

End of Waste Code

End-of-Life Tyres (ENEW07503018)

Waste Reduction and Recycling Act 2011



Version history

Version	Date	Description of changes
1.00	14 February 2020	Commencement of EOW Code
2.00	08 February 2021	Amendment of EOW Code – approval by gazette on 26 February 2021
2.01	23 June 2023	Minor update to reflect the definition of waste moving into the <i>Waste Reduction and Recycling Act 2011</i> . This does not impact the interests of the producer or user of the resource.

Prepared by: Waste Assessment, Department of Environment and Science

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1. Explanatory Statement

This End of Waste (EOW) code for **end-of-life tyres** has been issued by the **chief executive** in accordance with section 159 of the *Waste Reduction and Recycling Act 2011* (WRR Act).

This EOW code states when the **end-of-life tyres** become a **resource** and any relevant requirements and/or conditions for its use. If the **resource** is not being used in accordance with the relevant requirements and/or conditions of this EOW code, or another type of permit that allows for its use, it is considered a waste under section 8AA of the WRR Act and must be **lawfully** transported and disposed of appropriately at a facility that is **lawfully** able to receive the waste.

2. Guidance

2.1 Resource use versus activity

Under section 155 of the WRR Act, a waste stops being a waste and becomes a **resource** when it meets the requirements and conditions of an EOW code. Under section 159 of the WRR Act, an EOW code specifies the circumstances when a waste becomes a resource; how it must be used to be considered a resource; when it is no longer considered a resource but a waste instead; and conditions that must be complied with by resources users and registered resource producers.

An Environmental Authority (EA) under the *Environmental Protection Act 1994* (EP Act) is required where an activity being undertaken triggers the threshold for any environmentally relevant activity (ERA). This means that treating or processing the waste to meet the resource quality criteria under the EOW code may require an EA under the EP Act if the activity meets the threshold for an ERA.

2.2 Resource versus waste

A waste that is a **resource** under an EOW code is considered a **resource** only for the use(s) approved in an EOW code. To be considered a resource under the EOW code, the material used as the resource must meet the requirements of the EOW code and be used in accordance with the conditions of the EOW code, otherwise it is considered a waste and must be managed in accordance with waste management requirements under the EP Act and the WRR Act and their subordinate legislation.

A **resource** under an EOW code, is deemed to be a waste again, if it is not used in accordance with the EOW code; if it is disposed of at a waste disposal site; or if it is deposited at a place in a way that would, apart from its use approved under an EOW code, constitute a contravention of the general littering provision (section 103) or the illegal dumping of waste provision (section 104) under the WRR Act.

2.3 Failure to comply

It is an offence under section 158(1) of the WRR Act for a **registered resource producer** to produce the **resource**, or use, sell or give away the **resource** unless they comply with the requirements under an EOW code. Further, it is an offence under section 158(2) of the WRR Act for a **person** to use the **resource** in a way, or for a purpose, that does not comply with an EOW code for the **resource**. These offences carry a maximum penalty of 1,665 penalty units for an individual and 8,325 penalty units for a corporation¹.

Please refer to Appendix B of this EOW code for general obligations for all **persons** operating under this EOW code, which includes the **resource users**.

¹ The value of a penalty unit is stated in the *Penalties and Sentences Regulation 2015* (Qld).

2.4 Lawfulness of the activity

The issuing of this EOW code for the use of a **resource** does not warrant or imply the **lawfulness** of the activity under all legislation, or that approvals necessary under other legislation have or will be approved. It is the responsibility of the **registered resource producer** and **resource user** to identify and obtain all other approvals necessary for the relevant activities.

3. Period of this EOW code

This EOW code takes effect from the day of gazettal of this EOW code and remains in force until it is amended, cancelled or suspended by the **chief executive**².

4. Waste to which this EOW code applies

This EOW code is limited to **end-of-life tyres**. **End-of-life tyres** become a **resource** when the requirements and conditions under this EOW code are met.

5. Person to whom this EOW code applies

5.1 Registered resource producers of the resource

- 5.1.1 A **registered resource producer** for this EOW code must comply with the stated registered resource producer requirements in Section 6 – Registered Resource Producer Requirements.

5.2 Resource users

- 5.2.1 The **resource user** must only use the **resource** in a way, and for a purpose allowed under this EOW code.
- 5.2.2 The **resource user** must comply with the stated conditions of use in Section 7 – Conditions of Use.

