# Application for Planning Approval

*Land Use Planning and Approvals Act 1993*

APPLICATION NO.

**DA2025/217**

LOCATION OF AFFECTED AREA

**3 WEILY PARK ROAD, BRIDGEWATER**

DESCRIPTION OF DEVELOPMENT PROPOSAL

**INTENSIFICATION OF EXISTING USE (TYRE PROCESSING & RECYCLING) AND ASSOCIATED DEVELOPMENT**

THE ABOVE APPLICATION HAS BEEN REFERRED TO THE BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY (THE BOARD) FOR ASSESSMENT UNDER THE *ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL ACT 1994* (EMPCA). AN ENVIRONMENTAL EFFECTS REPORT (EER) HAS BEEN LODGED IN SUPPORT OF THE APPLICATION.

A COPY OF THE FULL DEVELOPMENT APPLICATION IS AVAILABLE FOR PUBLIC INSPECTION DURING THE NOTIFICATION PERIOD AT:

- www.brighton.tas.gov.au
- 1 TIVOLI ROAD, OLD BEACH

THE EER CAN ALSO BE VIEWED AT: https://epa.tas.gov.au/consultations

FOR ASSISTANCE IN ACCESSING A COPY OF THE EER, PLEASE CONTACT ERA ADVISORY ON PH (03) 6165 0443 OR Enquiries@era-advisory.com.au

A GUIDE FOR PREPARING A PUBLIC SUBMISSION CAN BE FOUND AT: https://epa.tas.gov.au/public-submission-guide

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT www.brighton.tas.gov.au AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M, MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS IN ACCORDANCE WITH S.57(5) OF THE LAND USE PLANNING AND APPROVALS ACT 1993 CONCERNING THIS APPLICATION UNTIL 4:45 P.M. ON **11/02/2026**. ADDRESSED TO THE CHIEF EXECUTIVE OFFICER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT development@brighton.tas.gov.au.
REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

**JAMES DRYBURGH**
**Chief Executive Officer**

SCAN ME

Brighton
going places


Project site (the Land)

Site entrance

Existing infrastructure

Administration building

Maintenance building

Weigh Bridge

Tyre Bays

Existing shredder

Proposed infrastructure

Proposed shredder

Tyrecycle Bridgewater
Capacity Upgrade

Figure 2.2
Project Site

era

| | |
|---|---|
| Job No. | 2425-112 |
| Rev. | V.1 |
| Date | 17 September 2025 |
| Size | A4 |

# Tyrecycle Bridgewater Capacity Upgrade

Supporting planning report

era

Final | 17 December 2025

Era Advisory acknowledge palawa as the Traditional Owners of lutruwita (Tasmania).

They are the original custodians of our land, sky and waters.

We respect their unique ability to care for country and deep spiritual connection to it.

We honour and pay our respect to Elders past and present, whose knowledge and wisdom has and will ensure the continuation of culture and traditional practices.

We acknowledge that their sovereignty has never been ceded.

Always was, always will be.

Era Advisory Pty Ltd

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| | |
|---|---|
| Client | Tyrecycle Pty Ltd |
| Document version | Final |
| Date | 17 December 2025 |
| Author | Patrick Carroll |
| Reviewer | Clare Hester |
| Job number | 2425-112 |

# Permit overview

## Permit application details

| | |
|---|---|
| **Applicant** | Era Advisory obo Tyrecycle |
| **Owner** | B G & J M Barwick Pty Ltd |
| **Address** | 3 Weily Park Road, Bridgewater TAS 7030 |
| **Lot description** | Folio of the Register 130051, Lot 2 |
| **Description of proposal** | Intensification of existing use (Recycling and Waste Disposal), new tyre shredder, and associated concrete bunkers. |

## Relevant Planning Provisions

| | |
|---|---|
| **Applicable planning scheme** | *Tasmanian Planning Scheme - Brighton* |
| **Zone(s)** | · General Industrial Zone |
| **Codes** | · Parking and Sustainable Transport Code<br>· Road and Railway Assets Code<br>· Potentially Contaminated Land Code |
| **Specific Area Plans** | · Bridgewater Quarry Specific Area Plan<br>· Brighton Industrial Hub Specific Area Plan |
| **Discretions** | · Clause 19.4.3 P1 Landscaping<br>· Clause C3.5.1 P1 Traffic generation at a vehicle crossing, level crossing or new junction<br>· Clause BRI-S4.7.1 P1 Buildings and works within Bridgewater Quarry Specific Area Plan |

# Contents

# 1 Introduction

## 1.1 Purpose

Era Advisory has been engaged by Tyrecycle to provide a supporting planning report for a redevelopment of an existing tyre recycling facility at 3 Weily Park Road, Bridgewater.

