will also be positioned throughout the development, and will be taken to the General Waste Bin Area by each individual tenant / trainer, and by NJC as required.

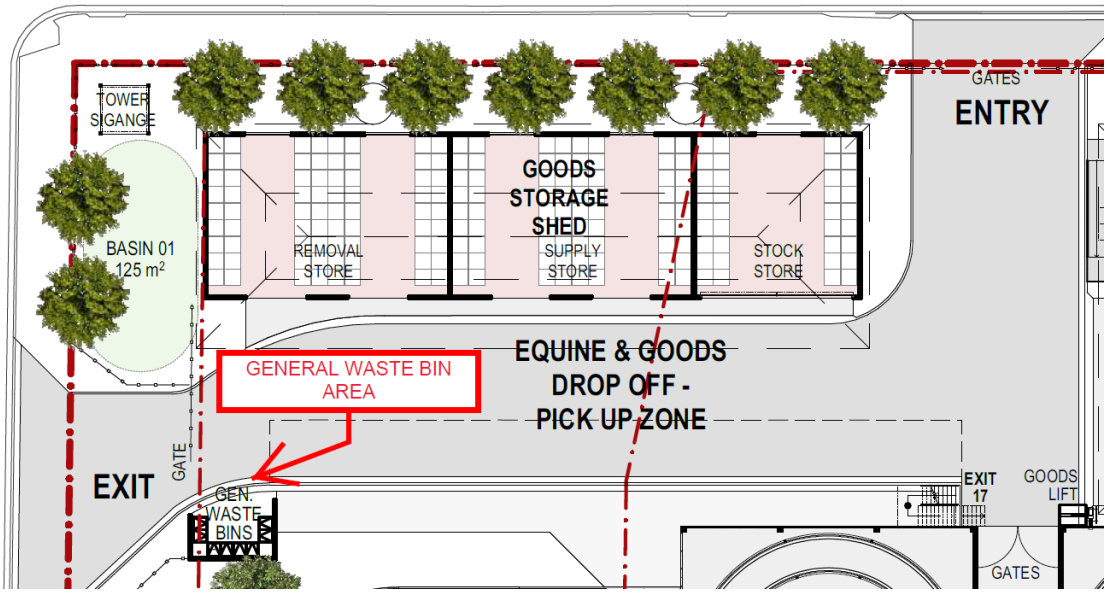

Image 6: General Waste Bin Area

Green Waste:

Investigations to utilise the green waste from the operation and maintenance of the development for composting and re-use on the gardens and landscaped areas of the stables facility and broader NJC site will be investigated and implemented, where appropriate.

Organic Waste:

As outlined in Section 1 of this Plan, the organic waste generated from the development (horse manure and used stable bedding) will be removed from the site in sealed, non-vented "mega bins". As outlined in Section 4 of this Plan organic waste will be removed daily by a private contractor to an approved off-site facility (or facilities, as the case may be). The organic waste could potentially be re-used as a product for the agricultural, horticultural, or other industries as appropriate.

The quantity of the organic waste has been calculated as an absolute, conservative maximum in accordance with Appendix 3 of this Plan, however it must be noted that these volumes are never expected to be realised, due to the fact that there will realistically never be 520 horses occupying the facility at the same time (due to spelling, horses being off-site for racing elsewhere, general vacancies, veterinary visits and the like).

Additionally, the calculations are based on conservative, maximum amounts of horse waste generation for large horses where in reality, there will be a range of horses of varying sizes occupying the development. Additionally, the amount of horse bedding removed per stable in the calculations is conservative. The conservative nature of the calculations has been made to ensure the logistics and materials handling for the development can cater for an absolute, "worst-case" scenario, and in reality it is not anticipated that the development will generate the amount of waste as calculated.

As outlined in Section 4, the sealed, non-vented "mega bins" will be filled with used bedding and horse waste on a daily basis, and moved by forklift to the "Removal Store" in the main Drop-off / Pick-Up Zone (as indicated in Image 7 below), where they can be conveniently loaded onto the private contractor's truck for removal off site.