² If an EOW code is to be amended, cancelled or suspended, the chief executive will provide an opportunity to make written submissions by providing a proposed action notice to the registered resource producers; and publishing the proposed action notice on the department's [website](#).

6. Registered Resource Producer Requirements

Registration under this EOW code	
(6.1)	Prior to operating under this EOW code, the producer of the resource must register with the chief executive by giving a notice in the approved form ³ to become a registered resource producer for this EOW code.
Approved resource	
(6.2)	The approved resource is end-of-life tyres which complies with <i>Requirement (6.3)</i> of this EOW code.
(6.3)	<p>The registered resource producer must not use, sell or give away the resource unless it complies with the following criteria:</p> <ul style="list-style-type: none"> a) is crumbed, granular or shredded end-of life tyres lawfully generated in Australia; or b) is whole end-of-life tyres generated in Queensland and is: <ul style="list-style-type: none"> i. sourced from tyre manufacturers, tyre recyclers and/or tyre transporters; ii. sourced from lawfully operated tyre retailers and/or tyre wholesalers; iii. sourced from a resource recovery and transfer facility; iv. sourced from a resource recovery area; and/or v. sourced from operators of petroleum activities and mining activities authorised under <i>the Environmental Protection Act 1994</i>.
Information to be provided	
(6.4)	<p>The registered resource producer must provide the following to the resource user upon establishment of an arrangement to sell or give away the resource, and annually thereafter:</p> <ul style="list-style-type: none"> a) a copy of the EOW code for <i>End-of-Life Tyres (ENEW07503018)</i>⁴; b) the registered resource producer's business name, ABN, address and environmental authority number (where applicable); and c) confirmation in writing that the resource being supplied is compliant with the requirements of this EOW code.
Records	
(6.5)	<p>The registered resource producer must keep the following records for whole tyres supplied to a resource user:</p> <ul style="list-style-type: none"> a) origin(s) of the resource (e.g. address, lot on plan and/or GPS coordinates); and b) quantity (in tonnes) of the resource supplied; c) date of dispatch of the resource; and

³ The approved form, *Registered Resource Producer for an EOW code*, is available on the **chief executive's** [website](#).

⁴ This can be a physical copy, an electronic copy or a link to the **chief executive's** [website](#) where this EOW code is available.

	d) individual or business name, ABN (where applicable) and address of the person receiving the resource .
(6.6)	All records required to be kept by the registered resource producer under this EOW code must be: <ul style="list-style-type: none"> a) kept by the registered resource producer for a period of not less than five (5) years; and b) provided to the chief executive upon request and in the format and time period specified.
Notification of emergencies, incidents and breaches	
(6.7)	Any breach of a requirement of this EOW code must be reported to the chief executive within 24 hours of becoming aware of the breach ⁵ .
(6.8)	Records of any breach of a requirement of this EOW code, including full details of the breach and any subsequent actions taken, must be kept and provided to the chief executive upon request and in the format and time period specified.

7. Conditions of Use

Notification under this EOW code	
(7.1)	Prior to operating under this EOW code, a person who intends to use the approved resource must notify the chief executive by giving a notice in the approved form ⁶ at least 10 days prior to commencement of using the resource .
Approved uses	
(7.2)	The approved resource is end-of-life tyres that complies with <i>Requirement (6.3)</i> of this EOW code and is used for the following purpose(s): <ul style="list-style-type: none"> a) as acoustic barriers; b) for equine applications; c) as weights for silage storage systems; d) as sediment barriers to prevent erosion; e) manufacturing prefabricated rubber products; f) as safety barriers in lawful motor racing events; g) as storage platforms for manufactured swimming pools; h) as fenders and/or bumpers for mooring marine vessels; i) in structural and non-structural civil engineering application(s); j) manufacturing bituminous binders used in road making applications; and/or

⁵ Reporting can be via the **chief executive's** Pollution Hotline (1300 130 372 – option 2) or via online reporting through the **chief executive's** [website](#).