The proposal requires a planning permit as it is an intensification of a use and development for a Recycling and Waste Disposal facility.

This report considers the Project against the requirements of the *Tasmanian Planning Scheme – Brighton.*

## 1.2 Enquiries

Enquiries relating to this planning report should be directed to:

Patrick Carroll
Senior Planner
Era Advisory
ABN 21 681 443 103
enquiries@era-advisory.com.au
03 6165 0443

## 1.3 Planning authority

The relevant planning authority is Brighton Council.

## 1.4 Planning scheme

The application must be considered against the provisions of the *Tasmanian Planning Scheme – Brighton* (the planning scheme).

## 1.5 The proponent

The proponent for the Project is Tyrecycle Pty Ltd. Table 1 outlines the proponent's details:

Table 1 - Proponent details.

| | |
|---|---|
| **Name of proponent (legal name)** | Tyrecycle Pty Ltd |
| **Name of proponent (trading name)** | Tyrecycle |
| **Registered address of proponent** | 30-56 Encore Avenue<br>Somerton VIC 3062 |
| **Postal address of proponent** | 30-56 Encore Avenue<br>Somerton VIC 3062 |
| **ABN** | 84 085 545 053 |
| **Contact person** | Peter Scioscia<br>Tyrecycle |
| **Phone** | 0447 179 602 |
| **Email** | peter.scioscia@tyrecycle.com.au |

## 1.6 Project site

The Project will be located at 3 Weily Park Road, in the suburb of Bridgewater, Tasmania. Upgrades will occur within the property boundary of the site, currently owned by B G & J M Barwick Pty Ltd.

The Project site consists of the following land parcel, as listed in Table 2 and shown in Figure 1. Title documentation is provided as an appendix to this report.

Table 2 - Titles comprising the Project site.

| Address | Owner | Title reference | PID |
|---|---|---|---|
| 3 Weily Park Road<br>Bridgewater TAS 7030 | B G & J M Barwick Pty Ltd | 130051/2 | 1862155 |

# 2 Site description and surrounds

## 2.1 The Project site

The site is located at 3 Weily Park Road, Bridgewater, as shown in Figure 1. The current land use of the Project site is the existing recycling facility and administration building, also used by Barwick's.

At the site is a storage shed and workshop, which is used by both Tyrecycle and Barwick's. This building is used for storing materials and undertaking maintenance of components of the tyre shredder.


Figure 1 Aerial photography of the Project site, which is bound in blue.

## 2.2 Surrounding area

The Project site sits at the southern end of the Brighton Industrial Estate. Surrounding land is generally commercial and industrial use, although there are several residential houses to the south, with the closest approximately 180 m from the Project site boundary.

There is also a recreational ground to the south (Weily Park). The Project site lies less than 200 m from the Midland Highway, and has access to the highway via a short section of Weily Park Road and Glenstone Road (noting Glenstone Road also forms part of the State Highway Network).


Figure 2 Aerial photography of the Project site in the context of the surrounding area.


Figure 3 Land tenure of the Project site. Yellow denotes private freehold, grey denotes road casement, and teal denotes local government-owned land.

## 2.3 Site images

Figure 4 Tyres stored for shredding.

Figure 5 Tyre shredder on right. On the left, shredded tyres are being loaded into a container.

Figure 6 Shredded tyres.

Figure 7 Inside the storage and maintenance shed.

# 3 The Project

## 3.1 Project description

Tyrecycle currently operates a tyre recycling facility at 3 Weily Park Road, Bridgewater. The facility accepts used passenger and truck tyres from around Tasmania and is currently the only licenced tyre exporter in the state. Tyrecycle acquired the tyre recycling business from Barwick's in December 2024 and have a 10-year lease on the relevant portion of the site. The site is owned by B G & J M Barwick Pty Ltd.