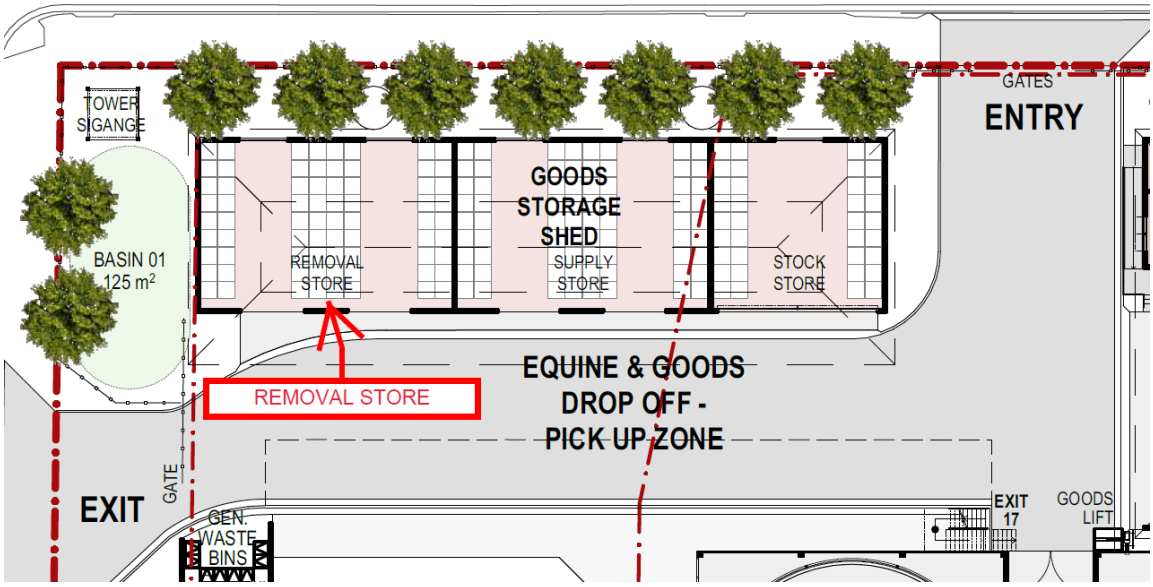

Image 7: Removal Store

APPENDIX ONE

"NSW Animal Welfare Code of Practice No 3 - Horses in riding centres and boarding stables"

NSW Animal Welfare Code of Practice No 3 - Horses in riding centres and boarding stables

Preface

This code is designed for everyone involved in the holding and care of horses in boarding stables and agistment or riding centres, including trail riding and trekking. By adhering to the code, people involved in these industries are demonstrating to the general community their concern for the welfare of the animals in their care.

Animal welfare can be thought of as the way an animal's health and well-being are affected by its interaction with its physical and social environments. Since humans can alter or control an animal's environment, animal welfare means that people have duties and responsibilities towards animals. The greater the level of interference with, or control of, an animal's environment, the greater our responsibilities.

The code is neither a complete manual on animal husbandry, nor a static document. It may be revised to take account of advances in the understanding of animal physiology and behaviour, technological changes changing industry standards, and the community's attitudes and expectations about the welfare of animals.

Compliance with the code does not remove the need to abide by the requirements of any other laws and regulations, such as local government or National Parks and Wildlife Service legislation.

The code has been prepared in consultation with the Equestrian Federation of Australia (NSW) and the Australian Horse Riding Centres representing a number of those involved with these industries, and is endorsed by the NSW Animal Welfare Advisory Council.

1. Introduction

1.1 This code sets standards for the care and management of horses in riding centres and boarding stables.

1.2 It applies to the welfare of horses held and cared for in these establishments.

2. Responsibilities of the manager

2.1 The Manager of a riding centre or boarding stable is responsible for:

(a) Providing adequate facilities, equipment, feed, water, supervision and care to ensure the welfare of the horses held

(b) supervising the daily feeding, watering and inspection of the horses to ensure their well-being

(c) maintaining the hygiene of the premises and the health of the horses

(d) providing prompt veterinary or other appropriate treatment in cases of illness or injury

(e) supervising staff, whether working full or part-time and whether or not for fee or reward

(f) collecting and maintaining relevant records.

3. Accommodation and facilities for horses

3.1 Riding centres and boarding stables must have an adequate water supply, and should be located away from noise or pollution that could cause injury or stress to horses.

3.2 Horses in stables, collecting yards and paddocks should have sufficient protection against sun, wind and rain and extremes of temperature. Shade trees, roofing, windbreaks and rugs may be necessary.

