

# NSW Harness Racing Track Maintenance Manual



# Track Shape

- The main objective at all NSW harness racing tracks is to provide a safe and even surface for both racing and training.
- It is imperative that the camber of the track and the transitions of the turns are in line with the track radii and that horses entering the straights do so through a smooth turn.

# Track Shape



Horses should have a smooth transition when entering into and out of bends.

# Track Material

- The race track base material should:
  - 1) ideally be able to be at a depth of 200mm-300mm
  - 2) have limited clay content and a low phosphate level;
  - 3) be able to adapt to both dry and wet weather;
  - 4) have the ability to be consistently conditioned, graded and when rain is forecast, rolled;

# Track Material

*Pictured is FOR A REASON in the Goulburn Cup.  
He smashed the track record by 2.1 seconds (overall time).  
The picture clearly shows the track has been conditioned and has a perfect cushion.*



All tracks in NSW are to be regularly conditioned, providing a cushioned surface for horses to race on.

# Track Preparation - Watering

- The application of water plays a major role in binding the track material together and keeping dust to a minimum, particularly on hot, dry and windy days.
- It assists to create a binding of the surface materials, which decreases the effect caused by wind, rain and the wear and tear from racing and training.

# Track Preparation - Watering



All tracks in NSW are to be watered regularly on training days and prior to & in between races at race meetings and official trials.

# Track Preparation - Conditioning

- The main role of the track conditioner is to provide a cushion for horses to compete or train on in safety and comfort.
- The tynes on the conditioner should be set to a maximum of 15mm, with an aim to leave a soft cushion which reduces the impact between the sole of a horses hoof and the track.



# Track Preparation - Conditioning



Except when rain is forecast, all tracks in NSW are to be conditioned regularly on training days and prior to & in between races at race meetings and official trials.

# Track Preparation - Grading

- The main role of the track grader is to rotate track material from the peg line to provide an even distribution to the outside fence. **(A serrated edged blade must be used)**.
- Track grading is to occur on a regular basis to ensure that the track material is combed back into place and distributed evenly.
- Marker pegs must be removed regularly when grading the track. This will allow access to the displaced material inside and between the pegs. Weaving in and out between pegs will not allow an even material flow across the serrated blade, therefore an uneven distribution takes place.

# Track Preparation - Grading



All tracks in NSW are to be graded regularly commencing 300mm to 500mm inside the marker peg line. Marker pegs should always be removed during track grading.

# Track Preparation – Rain Forecast

- If there is rain forecast, the track must be sealed so that the top of the track surface is not shifty or turns slushy.
- A shifty or slushy surface will result in the mobile barrier losing traction with the track and there is a probability that the meeting will need to be cancelled.

# Track Preparation – Rain Forecast

- A shifty or slushy surface compromises the safety of horses competing at race meetings.
- **Initially the water truck should be used** to compact the conditioned race surface.
- Following watering a multi tyred roller should be used to seal the surface.

# Track Preparation – Rain Forecast



A multi tyred roller is to be used when rain is forecast to seal the track surface.



A track conditioner can also be used to roll the track, simply lift the tynes off the track surface.

# Track Maintenance – During Meetings (before the first race)

1. Water and condition the track to remove hoof and tyre marks.
2. Water the track to achieve the correct water content based on the current and forecast conditions.
3. Condition the race track to create a cushion on the track surface.

# Track Maintenance – During Meetings (before the first race)



In standard weather conditions, prior to the first race, all tracks in NSW are to be watered and conditioned to ensure a cushioned racing surface.



# Track Maintenance – During Meetings (between every race)

**If there is not enough time to complete all 3 steps listed below - Start at Step 2.**

1. Use the mesh drag to remove hoof marks, tyre grooves and to turnover the track cushion (in wet conditions only mesh the track).
2. Maintain the moisture levels with the water truck.
3. Condition the race track to recreate a cushion on the track surface.

# Track Maintenance – During Meetings (between every race)



Mesh the track before watering and conditioning between races. In wet weather conditions, only mesh the track between races.