The site is a regulated premises under the *Environmental Management and Pollution Control Act 1994* (EMPC Act). Tyres are currently shredded at the onsite shredder, packed into shipping containers and then exported to Tyrecycle's mainland facilities for further processing. The facility is licenced under EPN 10195/1 to process up to 5,000 tonnes per year of rubber.

The proposal is seeking approval for the use and development of an additional shredder unit onsite, to supplement the existing shredder. This additional shredder will allow further processing of rubber for use as a kiln fuel. The proposal seeks to increase the annual production limit from 5,000 to 10,000 tonnes per year of rubber.

To limit impacts of noise emissions from the site on nearby residences, it is proposed that an acoustic barrier be installed to the south of the existing shredder onsite, between the shredder and nearby residences.

- The barrier is proposed to have a minimum surface mass of 10 kg/m$^2$ (e.g., 9 mm thick polycarbonate sheeting).
- It is recommended that the barrier extend 0.5 m above the top of the shredder bin, and that mass-loaded vinyl or rubber flaps are affixed above the conveyor of the existing shredder to assist in noise emission mitigation.

Figure 8 depicts the extent of the recommended barrier to be affixed to the existing shredder.


Figure 8 The extent of the proposed acoustic barrier to be installed on the existing shredder. Source: NVC

The new shredder is not required to implement additional measures to limit acoustic emissions.

The Project is therefore a modification and intensification of an existing level 2 activity.

Tyrecycle has negotiated a contract with Cement Australia to supply up to 6,000 tonnes per annum of shredded rubber for use as a fuel for their cement kiln in Railton, northern Tasmania. The proposal will result in a significant reduction in coal use at the kiln site and also reduce the volume of recycled rubber sent to mainland Australia, both positive environmental outcomes.

## 3.2 Application documentation

The planning permit application includes the following documents that are provided as appendices to this report:

- Planning application form
- Title documentation
- Plans

Also available separately is Era Advisory's Environmental Effects Report (EER), which is provided for the purposes of the assessment being undertaken by the Tasmanian Environment Protection Authority (EPA). The EER includes the following supporting technical reports as appendices:

- Noise assessment

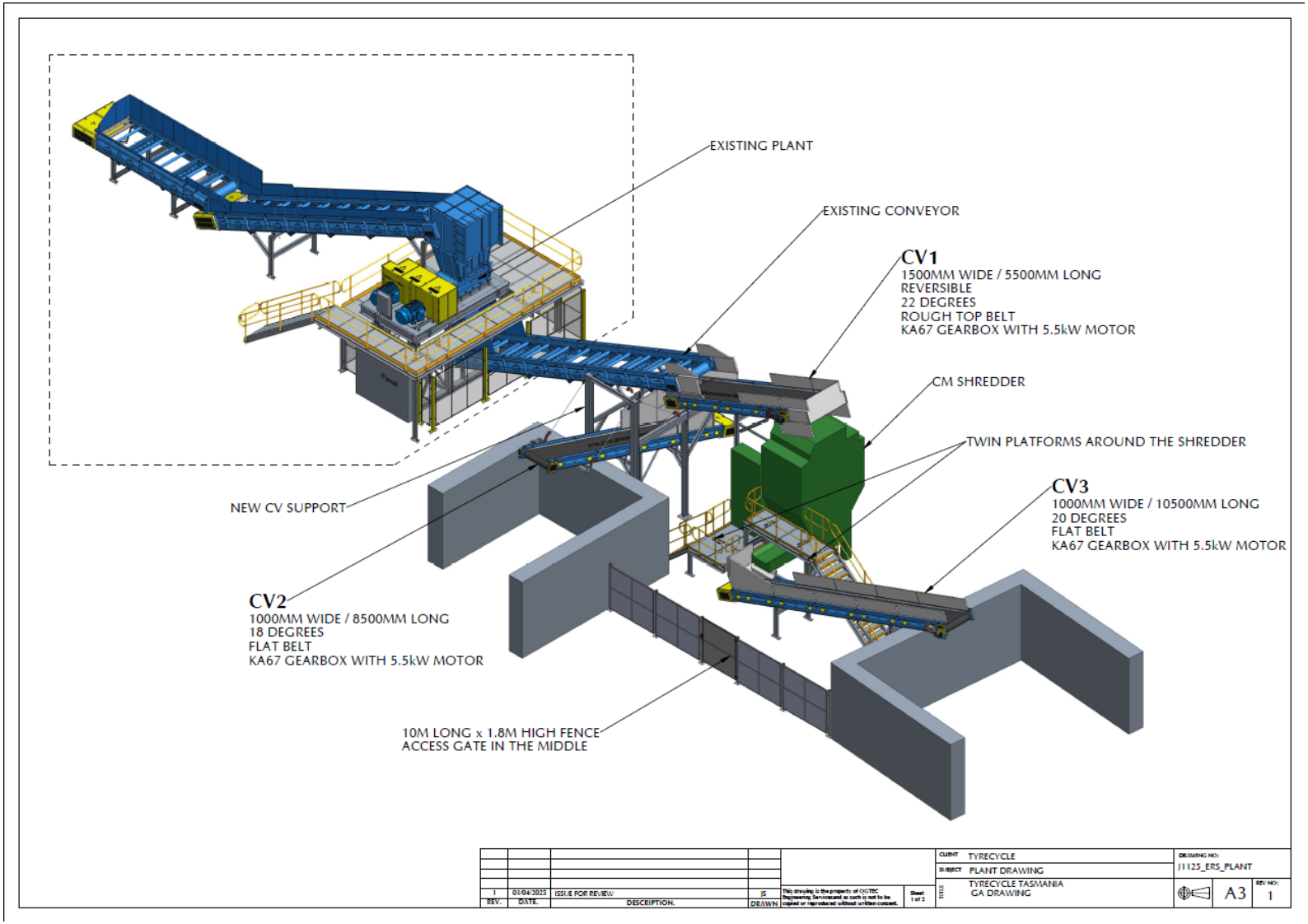


Figure 9 Isometric plan of proposed tyre shredding plant.

# 4 Assessment framework

## 4.1 Legislative framework

The application must be considered against the provisions of the planning scheme. In addition, the application will be assessed as a scheduled level 2 activity under the *Environmental Management and Pollution Control Act 1994* (EMPC Act). A Notice of Intent in accordance with Section 27B of the EMPC Act was provided to the EPA who then issued project specific guidelines (PSGs) in July 2025.

The assessment under the *Land Use Planning and Approvals Act 1993* (LUPA Act) and the EMPC Act are legislatively linked. In accordance with section 25(1)(b) of the EMPC Act, Council is required to refer this planning permit application to the EPA as soon as practicable, but in any event no later than 21 days after receipt of its lodgement.

Additionally:

- Council has 42 days instead of the standard 21-day period for Level 1 activities under section 57 of the LUPA Act to request further information. This is also taken to be a separate statutory period to the 42-day assessment period (refer to section 25(2)(d) of the EMPC Act).
- The public notification period does not commence until directed to by the EPA (refer to section 25(2)(b) of the EMPC Act). The public notification period for a 2A is 14 days.
- Council's 42-day assessment period does not commence until the assessment by the EPA is complete and Council is notified of the decision (refer to section 25(2)(e) of the EMPC Act).

## 4.2 EPA assessment

As a permissible level 2 activity the EPA is required to do its assessment in accordance with Division 1A of the EMPC Act and in consultation with Council[1]. It is also required to do its assessment in accordance with section 74 of the EMPC Act (Environmental Impact Assessment Principles).

In practical terms this means that the EPA is responsible for assessing the environmental impacts of the Project and whether, having regard to the information provided (the EIS and supporting technical reports), the Project should proceed. Further, the EPA is responsible for assessing whether there are any restrictions or conditions under which the Project should proceed.

The PSGs, issued in July 2025, provide the framework for its assessment. The potential environmental impacts identified under the PSGs, and which are matters that the EPA will assess, include the following:

- Noise emissions

[1] A permissible level 2 activity is defined under section 25(9) of the EMPCA as one that is either discretionary or one that Council is bound to grant a permit for. In other words, it is an activity that is not otherwise prohibited by the applicable planning scheme.