⁶ The approved form, *Resource user for an EOW code notification form* is available on the **chief executive's** [website](#).

	k) use in manufacturing processes and applications which transform and incorporate the resource into a final product that complies with relevant Australian Standards for that product.
(7.3)	For whole tyres received by a resource user under this EOW code, the resource user must record the following information: <ul style="list-style-type: none"> a) business name, ABN, address and environmental authority number (where applicable) of the registered resource producer who supplied the resource; b) date the resource user received the resource; c) quantity (in tonnes) of the resource received by the resource user; and d) site of use of resource (e.g. street address, lot on plan and/or GPS coordinates).
Resource use in structural and non-structural civil engineering applications	
(7.4)	Resource users using the resource under this EOW code for structural and non-structural civil engineering applications must record the following information in accordance with <i>Condition (7.10)</i> of this EOW code: <ul style="list-style-type: none"> a) evidence that the resource was used in accordance with an applicable prescribed engineering standard; or b) evidence of certification from a Registered Professional Engineer of Queensland (RPEQ) of the engineer designed civil application being suitable for its intended purpose.
(7.5)	Prior to the use of whole tyres in structural and non-structural civil engineering application(s) in waters , the resource user must: <ul style="list-style-type: none"> a) carry out an assessment on the potential for the whole tyres to become mobile under flood or erosive stream conditions; b) carry out an assessment on the potential for leaching of contaminants from the whole tyres in acidic or alkaline pH conditions; and c) keep records of the assessments carried out under <i>Condition (7.5 (a-b))</i> in accordance with <i>Condition (7.10)</i>.
Waste	
(7.6)	All waste generated from the approved use(s) of the resource must be lawfully transported to a facility that can lawfully accept the waste.
Storage	
(7.7)	Any storage of the resource on the site of use must not exceed the operational demand for the purpose of the use(s) approved under this EOW code.
(7.8)	The stored resource must not be a public health risk in accordance with the Public Health Act 2005 .
(7.9)	The resource must be stored in accordance with the Fire and Rescue Service Act Requisition (No. 1) 2011 stated in Appendix A.
Records	

(7.10)	All records required to be kept by the resource user under this EOW code must be: <ul style="list-style-type: none"> a) kept by the resource user for a period of not less than five (5) years; and b) provided to the chief executive upon request and in the format requested and time period specified.
Notification of emergencies, incidents and breaches	
(7.11)	Any breach of a condition of this EOW code must be reported to the chief executive within 24 hours of becoming aware of the breach ⁷ .
(7.12)	Records of any breach of a condition of this EOW code, including full details of the breach and any subsequent actions taken, must be kept and provided to the chief executive upon request and in the format requested and time period specified.

8. Definitions

Words and phrases used throughout this EOW code **in bold** are defined below. Where a definition for a term used in this EOW code is sought and the term is not defined within this EOW code the definitions provided in the relevant legislation shall be used.

‘ABN’ means Australian Business Number which is a unique 11 digit number issued by the Australian Business Register and identifies a business in Australia.

‘acoustic barrier’ means an exterior structure designed to protect inhabitants of a **sensitive place** from noise pollution.

‘chief executive’ means the Department of Environment and Science or its successor.

‘contaminants’ (as defined in Section 11 of the *Environmental Protection Act 1994*), unless authorised under this EOW code means —

- a) a gas, liquid or solid; or
- b) an odour; or
- c) an organism (whether alive or dead), including a virus; or
- d) energy, including noise, heat, radioactivity and electromagnetic radiation; or
- e) a combination of contaminants.

‘crumbed’ means processed **tyres** less than 2mm in diameter.

‘designated pests’ (as defined in the *Public Health Act 2005*) means any of the following —

- a) mosquitos;
- b) rats;
- c) mice;
- d) other animals prescribed under a regulation.

⁷ Reporting can be via the **chief executive’s** Pollution Hotline (1300 130 372 – option 2) or via online reporting through the **chief executive’s** [website](#).

‘emergency(ies)’ means a situation where either human health or safety is threatened, or serious or material environmental harm has been or is likely to be caused; or urgent action is necessary to protect the health or safety of persons, or prevent or minimise the harm, or rehabilitate or restore the environment because of the harm.

‘end-of-life tyres’ means a used tyre that is not attached to a vehicle.

‘environmental authority’ is a licence granted by the **chief executive** pursuant to the ***Environmental Protection Act 1994*** which authorises the holder of the environmental authority to carry out an environmentally relevant activity.

‘environmental harm’ means environmental harm as defined in Chapter 1 of the *Environmental Protection Act 1994*.

‘Environmental Protection Act 1994’ means the most recent version of the Queensland Environmental Protection Act which is in force at the time of use of the **resource**.

‘equine applications’ means reuse of the **resource** in equine performance, recreational and management activities.

