QUICK REFERENCE GUIDE TO TYRE STORAGE REGULATIONS



Queensland

This quick reference guide has been extracted from the TSA Best Practice Guidelines for Tyre Storage. For a more detailed discussion of the many considerations around tyre storage, please refer back to the Guidelines.

QLD Tyre storage regulations

Under the <u>Environmental Protection Regulation 2019</u>, tyres are a category 2 regulated waste (commercial or industrial waste). If a person or business receives and stores more than 4 tonnes or 4m³ of EOL tyres at any one time (500 EPU), then you are required to hold an EA as this activity is classed as undertaking ERA 62 – Resource recovery and transfer facility operation.

- <u>The Fire and Rescue Service Act 1990</u>, requires occupants of premises to ensure the risk of a fire occurring at the premises is properly managed to mitigate the risk.
- This is regulated under the Building Fire Safety Regulation 2008. There is a requisition under the Act (Fire and Rescue Service Act Requisition (No. 1) 2011), this applies to outdoor storage of more than 500 tyres. The requisition prescribes stockpile dimensions and configurations, firefighting equipment, machinery for moving tyres and a number of other requirements.
- The <u>Public Health Act 2005</u> and more specifically the <u>Public Health Regulation 2005</u>,
 Division 2 prescribes mosquitos as a public health risk and requires all persons to ensure that there is no breeding ground for mosquitos through the accumulation of water.

Fire safety requirements

Queensland Government Gazette No. 78 (1 April 2011) pages 539 - 544

Fire and Rescue Service Act 1990Fire and Rescue Service Act Requisition No. 1 2011

The requisition applies to any person who stores or stockpiles in excess of 500 tyres of any type and in any condition (new, second-hand, re-conditioned, scrap, shredded or crumbed) or their equivalent parts with a dimension exceeding 100mm in the open.

- Single stack tyre dimensions must not exceed the following:
 - Maximum width of base 5m
 - Maximum length of base 45m
 - Maximum height 3m
 - Minimum distance between stacks 10m
 - Average side slope 1:1.
- The longest dimension of a stack must be at right angles to the direction of the prevailing winds
- Multiple stacks may be separated by a protective wall with a fire rating of 4 hours provided that:
 - the protective wall protrudes 1.5 meters above the highest point and 1.5 meters beyond the widest point to each side





- only two stacks abut on the longest axis and two stacks on the shortest axis (i.e. four individual stacks in any one group)
- any individual stack must not exceed the dimensions specified above (except that tyres may be stacked against such wall with a side slope batter only on the exposed sides)
- such groups of stacks do not exceed an aggregate width of 10 meters and an aggregate length of 90 meters
- such groups of stacks are separated from any other group of stacks, individual stacks of tyres or any combustible or flammable material including grass and weeds by a distance of 10 meters or more.
- Machinery capable of creating a break 10 metres wide between burning and unburnt tyres must be kept on site
 24 hours a day. A competent operator for this equipment must be available 24 hours a day.
- A system to have the operator on site within 20 minutes must be in place 24 hours a day. This system must be approved by the Commissioner, Queensland Fire and Rescue Service.
- A stockpile of sand or soil and the resources to load and transport it to the tyre storage site, and to place it on the tyre stacks must be readily available. The volume of sand or soil must be sufficient to completely cover the largest stack to a depth of 1 metre over the entire exposed surface area of the stack.
- A water supply system capable of delivering high volumes of water with minimum delay is required. The source may be reticulated town water or a dam.
- The on-site water reticulation system is to have the following characteristics:
 - A minimum of three standpipes with fittings approved by the Commissioner, Queensland Fire and Rescue Service are to be located so that at least one is no closer than 50 metres and no further than 90 metres from any part of any stack and is up-wind or cross-wind no matter what the wind direction.
 - Each standpipe is to be able to deliver 1,800 litres/minute when any two are operating. This flow rate must be able to be continuously maintained for a minimum of 3 hours.
 - Three 30 metre lengths of 64 millimetre hose and fittings, one branch and one nozzle must be kept readily available at a specified Fire Point.
 - This equipment is to be maintained in accordance with AS1851 and to meet the specifications of the Commissioner, Queensland Fire and Rescue Service.
 - If water is to be drawn from a dam, a volume of 648,000 litres must always be available for pumping.
 - Provision should be made to contain firewater runoff.
- More than one access point to the storage area shall be available to allow for varying wind directions. A
 perimeter road shall be developed to aid security and access. All roads to, and lanes between stacks, shall be
 maintained in a condition suitable for Queensland Fire and Rescue Service vehicles.
- If water is to be drawn from a dam, a hard standing area of a design and location approved by the Commissioner, Queensland Fire and Rescue Service must be provided adjacent to the dam for the sole use of a Queensland Fire and Rescue Service pumping unit.
- A security system meeting the approval of the Commissioner, Queensland Fire and Rescue Service is to be provided.
- A plan of action for a fire emergency must be developed. This plan must be approved by the Commissioner, Queensland Fire and Rescue Service.

Australia (Federal) Tyre Storage Regulations

Transport

Nationally, tyres are listed as a 'controlled waste' in List 1 of Schedule A of the National Environmental Protection (Movement of Controlled Waste between States and Territories) Measure 2004 (Controlled Waste NEPM). The NEPM has established a national system to track the transport movements of controlled waste between States and Territories and developed nationally recognised licences for interstate transporters. While, the interstate transport of tyres is regulated via this legislation, there is no federal control over the storage of tyres.

Storage

While there are no federal requirements on storage of tyres, where tyres are stored indoors, buildings must be constructed in compliance with Part E of Volume 1 of the National Construction Code (Building Code of Australia)¹, which lists requirements and specifications for firefighting equipment and smoke hazard management, and tyre storage facilities must comply specifically with Clause E1.10 and E2.3. Clause E1.10.

State jurisdictions may specify separate requirements (under state-specific guidelines or waste management regulation) that must be complied with. For example, in Western Australia clearly specifies pile sizes for indoor and outdoor provided in Guidance Note GN02: Bulk Storage of Rubber Tyres Including Shredded and Crumbed Tyres.

Work Health and Safety (WHS)

In addition, Australian businesses have obligations under the harmonised Work Health and Safety (WHS) framework in Australia, including the Model WHS Regulations (1 January 2021). However, there are no specific requirements under the WHS framework for tyre storage facilities.

¹-Australian Building Codes Board (2015) National Construction Code Volume One, Building Code of Australia, Class 2 to Class 9 Buildings.