- Air quality
- Water quality
- Natural values
- Weeds, pests and pathogens
- Waste
- Environmentally hazardous substances
- Greenhouse gas emissions and climate change
- Environmental monitoring
- Decommissioning and rehabilitation

## 4.3 Planning authority assessment approach

As with all planning permit applications, Council's assessment of this Project is directed and confined by the relevant provisions under the planning scheme. This means that any issues raised through representations will be determined having regard to the specific requirements of the planning scheme.

Section 5 of this supporting planning report provides an appraisal of the Project against the relevant zone use and development standards of the planning scheme. Section 6 provides an appraisal against the applicable codes, highlighting whether code exemption provisions apply. The zone and code assessments include details on whether the Project meets the acceptable solution or relies on the performance criterion for each applicable standard.

Due to the provisions of section 25(2)(f) of the EMPCA, the Council is not required to undertake an assessment of any matters being assessed by the EPA. The matters where there is potential for duplication of assessment relate to the Natural Assets Code, the Attenuation Code and the Potentially Contaminated Land Code.

## 4.4 Gas Industry Act 2019

Part of the site is subject to a gas infrastructure planning corridor, as declared under the *Gas Industry Act 2019*, and as shown in Figure 10.

Pursuant to section 51(1) of that Act, the planning authority must refer the application to the gas infrastructure licensee.

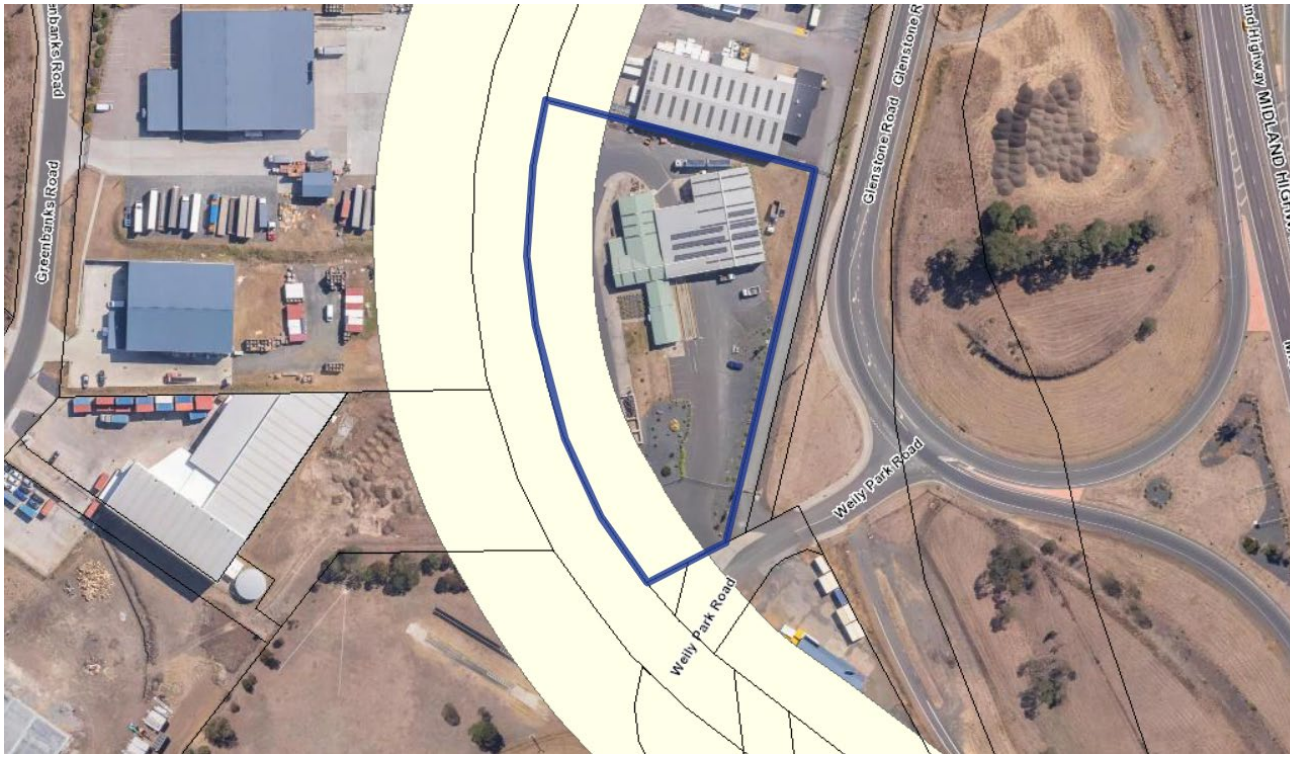


Figure 10 The extent of the gas infrastructure planning corridor's encroachment on the Project site.