‘Fire and Rescue Service Act Requisition (No. 1) 2011’ is available in Queensland Government Gazette 72-78, volume 356, pages 493-558 (1 April 2011). This is also available as Appendix A of this EOW code.

‘fenders and/or bumpers’ are anti-collision devices used to absorb kinetic energy between marine vessels or between marine vessels and berth.

‘forage’ means edible parts of plants, other than separated grain, that can provide feed for grazing animals or that can be harvested for feeding.

‘granular’ means processed **tyres** between 2mm-15mm in diameter.

‘lawful(ly)’ means allowed or permitted by law and not contrary to law.

‘mining activities’ as defined in Chapter 5 of the ***Environmental Protection Act 1994*** means:

- a) an activity that is an authorised activity for a mining tenement under the *Mineral Resources Act 1989*; or
- b) another activity that is authorised under an approval under the *Mineral Resources Act 1989* that grants rights over land.

‘person’ means an individual or a corporation.

‘petroleum activities’ as defined in Chapter 5 of the ***Environmental Protection Act 1994*** means:

- a) an activity that, under the *Petroleum Act 1923*, is an authorised activity for a 1923 Act petroleum tenure under that Act; or
- b) an activity that, under the *Petroleum and Gas (Production and Safety) Act 2004*, is an authorised activity for a petroleum authority under that Act; or
- c) exploring for, exploiting or conveying petroleum resources under a licence, permit, pipeline licence, primary licence, secondary licence or special prospecting authority granted under the *Petroleum (Submerged Lands) Act 1982*.

‘Public Health Act 2005’ means the most recent version of the Queensland Public Health Act which is in force at the time of use of the **resource**.

‘public health risk’ as defined in Chapter 2 of the ***Public Health Act 2005*** means:

- a) an animal, structure, substance or other thing that —
 - i. is, or is likely to become, a breeding ground or source of food for **designated pests**; or

- ii. harbours, or is likely to become something that harbours, designated pests; or
- b) any of the following that is, or is likely to be, hazardous to human health, or that contributes to, or is likely to contribute to, disease in humans or the transmission of an infectious condition to humans—
 - i. **a designated pest;**
 - ii. drinking water supplied by a drinking water service provider;
 - iii. recycled water produced or supplied under a recycled water scheme within the meaning of the *Water Supply (Safety and Reliability) Act 2008*;
 - iv. water, other than water mentioned in subparagraph (ii) or (iii);
 - v. waste;
 - vi. a dead or living animal, structure, substance or other thing that has been, or is likely to have been, exposed to an infectious condition;
 - vii. a dispersal or release of a pesticide, herbicide, solvent or other chemical at a place other than a workplace;
 - viii. a dispersal or release of a by-product of manufacturing, construction, repair, alteration, cleaning or demolition work at a place other than a workplace;
 - ix. lead used, or being used, in a way that contravenes section 58 or 59;
 - x. paint used, or being used, in a way that contravenes the standard mentioned in section 60;
 - xi. any other activity, animal, substance or other thing prescribed under a regulation.

‘records’ include breach notifications, written procedures, analysis results, monitoring reports, monitoring programs, certification, and evidence of the use of the **resource** in accordance with an applicable prescribed engineering standard required under a condition or requirement of this EOW code.

‘Registered Professional Engineer of Queensland’ (RPEQ) means an engineer who is registered by the Board of Professional Engineers Queensland to provide professional engineering services in Queensland as required under the *Professional Engineers Act 2002*.

‘registered resource producer(s)’ means a **person** who produces the **resource** and has registered with the **chief executive** (in accordance with *Requirement (6.1)*) to use, sell or give away the **resource** to be used under this EOW code. Where the registered resource producer uses the resource, notification must also be made in the approved form in accordance with *Condition (7.1)* of this EOW code.

‘resource’ means **end-of-life tyres** which are **whole**, **crumbed**, **granular** or **shredded** that meet *Requirement (6.2)* of this EOW code.

‘resource recovery and transfer facility’ means carrying out environmentally relevant activity 62 (Resource recovery and transfer facility operation) for receiving and sorting, baling or temporarily storing end-of-life tyres as authorised under the *Environmental Protection Act 1994*.

‘resource recovery area’ means a declared resource recovery area as per the most recent version of the *Waste Reduction and Recycling Act 2011*.

