ATTACHMENT 3B: PROPOSED ACTIVITIES

It is proposed to operate a Tyre Recycling Facility in the City of Canning within *General Industry* zoning. Used tyres will be brought to site to be shredded, and then exported overseas for further processing.

The proposed prescribed premises (Attachment 2) will be the leased area located at the back of 14 Vinnicombe Drive, Canning Vale (approximately 3500m^2) and the only existing infrastructure within the lease area is a factory shed (1034m^2) and lean to/awning (383m^2). There is mains water and power supply, with bathroom/shower amenities and office space along the northern section of the factory shed. The undercover flooring is concrete, the outside is bitumen.

Previous use of the lease site was concrete manufacturing.

The property has two access points, each at least 6m wide. The property is fenced, and the access is gated. Access for the operations will be from Vinnicombe Drive via the gate and sealed driveway along the eastern boundary of the property. The proposed operations will largely be screened from the road as the lease location is at the back of the property and the buildings situated at the front of the property will conceal operations.

There are two stormwater drains located at the end of the access driveway within the lease area. A drainage basin is located adjacent to the property, along the eastern boundary.

Slopes are flat with most of the property circa 22m AHD.

PROPOSED OPERATIONS

The Tyre Recycling Facility will involve trucks collecting used tyres from other operators such as tyre fitting businesses and bringing them to the property (they have applied for a Controlled Waste Carrier Licence). These tyres would then be processed into shreds of not more than 150 millimetres, which will be loaded into shipping containers and trucked out of the property to be shipped overseas. The processing will be undertaken indoors (shed) and involves a shredding machine. Stockpiles of used tyres and product would be located undercover, with 'spill over' stockpiles located outdoors within the property.

Operating times will be Monday to Friday 0700 to 1800 and Saturday 0700 to 1300, excluding public holidays.

The proposed throughput is up to 10,000t/year. The maximum tyres stored on site at any one time will be approx. 4,800 tyres (including both internal and external stockpiles and shredded product). However, this is to accommodate unusual circumstances such as machinery break down, and the number of tyres stored at site is expected to be much less on a 'business as usual' scenario. Tyre stock management will

always be undertaken to minimise the quantity of tyres on site and hence reduce the likelihood and severity of a potential fire.

The operation will have two trucks to bring in used tyres. These are expected to be 4.5t Gross Vehicle Mass (GVM) trucks with 4.5x2.5x2.1m van body box fitted. The trucks transporting the shredded tyre product from site will be provided by the shipping transport company. These trucks are expected to be a semi-trailer with a standard 40ft container, which will do the shipping container drop off and pick up.

EMISSIONS DISCHARGE POINTS

Dust emissions are not applicable to this site. Given the tyres will only be shredded to 150 millimetres, the operations are not expected to cause any dust impacts.

Potential does exist for noise emissions from the proposed operations. There is also potential for wastewater discharges (firewater runoff) and gaseous and particulate emissions (smoke) resulting from a fire.

The emission discharge points are summarized below.

NOISE

The proposed operations will create some operational noise, the majority of which will be generated by the tyre shredder and loading/unloading of trucks. A diesel generator will also be used temporarily while Western Power upgrades the power supply to the premises (expected to be completed in 2 months).

The nearest sensitive receptor is the residential zoning located approximately 670m to the north of the site.

Minimum noise impacts are anticipated due to:

- The location within a General Industry zoning;
- Processing will be undertaken indoors;
- The shredder utilises high torque at low speed to minimize noise; and
- The closest sensitive receptors are over 500m distance across Roe Hwy.

A noise modelling assessment by an acoustical consultant has been undertaken (Attachment 6A), showing the operations are in compliance with the *Environmental Protection (Noise) Regulations 1997* if the western shed door remains shut during tyre shredding operations. The proponent will ensure the western doors remains shut during operations.

FIRE

The proposed storage of used tyres and tyre shreds on the property poses a potential fire risk. While tyres are not easily ignitable, when on fire, they are extremely difficult to extinguish, and as such are considered a Special/High Hazard.

Due to their difficulty to extinguish, tyre stacks must be physically separated in order to be extinguished. The operations will apply the appropriate fire separation practices and size restrictions to limit the spread of fire as per Department of Fire and Emergency Services (DFES) Guidance Note: GN02 for both whole tyres and shredded tyres. The shredded tyre product will be stored within a 40ft shipping container, effectively separating it from any whole tyre stacks.

The DFES classifies a facility having a tyre storage capacity not greater than one pile (i.e. less than 50 tonnes) as a “Small Tyre Facility”. The proposed operation will have a maximum tyre storage capacity of 48 tonnes and is therefore classified as a “Small Tyre Facility”.

The internal tyre storage building (shed) has a fire compartment floor area of <2,000m² and therefore is not required, as per DFES guidance, to have a sprinkler system, or smoke or heat vents. The guidance for non-sprinkler protected indoor storage will be applied.

A fire hydrant system consisting of 3 fire hydrants and booster and 2 fire hose reels (locations shown in Attachment 2) has been installed to meet DFES firewater requirements, which are above those tableted in AS 2419.1 for the building size.

A minimum water storage volume of 432,000 L has been provided to contain firewater from 4 hours of simultaneous operation of all 3 hydrants. This has been achieved by concrete bunding an area of 3,333m2 (illustrated in Attachment 2) with bunding height between 13cm and 15cm. The bunded area is a combination of concrete floors (indoors) and bitumen hardstands (outdoors). An isolation valve has been installed on the sub-surface drainage collection pit. These measures will prevent leachate to groundwater or into the adjacent drainage basin. Fire wastewater will be removed and appropriately disposed of by a contractor.

A Fire and Emergency Management Plan has been prepared for the premises and is provided in Attachment 6A.