3.3 Horse enclosures must be designed and maintained to prevent injury, disease and escape. Methods used to achieve this include the following:

3.3.1 Provide enclosures with secure closing devices that cannot be opened by the horses held.

3.3.2 Use fencing material that is clearly visible to horses.

3.3.3 Build collecting yards with post and rail fencing using timber or steel piping and steel or concrete posts. Barbed wire, prefabricated wire and high tensile fencing can injury horses severely, and should not be used for collecting and handling yards. The fences for handling yards should be high enough to prevent escape.

3.3.4 Provide floors (of yards, sheds and stables) with surfaces that permit adequate drainage and allow horses to stand and walk normally.

3.3.5 Make gates at least 1.3 metres wide to stables, yards and paddocks. Swinging stable doors should open outwards.

3.3.6 Use stables that are at least 2.5 metres high, with a floor area of at least 12 square metres for each horse or 9 square metres for each pony under 12 hands.

3.3.7 Provide appropriate stable bedding that is clean and sufficiently thick.

3.3.8 Ensure stables are ventilated enough to keep them free of dampness and noxious odour without draughts.

3.3.9 House horses in a dust free environment wherever possible.

3.3.10 Use lighting that is as natural as possible and that can be used for thorough inspection of horses. Horses should not be subjected to continuous artificial lighting.

3.3.11 Keep paddocks free of noxious plants and rubbish that may injury horses.

3.4 Cleanliness

3.4.1 Stables and yards must be kept clean. Urine affected bedding and manure must be removed at least once a day.

3.4.2 Efforts must be made to effectively control of pests including ticks, flies, lice, mosquitoes and rodents, under professional supervision if applicable.

3.4.3 Disposal of manure, bedding, food wastes and animal bodies should be prompt and hygienic.

3.5 Food and Water

3.5.1 Horses must have appropriate food and water, sufficient to keep them in good health and body condition.

3.5.2 For advice on specific feed requirements you can contact veterinary surgeons, government departments of Agriculture and university departments of animal husbandry.

3.5.3 Horses need salt (added to the feed or as a salt lick) and a regular supply of fresh, clean water. As a guide, 25-45 litres a day may be needed in hot weather. Mares need extra feed and water when they are pregnant or lactating.

3.5.4 When pasture is available but supplementation is necessary, horses should be fed at least once a day. They should be fed at least twice a day where there is no access to pasture.

3.5.5 Feeding diets high in cereal grain to horses that are ridden infrequently can produce unpredictable temperament changes which can be dangerous for a rider.

3.5.6 Feed should be free from contamination such as mould, dust, insecticides or other substances that could be toxic.

3.5.7 Feed should be stored in the best practical way to prevent deterioration [for example; store chaff in dry, rodent proof bins, and store hay in a dry area on raised pallets to allow air circulation].

3.5.8 Horses must be able to easily reach feed and water containers. The containers should be firmly fixed if possible, non toxic, easily cleaned and kept clean.

3.5.9 Automatic and manually filled watering systems should be checked daily. If horses are working during the day, they should have water available at regular intervals when they are resting.

3.5.10 On treks, horses must be allowed sufficient time to drink from natural water sources. If feed must be changed before a trek, this should be done gradually over a period of days.

4. Management

4.1 Equipment

4.1.1 All equipment which may affect the safety and welfare of horses and riders should be designed and maintained to avoid injury and disease.

4.1.2 Saddles that touch the mid-line of the horse's back or that have broken trees must not be used.

4.1.3 Saddle blankets should give enough padding and be dry and clean.

4.1.4 Tack should be appropriate for and fit each horse on which it is used.

4.2 Care of Horses

4.2.1 As far as possible, horses should be protected from stress or injury. Methods that should be used to achieve this include:

- providing the space for each horse in a group to reach sufficient feed (for example, give each horse a separate feed container, at least 4 m apart)
- segregating colts, stallions, weanlings, pregnant mares and sick horses from other groups if necessary
- providing adequate supervision of horses in stables, collecting yards and, as far as possible, when they are being ridden

4.2.2 Horses must be of a suitable size, conformation, disposition, fitness, and have adequate education for the purpose for which they are used.

4.2.3 Horses that must not be used for work in riding centres include:

- horses under 3 years of age,
- horses in poor body condition,
- mares that are more than 8 months pregnant, or are in the first three months after foaling,
- horses known to be or suspected of being injured or ill, except as advised by a veterinary surgeon.

4.2.4 Horses should be groomed before saddling, and particular care should be taken to remove sweat and dirt from areas under the saddle, girth and bridle.The back and girth areas should be cleaned and inspected when unsaddling.