‘resource user(s)’ means a **person** who has notified the **chief executive** (in accordance with *Condition (7.1)*) to receive the **resource** from a **registered resource producer** and uses the **resource** for a use approved under this EOW code and does so in such a manner which does not cause any **environmental harm**.

‘rubber products’ means products manufactured from **crumbed**, **granular** or **shredded end-of life tyres** or minimally processed **whole tyres** (e.g. mats, flooring, tiles, pavers, surfacing and textiles).

‘sediment barrier’ means a structure that is intended for use as a sediment barrier to prevent erosion where the **resource user** uses the **resource** in accordance with :

- a) an applicable prescribed engineering standard; or
- b) an engineering design certified by a **Registered Professional Engineer of Queensland (RPEQ)** or a Certified Professional in Erosion and Sediment Control (CPESC).

‘sensitive place’ includes the following and includes a place within the curtilage of such a place reasonably used by persons at that place:

- a) a dwelling, residential allotment, mobile home or caravan park, residential marina or other residential premises;
- b) a motel, hotel or hostel;
- c) a kindergarten, school, university or other educational institution;
- d) a medical centre or hospital;
- e) a protected area under the *Nature Conservation Act 1992*, the *Marine Parks Act 2004* or a World Heritage Area;
- f) a public park or garden; or
- g) for noise, a place defined as a sensitive receptor for the purposes of the Environmental Protection (Noise) Policy 2008.

‘shredded’ means processed **tyres** between 15mm-80mm in diameter.

‘silage’ means the fermented product resulting from the anaerobic fermentation of sugars in **forage**.

‘silage storage systems’ means storage systems used for producing or storing **silage** (e.g. buns, stacks, bunkers, above-ground bunkers, clamp silos, trench silos, pits, in-ground pits, hill-side pits and silage bales).

‘site of use’ means the relevant location(s) where the **resource user** uses the **resource** in accordance with this EOW code.

‘structural and non-structural civil engineering application(s)’ means the application(s) where the **resource user** uses the **resource** in accordance with:

- a) an applicable prescribed engineering standard; or
- b) engineer designed civil application(s) that have been certified by a **Registered Professional Engineer of Queensland (RPEQ)** as suitable for its intended purpose.

‘tyres’ means **end-of-life tyres**.

‘tyre manufacturers’ means carrying out environmentally relevant activity 13 (Tyre manufacture or retreading) as authorised under the ***Environmental Protection Act 1994***.

‘tyre recyclers’ means the carrying out of environmentally relevant activity 54 (Mechanical waste processing) for receiving and mechanically reprocessing tyres as authorised under the ***Environmental Protection Act 1994***.

‘tyre retailers’ means a business holding an **ABN** for carrying out activities in relation to the commercial sale of tyres.

‘tyre transporters’ means the carrying out of environmentally relevant activity 57 (Regulated waste transport) for transporting tyres as authorised under ***Environmental Protection Act 1994***.

‘tyre wholesalers’ means a business holding an **ABN** for carrying out activities in relation to the commercial sale of tyres.

‘waters’ includes river, stream, lake, lagoon, pond, swamp, wetland, surface water, natural or artificial watercourse, bed and bank of any watercourse, dams, non-tidal or tidal waters (including the sea), stormwater channel, stormwater drain, roadside gutter, stormwater run-off, and groundwater and any part thereof.

‘whole’ means **tyres** which are unprocessed (intact) or processed (but not **crumbed**, **granular** or **shredded**) and are structurally rigid with no exposed metal (other than where the tyre is cut during processing). This includes tyre casing.

- END -

Appendix A — Fire and Rescue Service Act Requisition (No. 1) 2011

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Fire and Rescue Service Act 1990

FIRE AND RESCUE SERVICE ACT REQUISITION (No. 1) 2011

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SCHEDULE

Short title

1. This requisition may be cited as the Fire and Rescue Service Act Requisition (No. 1) 2011.

Commencement

2. This requisition commences on 1st April 2011.

Requisition

3. The Commissioner, Queensland Fire and Rescue Service requires occupiers of premises to whom this requisition applies to take the measures specified in the schedule for the purpose of reducing the risk of fire occurring on the premises or reducing potential danger to persons, property or the environment.

Application

4. This requisition applies to any person who stores or stockpiles in excess of 500 tyres of any type and in any condition or their equivalent parts in the open.