# 5 Zoning assessment

## 5.1 Zoning

The site is subject to the provisions of the *Tasmanian Planning Scheme – Brighton* (the planning scheme). Specifically, the site is zoned General Industrial, as shown in Figure 11.

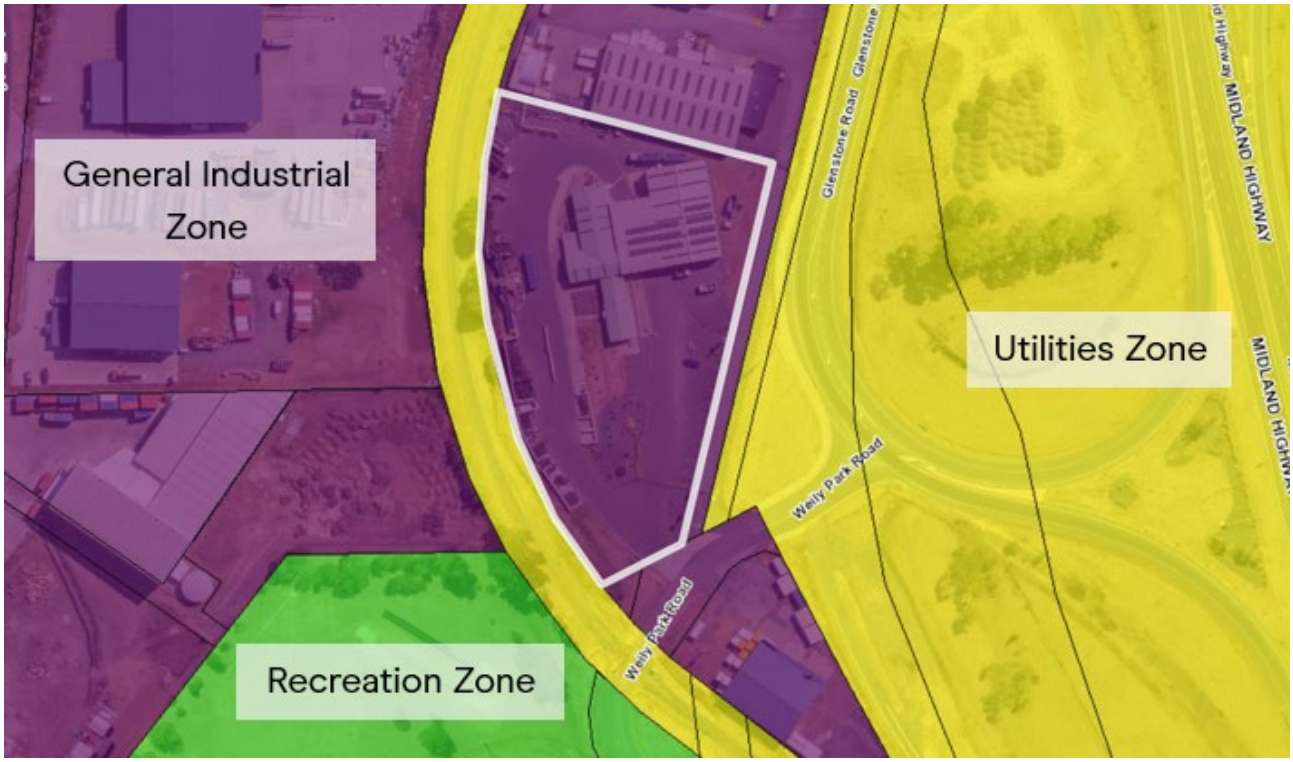


Figure 11 Zoning of the Project site and surrounds.