4.2.5 Horses should, as far as possible, be ridden in a controlled manner and at a speed that is safe for horse and rider, considering the ground, the weather, and the experience of the rider.

4.2.6 Horses should not be overworked. Horses that show signs of tiredness or distress during work should be rested until fully recovered.Programs must be planned to prevent overwork and allow appropriate spelling of horses.

4.2.7 Continuously stabled horses should be exercised at least once a day. This may be done by riding, lunging or releasing them into a large yard for at least one hour a day. Horses that are stabled long term should be spelled outside at least once a year.

4.2.8 Horses should be spelled as often as necessary to maintain welfare, with consideration to the workload and the individual temperament of the animal.

4.2.9 After working, stabled horses should be hosed, sponged or brushed to remove sweat and dirt.

4.2.10 In cold weather, horses should be dried after working.

4.2.11 When introducing new or spelled horses, increase their workload gradually.

4.2.12 The number of staff provided to supervise a group of riders should be sufficient to ensure each horse's welfare is maintained, and as a general rule should be one staff member per 10 horses.

4.2.13 Horses should not be tied up by reins attached to the bit unless the attachment includes an easily breakable component such as plastic or string.

4.2.14 Whips and spurs should only be used as training aids by experienced riders. It is illegal to use spurs with sharpened rowels.

4.2.15 In cold weather, horses that are in poor condition or have not grown a long coat should be rugged with a waterproof rug.

4.3 Fire Safety

4.3.1 Staff should have easy access to appropriate fire fighting equipment. They must be trained and practised in using the equipment.

4.3.2 Any security methods must allow for ready access to horses and quick evacuation of staff and horses in an emergency.

4.3.3 Precautions to improve fire safety in stables should include:

- enough exits for horses (about one exit per five stables)
- exits that are wide enough (at least 1.3 m for stable doors and 2 m for aisle exits)
- fire hose reels that are long enough to reach all stables.
- adequate water pressure
- fire hoses of adequate diameter
- storage of flammable items in an area separated from the stables.
- sliding stable doors that don't block corridors.
- smoke detectors in enclosed buildings.
- "no smoking" signs in stable areas.
- an enforced non-smoking policy in the stable area.

4.4 Record Keeping

Appropriate records should be kept for each horse, as part of good business management and a health care program.

4.5 Staff

4.5.1 Staff should respect horses and have experience in handling them.

4.5.2 Staff should be aware of their responsibilities and be competent to carry them out.

4.5.3 Formal training, such as a Technical College qualification in horse husbandry, is encouraged.

4.6 Health Care

4.6.1 Owners of animals being boarded must be asked to sign an agreement authorising provision of necessary veterinary treatment.

4.6.2 The animal boarding establishment manager should establish liaison with a veterinary surgeon who is able to attend to any animals in his or her care, and is also able to advise on disease prevention measures.

4.6.3 The health and comfort of each horse needs to be checked. Horses which are stabled or confined to stable yards, boxes or small paddocks should be checked at least once a day to ensure that they are receiving appropriate food and water and are free from disease, distress and injury, while horses confined in broadacre situations must be inspected regularly.

4.6.4 If signs of disease or injury are observed, appropriate treatment must be promptly provided to protect the health of individual horses and prevent the spread of disease.

4.6.5 Signs of illness or injury for which veterinary treatment should be sought include:

- nasal discharge
- runny or inflamed eyes
- coughing
- laboured breathing
- lameness
- inability or reluctance to stand or walk
- fits or staggering
- severe diarrhoea
- bleeding, swelling or ulcerating of body parts
- unexplained weight loss
- apparent pain
- inability to urinate or defecate
- repeated or continuous rolling, pawing, kicking at abdomen or sweating
- poor appetite
- dropping food or chewing with difficulty
- excessive distress during work

- excessive scratching or hair loss.

4.6.6 If necessary, horses that are ill should be stabled, separated or isolated and appropriate facilities must be available for their care.

4.6.7 A basic first aid kit for horses should be carried when they are ridden into remote areas where prompt veterinary attention cannot be provided in case of injury or illness. The kit may include:

- cotton wool
- bandages and wound dressings
- adhesive dressings
- antibacterial wash
- fly repellent.

You should also consult a veterinary surgeon on first-aid procedures before leaving.

4.6.8 Horses should be vaccinated against tetanus at least every 5 years.

4.6.9 Annual vaccination against strangles is advisable, particularly in young horses.

4.6.10 A program to control internal parasites should be set up with the advice of a veterinary surgeon. To help control parasites:

- regularly monitor parasite status treat as necessary
- spell paddocks
- remove manure
- remove and hygienically dispose of bot fly eggs.