SCHEDULE

THE STORAGE OR STOCKPILING OF TYRES IN THE OPEN

1. Preamble

Any person who stores or stockpiles, or intends to store or stockpile in excess of 500 tyres of any type and in any condition or their equivalent parts in the open must:—

- (a) comply with any and all other statutory requirements and or approvals relative to land use, strategic planning and environmental protection requirements;
- (b) comply with the undermentioned conditions.

The expression "tyre" shall refer to a tyre whether new, secondhand, re-conditioned, scrap, shredded or crumbed in whatever state of repair or condition.

The Commissioner, Queensland Fire and Rescue Service may vary any of the following conditions provided that he is satisfied such variations will not materially compromise the intent of the requisition, or to increase the risk to persons, property or the environment.

2. Scope

This requisition deals with the storage of vehicle tyres or parts of tyres in the open in numbers greater than 500 or equivalent parts where the parts have any dimension exceeding 100 millimetres.

Sections 3, 4 and 6 of this requisition will not be applied:—

to tyres in stable stacks of fewer than 500 tyres that are separated from other stacks of tyres or any combustible or flammable material including grass and weeds by a distance of 10 metres or more in any direction; or
to shredded or crumbed tyres (where the shreds or crumbs have two dimensions less than 100 millimetre) stored in the open, where:

1. the base of the stockpile has an area less than 100 metres²;
2. the width of the stockpile does not exceed 5 metres at any point;
3. the height of the stockpile is less than 3 metres;
4. the stockpile is stable, with batters not exceeding the angle of repose of the material; and
5. there is a 10 metre separation distance in any direction to any tyres, parts of tyres, or any other flammable or combustible material including grass and weeds.

3. Stack dimensions

(a) Single Stacks (See Figure 1)

Maximum width of base.....	5 metres
Maximum length of base	45 metres
Maximum height.....	3 metres
Minimum distance between stacks	10 metres
Average side slope.....	1:1

Stacks must be stable

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The longest dimension of a stack must be at right angles to the direction of the prevailing wind. (The prevailing wind is that wind direction which is the most dominant determined from annual wind statistics).

(b) Group Stacks (See Figure 2)

In lieu of a 10 metre separation distance stacks may be separated by a protective wall with a fire rating of 4 hours provided that:

- (a) this protective wall protrudes 1.5 metres above the highest point and 1.5 metres beyond the widest point to each side;
- (b) that only two stacks may abut on the longest axis and two Stacks on the shortest axis (i.e. four individual stacks in any one group);
- (c) that any individual stack must not exceed the dimensions specified in this part (except that tyres may be stacked against such wall with a side slope batter only on the exposed sides); and
- (d) that such group of stacks must not exceed an aggregate width of 10 metres and an aggregate length of 90 metres.

Such groups of stacks must be 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 metres or more.

4. Fire Fighting

Three methods of extinguishing a tyre fire are addressed in this guideline:

- 1. separation of tyres;
- 2. exclusion of oxygen by sand or soil; and
- 3. absorption of heat by water.

A combination of all methods is the most effective.

As a tyre fire cannot be fought effectively from the downwind side, fire fighting equipment and resources may need to be duplicated or be easily portable so that a fire in any stack can be fought from upwind no matter what the wind direction. The design and layout of the tyre stacks needs to be waned to facilitate this.

The resources for one or more methods as set out below must be available as directed by the Commissioner, Queensland Fire and Rescue Service.

4.1 Resources required for the separation of tyres method

Machinery capable of creating a break 10 metres wide between burning and unburnt tyres must be kept on site 24 hours a day. During maintenance down-time or breakdown a replacement machine must be on site so that a break in the tyres can be created at any time.

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.

4.2 Resources required for exclusion of air method

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.

Earthmoving equipment must be able to deposit any load of sand/soil on to the centre of any stack while remaining upwind of the fire and without having to drive on to the tyre stack.

4.3 Resources required for heat absorption by water method.

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:

1. 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; and
2. each standpipe is to be able to deliver 1800 litres/minute when any two are operating. This flow rate must be able to be continuously maintained for a minimum of 3 hours.

So that immediate action can be taken by staff whilst awaiting the Queensland Fire and Rescue Service, 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 AS 1851 and to meet the specifications of the Commissioner, Queensland Fire and Rescue Service. This equipment and Fire Point are not to be used for any other purpose.

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 run off.