## 5.2 Use

### 5.2.1 Use class

The proposed development is classed as 'Recycling and Waste Disposal', which is defined in Table 8.2 of the planning scheme as:

> *Use of land to collect, dismantle, store, dispose of, recycle or sell used or scrap material. Examples include a recycling depot, refuse disposal site, scrap yard, vehicle wrecking yard and waste transfer station.*

### 5.2.2 Use status

Recycling and Waste Disposal is a permitted use within the General Industrial Zone, without qualification.

## 5.3 General Industrial Zone

### 5.3.1 Zone purpose

The purpose of the General Industrial Zone is described in clause 19.1 of the planning scheme. It states:

> *The purpose of the General Industrial Zone is:*
>
> *19.1.1 To provide for manufacturing, processing, repair, storage and distribution of goods and materials where there may be impacts on adjacent uses.*
>
> *19.1.2 To provide for use or development that supports and does not adversely impact on industrial activity.*

As Recycling and Waste Disposal is a permitted use within the General Industrial Zone, the use is deemed to satisfy the zone purpose.

### 5.3.2 Applicable standards

Not all standards within the General Industrial Zone are applicable to the Project. Table 3 identifies the applicable standards. An assessment of the applicable standards is provided in the following sections.

Table 3 - Applicable standards in the General Industrial Zone.

| Clause | | Applicability |
|---|---|---|
| **Use standards** | | |
| Clause 19.3.1 Discretionary uses | A1/P1 | Not applicable. No discretionary uses are proposed. |
| **Development standards** | | |
| Clause 19.4.1 Building height | A1/P1 | Applicable. |
| Clause 19.4.2 Setback | A1/P1 | Applicable. |
| Clause 19.4.3 Landscaping | A1/P1 | Applicable. |
| **Subdivision standards** | | |
| Clause 19.5 Development standards for subdivision | | Not applicable. No subdivision is proposed. |

### 5.3.3 Building height

An assessment against Clause 19.4.1 of the planning scheme is provided below in Table 4.

Table 4 - Assessment against the building height standard in the General Industrial Zone.

| Acceptable Solutions | Performance Criteria |
|---|---|
| **Objective:**<br>To provide for a building height that:<br>(a) is necessary for the operation of the use; and<br>(b) minimises adverse impacts on adjoining properties. | |
| **A1**<br>Building height must not be more than 20 m. | **P1**<br>Building height must be necessary for the operation of the use and not cause an unreasonable impact on adjoining properties, having regard to:<br>(a) the bulk and form of the building;<br>(b) separation from existing use on adjoining properties; and<br>(c) any buffers created by natural or other features. |
| **Planner Response**<br>'Building' is defined in the LUPA Act. It states:<br>*Building includes –*<br>*(a) a structure and part of a building or structure; and*<br>*(b) fences, walls, out-buildings, service installations and other appurtenances of a building; and*<br>*(c) a boat or a pontoon which is permanently moored or fixed to land;*<br>The tyre shredder being a structure, meets the definition of a building. The building height will be approximately 7 m above natural ground level.<br>The acceptable solution (A1) is met. | |

### 5.3.4 Setback

An assessment against Clause 19.4.2 of the planning scheme is provided below in Table 5.

Table 5 - Assessment against the setback standard in the General Industrial Zone.

| Acceptable Solutions | Performance Criteria |
|---|---|
| **Objective:**<br>That the building setback is appropriate for the site. | |
| **A1**<br>Buildings must have setback from a frontage of:<br>(a) not less than 10m;<br>(b) not less than existing buildings on the site; or<br>(c) not more or less than the maximum and minimum setbacks of the buildings on adjoining properties. | **P1**<br>Buildings must have a setback from a frontage that provides adequate space for vehicle access, parking and landscaping, having regard to:<br>(a) the topography of the site;<br>(b) the setback of buildings on adjacent properties; and<br>(c) the safety of road users. |
| **Planner Response**<br>The proposed building is setback more than 10 m from the frontage, and behind existing buildings.<br>The acceptable solution (A1) is met. | |

### 5.3.5 Landscaping

An assessment against Clause 19.4.3 of the planning scheme is provided below in Table 6.