# Track Maintenance – After Meetings (restore to pre race condition)

1. If the track is to be used for training the next day, the track should be conditioned to provide a uniform surface.
2. If a race meeting is scheduled for the next day, the track should be sealed by rolling.
3. If clear weather conditions are forecast the following day the track is to be conditioned prior to horses commencing training.

# Track Maintenance & Preparation Schedule

## Pre Race Meeting – Dry

1. Condition the track for training
2. Inspect the track surface to determine the course of action
3. Mesh track
4. Water track
5. Condition track

# Track Maintenance & Preparation Schedule

## Pre Race Meeting – Wet

1. Inspect the track surface to determine the course of action
2. Light mesh the track

# Track Maintenance & Preparation Schedule

## No Race Meeting – Dry

1. Condition the track for training
2. Inspect the track surface to determine the course of action
3. Mesh the track
4. Water the track
5. Seal the track with a roller

# Track Maintenance & Preparation Schedule

## No Race Meeting – Wet

1. Light mesh the track prior to training
2. Inspect the track surface to determine the course of action
3. Light mesh the track

# Track Material

1. On tracks that race 50+ times per year where possible, should be between 200mm-300mm in depth. On tracks that race less than 50 times per year should be between 25mm and 50mm.
2. Should have low clay content and have a low phosphate content (preferably 0)
3. Can be a mixture of materials (e.g. blue metal crusher dust and granitic sand)
4. Prior to the purchase of material all Clubs must contact HRNSW to advise the type of material and the quarry it is being purchased from.



# Track Material

4. Crusher dust should not be any larger than 5mm.
5. To ensure an even spread of material all track materials should be spread by an agricultural spreader (fertilizer spreader).

# Track Material

7. Clubs that have a high volume of racing/training should have a stock pile of their material on course to allow regular top up's to refresh the track surface.
8. To ensure an even spread of material the top up track material should be spread by an agricultural spreader.
9. Major clubs should consider purchasing a small agricultural spreader for regular top up's.

# Track Material

10. High volume tracks (30+ meetings) should be fully resurfaced every 6 months, Medium volume (5+ meetings) every year and Low volume (less than 5 meetings) every 2 years. *A factor also to be taken into consideration are the number of horses trained daily on the track.*
11. The resurface includes grading the old material off the track to a depth of 25mm.
12. The new material should then be spread onto the track with an agricultural spreader.

# Track Material

13. During the resurface the camber and transition of the turns should be checked against the track plans.



The above track surface is unacceptable



The above track surface is expected

# Weather Forecast

The weather forecast is to be monitored on the Bureau of Meteorology website [www.bom.gov.au](http://www.bom.gov.au) each day during non race meeting weeks and at regular intervals during the preceding 48 hours of a race meeting to evaluate the correct track preparation procedures to be adopted.

# Rain Gauge

1. All clubs must have a rain gauge.
2. The rain gauge is to be read and recorded at the same time every day to assist with historical data for future comparisons when considering the preparation of a race track.

# Vehicle Maintenance & Cleaning

## Tractors

1. A general service (oil, water, air etc) should be carried out on the tractor twice a week.
2. A comprehensive service should be carried out on the tractor by a contracted mechanic at a minimum of every 6 months.

# Vehicle Maintenance & Cleaning

## Water Truck

1. A general service (oil, water, air etc) should be carried out on the water truck twice a week.
2. A comprehensive service should be carried out on the water truck by a contracted mechanic at a minimum of every 6 months.



# Vehicle Maintenance & Cleaning

## Track Conditioners

1. A general service (grease) should be carried out on the track conditioner once a week.
2. A comprehensive check of the tynes should be carried out at a minimum of every 6 months.

# Vehicle Maintenance & Cleaning

## Race Day Machinery

1. Race day machinery should be washed and cleaned prior to use.
2. Any excess track material should be removed from equipment prior to using it again between races to enhance the effect of the machinery.