5. Fire break

The stacks of tyres are to be separated from the property lines or security fencing by a fire break of 10 metres. The fire break is to be kept clear of all flammable and combustible materials including grass and weeds at all times.

6. Vehicular access

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.

7. Equipment

All fire fighting equipment shall be regularly maintained and checked for serviceability in accordance with AS 1851. A firefighting equipment maintenance plan should be developed.

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8. Security

A security system meeting the approval of the Commissioner, Queensland Fire and Rescue Service is to be provided. It is to include all or some of the following:

1. 2 metre Security Fencing complying with A.S. 1725-1975;
2. Security Guards;
3. Guard Dogs;
4. Lighting; and
5. Alarms.

9. Emergency plan

A plan of action for a fire emergency must be developed. This plan must be approved by the Commissioner, Queensland Fire and Rescue Service.

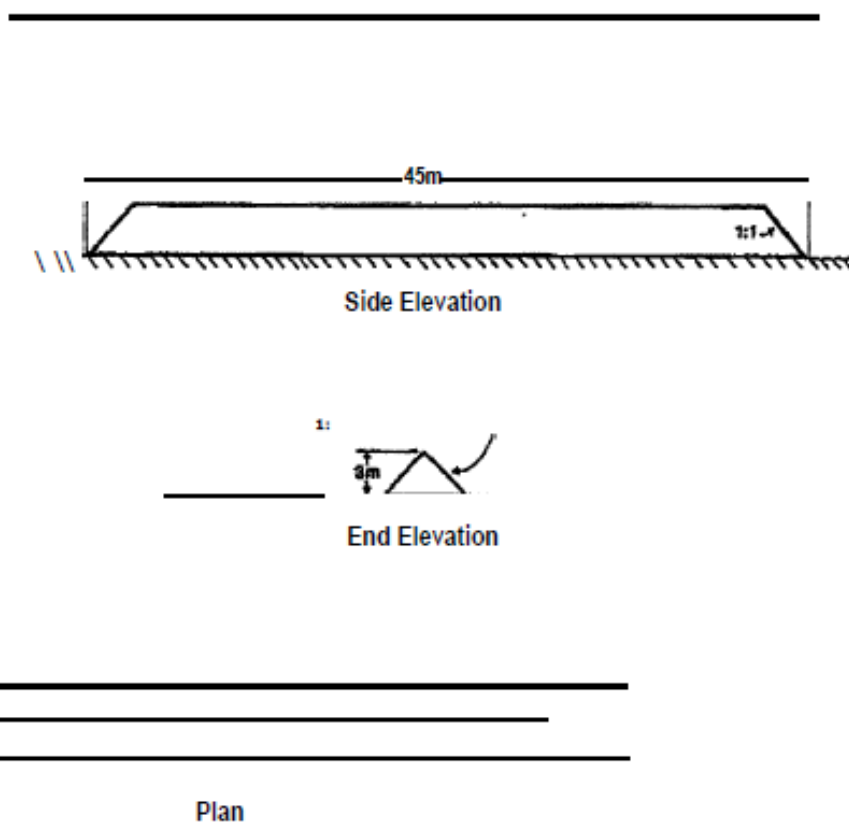
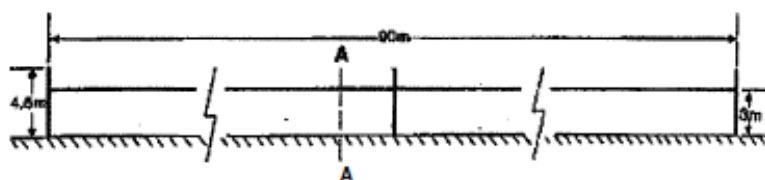
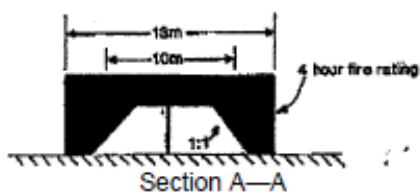


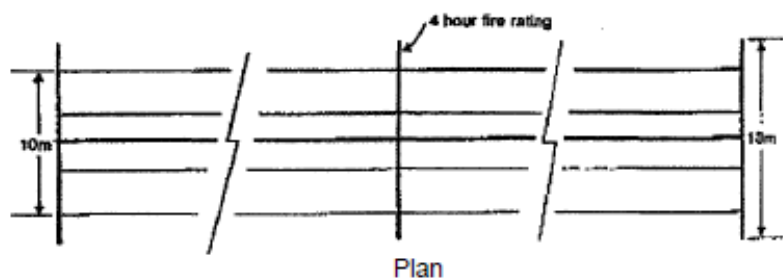
Figure 1



Side Elevation



Section A—A



Plan

Figure 2

ENDNOTES

1. Published in the Gazette on 1st April 2011.
2. The administering agency is the Department of Community Safety.

Appendix B — General obligation for all persons

This appendix is not intended to provide a comprehensive assessment of all obligations under Queensland law. It provides some general information and persons are encouraged to familiarise themselves with all requirements related to their specific operation.