4.6.11 Horses' teeth must be checked, and filed if necessary, every 12 months.

4.6.12 Horses' legs should be inspected regularly for injuries or swellings.

4.6.13 Horses' hooves should be:

- shod if the horses are worked on roads or hard ground
- regularly trimmed or shod by a farrier (preferably every 6-8 weeks)
- regularly cleaned out.

4.6.14 Where treatment to restore health or repair injury is not possible, practical or successful, horses should be humanely destroyed.

Horses should be humanely destroyed by a veterinary surgeon; or if this is not possible, by a person experienced in these procedures. When horses are boarded, the owner should sign an authorisation for the animal to be euthanased in an emergency.

4.7 Transport

4.7.1 During transport horses should be:

- transported in the shortest practicable time
- penned separately, wherever possible
- fitted safely with headstalls (if the animals are trained to lead and tie up) with the lead of the headstall secured to the vehicle or stall using a quick release knot.

4.7.2 Lame or sick horses should only be transported for veterinary treatment or slaughter where transport would not cause undue pain or distress.

4.7.3 Mares more than eight months pregnant should not be transported, if possible.

4.7.4 Any vehicle especially designed or regularly used for transporting horses should:

- protect horses from injury
- have non-slip floors
- provide easy access and operator safety
- protect horses against extremes of temperature
- have adequate ventilation
- be easy to clean
- be kept clean.

Originally published in October, 1996, by NSW Agriculture

APPENDIX TWO

Mega Bin Specification Sheet

Plastic Mega Bins

The Nally MegaBin is the original Australian bulk bin. Designed for fruit and vegetable movement and retail high performance the Nally MegaBin is clearly the way of plastic bins in Australia.

Rounded corners and smoother interior surfaces results in less bruising and damage to your produce. Multiple vents in sides and base provide superior airflow so products cool faster adding valuable shelf life to your produce. The smooth, non-absorbent surface will not harbour or transfer mould, bacteria or disease carrying organisms.

Nally Megabins are up to 40% lighter in weight than wood bins and the weight is constant as they don't absorb moisture. This allows for increased freight efficiencies of 4-5%. In practice you are able to transport 2-3 extra bins of fruit per semi-trailer load.

- Available in both solid and vented
- Standard pallet size (1165mm x 1165mm)
- Fits on standard pallet racking
- Maximum load capacity: 500kgs

V7800 V7810

Code	Details	Capacity (L)	Eternal Size LxWxH (mm)	Internal Size LxWxH (mm)	Unit Weight (kg)
V7800	Solid Mega Bin	780	1165x1165x780	1082x1082x650	44
V7810	Vented Mega Bin	780	1165x1165x780	1082x1082x650	44
V7815	Mega Bin Lid	-	1180x1180x35	-	10

*Visit **www.verdex.com.au** for more images and details*

ABOUT VERDEX EQUIPMENT

At Verdex Equipment we have the largest range of manual handling and workplace materials handling equipment in Australia. This includes thousands of workplace and storage items suited to every workplace and lifting equipment and trolleys for almost every application. Our products aim to eliminate or reduce manual handling effort in the workplace, while boosting productivity and ensuring workplace safety.

VERDEX has over many years spent countless hours on product development and sourcing to ensure we can get products to make your workplace not only safer but more efficient.

VERDEX sources products from all over the world and sells them direct meaning there is no middle man or middle margin added giving you the best possible price and faster service. We strive to ensure you have the perfect product to improve the safety and efficiency of your workplace.

VERDEX is dedicated to providing you with the highest quality workplace products at the best possible price, with the best possible service. With a long and trusted reputation in the industry, VERDEX is a name and company you can rely on.