Responsibilities under the *Environmental Protection Act 1994*

All persons within the State of Queensland must also meet their obligations under the *Environmental Protection Act 1994*, and the regulations made under that Act.

General environmental duty

Section 319 of the *Environmental Protection Act 1994* states that we all have a general environmental duty. This means that we are all responsible for the actions we take that affect the environment. We must not carry out any activity that causes or is likely to cause environmental harm unless we take all reasonable and practicable measures to prevent or minimise the harm. To decide what meets your general environmental duty, you need to consider:

- the nature of the harm or potential harm
- the sensitivity of the receiving environment
- the current state of technical knowledge for the activity
- the likelihood of successful application of the different measures to prevent or minimise environmental harm that might be taken
- the financial implications of the different measures as they would relate to the type of activity.

It is not an offence not to comply with the general environmental duty. However, maintaining your general environmental duty is a defence against the following acts:

- (a) an act that causes serious or material environmental harm or an environmental nuisance
- (b) an act that contravenes a noise standard
- (c) a deposit of a contaminant, or release of stormwater run-off, mentioned in section 440ZG.

More information is available on the Department of Environment and Science website www.des.qld.gov.au.

Some relevant offences under the *Environmental Protection Act 1994*

Causing serious or material environmental harm (sections 437–39)

Material environmental harm is when the harm is not trivial or negligible in nature. Serious environmental harm is harm that is irreversible, of a high impact or widespread, or that is caused to an area of high conservation value or special significance. Damages, or costs required to rehabilitate the environment, of over \$5000 constitutes material environmental harm and damages, or costs required to rehabilitate the environment, of over \$50,000 constitutes serious environmental harm.

Serious or material environmental harm excludes environmental nuisance.

Causing environmental nuisance (section 440)

Environmental nuisance is unreasonable interference with an environmental value caused by aerosols, fumes, light, noise, odour, particles or smoke. It may also include an unhealthy, offensive or unsightly condition because of contamination.

Depositing a prescribed water contaminant in waters (section 440ZG)

Prescribed water contaminants include a wide variety of contaminants listed in Schedule 10 of the Environmental Protection Regulation 2019.

It is your responsibility to ensure that prescribed water contaminants are not left in a place where they may or do enter a waterway, the ocean or a stormwater drain. This includes making sure that stormwater falling on or running across your site does not leave the site contaminated. Where stormwater contamination occurs you must ensure that it is treated to remove contaminants. You should also consider where and how you store material used in your processes onsite to reduce the chance of water contamination.

Placing a contaminant where environmental harm or nuisance may be caused (section 443)

A person must not cause or allow a contaminant to be placed in a position where it could reasonably be expected to cause serious or material environmental harm or environmental nuisance.

Some relevant offences under the *Waste Reduction and Recycling Act 2011*

Littering (section 103)

Litter is any domestic or commercial waste and any material a person might reasonably believe is refuse, debris or rubbish. Litter can be almost any material that is disposed of incorrectly. Litter includes cigarette butts and drink bottles dropped on the ground, fast food wrappers thrown out of the car window, poorly secured material from a trailer or grass clippings swept into the gutter. However, litter does not include any gas, dust, smoke or material emitted or produced during, or because of, the normal operations of a building, manufacturing, mining or primary industry.

Illegal dumping of waste (section 104)

Illegal dumping is the dumping of large volumes of litter (200 litres or more) at a place. Illegal dumping can also include abandoned vehicles.

Failure to comply with EOW code (section 158)

A registered resource producer for an EOW code must not use, sell or give away the resource unless the registered resource producer complies with the requirements of the EOW code relating to the resource.

A person, other than a registered resource producer, must not use a resource in a way, or for a purpose, that does not comply with an EOW code for the resource.

Approved:

8 February 2021

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