TRIAL MODE - Click here for more information

APPENDIX THREE

Horse Waste Calculations and Logistics Review

NJC STABLES DEVELOPMENT - HORSE WASTE CALCULATION / LOGISTICS REVIEW

NOTES:	RESOURCES
1. Refer to the following publication from Michigan State University: 2. *"a 1,100-pound horse can produce 0.910 ft3 of manure per day." - refer "Manure Storage" section of the Michigan State University publication on Page 3.*	https://www.canr.msu.edu/horses/uploads/files/Final-EMM%20Bulletin%209.1.2020.pdf
3. Average weight of a thoroughbred is 900 - 1100 pounds at maturity, therefore we are using the upper limit for these calculations (fully occupied facility with mature horses at maximum weight). 1,100 pounds equates to a maximum weight of 498kg.	https://www.britannica.com/animal/Thoroughbred
4. An 1,100-pound horse can produce 57 pounds of manure per day, which equals 25.85kg - this is consistent with the calcs from University of Minnesota	https://extension.umn.edu/horse-care-and-management/managing-and-composting-horse-manure#facility-design-1159961
5. As per RS advice 08/07/21, 25% of a Mega Bin is typically used for bedding disposal per horse / stall per day	
6. Mega Bin volume is 0.76m3 (1082mm x 1082mm x 650mm) - refer Verdex Product Information Sheet	https://www.verdex.com.au/assets/brochures/V7800P.pdf
7. As per RS advice 08/07/21, a 40ft articulated curtain-side semi trailer can carry 80 Mega Bins	Godolphin Racing

ITEM	QTY	UNIT	COMMENTS
WASTE REMOVAL:			
Manure Calculation:			
1ft3 =	0.0283168	m3	
Therefore, 0.910ft3 =	0.025768288	m3	per horse per day
Bedding Calculation:			
25% of a Mega Bin per day per horse			
Volume of 1 x Mega Bin =	0.7609706	m3	
25% =	0.19024265	m3	per horse per day
Manure + Bedding Calculation:	0.216010938	m3	per horse per day
For 40 x horses	8.64043752	m3	per 40-horse level per day
No of full Mega Bins / level / barn	11.35449585	bins	per 40-horse level per day
Round up to	12	bins	per 40-horse level per day
Total Occupied Facility (13 x 40-horse barns)	156	bins	Maximum amount for the fully-occupied facility per day (in reality will be significantly less due to vacancies, spelling, horses off site racing, veterinary visits, etc).
Number of Mega Bins / 45ft curtain-sided articulated semi	78	bins	per truck (per Godolphin advice 21/07/21)
Number of Trucks / day	2	trucks	per day
WASTE STORE CAPACITY			
Number of Mega Bins in floor area	72	bins	
Number of Mega Bins stacked 2 x high	144	bins	
Number of Mega Bins stacked 3 x high	216	bins	Triple stacked bins have been factored into design and will cater for the number of bins to be stored
BEDDING SUPPLY:			
Total Occupied Facility (13 x 40-horse barns)	156	bins	Maximum amount for the fully-occupied facility per day (new bedding replaces removed bedding, so deducting manure, bedding amount will be slightly less, but bin deliveries needs to be the same as the waste removal).
GENERAL WASTE REMOVAL:			Anticipated at approximately 3 x collections per week by private contractor from "General Waste Bin" area.
FEED SUPPLY:			Discussion with RS 08/07/21: It is anticipated that there will be 1 x feed delivery on a rigid truck per day for the whole facility. The daily deliveries may be from different suppliers to suit trainer preference / demand. These deliveries will be during daytime hours, scheduled in with NJC management to ensure timing suits availability for materials handling. Feed is typically palletised (not in Mega Bins - Mega Bins are for bedding supply and manure / bedding removal).

APPENDIX FOUR

Pest Control Procedures

16 July 2021

David Read

Avid Project Management Pty Ltd

David.read@avidpm.com.au

Hi David,

Further to our meeting on site at the Newcastle Jockey Club on Tuesday 13 July, please find following Pest Management recommendations for the proposed New Stables corner Darling & Chapman Streets Broadmeadow.

PEST MANAGEMENT RECOMMENDATIONS

- RODENT CONTROL

It is a recommendation of industry standards and H.A.C.C.P that Rodent Bait Stations should be placed at intervals of no more than 9 metres. Advanced Pest Control Australia recommend a monthly service be carried out in which we inspect all bait stations, clean, rebait and record all activity findings, so monitoring of activity can be gauged.

- EXTERNAL WEBBING SPIDERS & COCKROACH CONTROL

Initial spray for external webbing spiders & cockroach treatment to be carried out. Advanced Pest Control Australia recommend 3 monthly maintenance programme.

- SNAKES

As requested.

If you have any questions regarding our recommendations, please do not hesitate to contact me on 0403340727.

Kind regards,

Steve Podgorelec

Email spodgorelec@apcaus.net.au

Address: 40 Portside Cres, Wickham NSW 2293
Phone: 1300 139 123 www.advancedpestcontrol.net.au