Table 6 - Assessment against the landscaping standard in the General Industrial Zone.

| Acceptable Solutions | Performance Criteria |
|---|---|
| **Objective:** That landscaping enhances the amenity and appearance of the streetscape where buildings are setback from the frontage. | |
| **A1**<br>If a building is set back from a road, landscaping treatment must be provided along the frontage of the site:<br>(a) to a depth of not less than 6m; or<br>(b) not less than the frontage of an existing building if it is a lesser distance. | **P1**<br>If a building is setback from a road, landscaping treatment must be provided along the frontage of the site, having regard to:<br>(a) the width of the setback;<br>(b) the width of the frontage;<br>(c) the topography of the site;<br>(d) existing vegetation on the site;<br>(e) the location, type and growth of the proposed vegetation; and<br>(f) any relevant local area objectives contained within the relevant Local Provisions Schedule. |

**Planner Response**

No landscaping is proposed as part of this application. Landscaping is currently provided along the frontage of the site as well as central to the site. The existing landscaping treatment currently enhances the amenity and appearance of the streetscape when having regard to the width and the slope of the road reserve between the corner of Glenstone and Weily Park Roads, and the existing frontage setback which is required for truck movements to move in a forward direction through the site.

**The performance criteria (P1) are satisfied.**

# 6 Code assessment

## 6.1 Applicable codes

The following codes apply to the Project, and have been considered below:

- C2.0 Parking and Sustainable Transport Code
- C3.0 Road and Railway Assets Code

## 6.2 Parking and Sustainable Transport Code

### 6.2.1 Application of the code

The Parking and Sustainable Transport Code applies to all use and development.

### 6.2.2 Applicable standards

Not all standards within the Parking and Sustainable Transport Code are applicable to the Project. Table 7 identifies the applicable standards. An assessment of the applicable standards is provided in the following sections.

Table 7 - Applicable standards in the Parking and Sustainable Transport Code.

| Clause | | Applicability |
|---|---|---|
| **Use standards** | | |
| Clause C2.5.1 Car parking numbers | A1/P1.1 & P1.2 | Not applicable, pursuant to clause 5.6.2(c) of the planning scheme.[2] |
| Clause C2.5.2 Bicycle parking numbers | A1/P1 | Not applicable. There is no requirement to provide bicycle parking for a Recycling and Waste Disposal use class. |
| Clause C2.5.3 Motorcycle parking numbers | A1/P1 | Not applicable, pursuant to clause C2.2.2. |
| Clause C2.5.4 Loading bays | A1/P1 | Not applicable, pursuant to clause C2.2.3. |

[2] A standard in the planning scheme is an applicable standard if the standard deals with a matter that could affect, or be affected by, the proposed use or development.

As there is no change to the number of employees, the size of the subject site, and the number and nature of the use of the car park, clause 2.5.1 A1/P1 is not an applicable standard, and no assessment is required.

| Clause | | Applicability |
|---|---|---|
| Clause C2.5.5 Number of car parking spaces within the General Residential Zone and Inner Residential Zone | A1/P1 | Not applicable. The site is not located within a residential zone. Additionally, the clause does not apply, pursuant to clause C2.2.4. |
| **Development standards for Buildings and Works** | | |
| C2.6.1 Construction of parking areas | A1/P1 | Not applicable. No new parking areas proposed. |
| C2.6.2 Design and layout of parking areas | A1 /P1 | Not applicable. No new parking areas proposed. |
| C2.6.3 Number of accesses for vehicles | A1/P1 | Applicable. |
| | A2/P2 | Not applicable. The site is not within the Central Business Zone. |
| C2.6.4 Lighting of parking areas within the General Business Zone and Central Business Zone | A1/P1 | Not applicable. The site is not within the General Business or Central Business Zone. |
| C2.6.5 Pedestrian access | A1 /P1 | Not applicable. No new parking areas proposed. |
| C2.6.6 Loading bays | A1/P1 | Not applicable. No loading bays proposed. |
| | A2/P2 | Not applicable. No loading bays proposed. |
| C2.6.7 Bicycle parking and storage facilities within the General Business Zone and Central Business Zone | A1/P1 | Not applicable. The site is not within the General Business or Central Business Zone. |
| | A2/P2 | Not applicable. The site is not within the General Business or Central Business Zone. |
| C2.6.8 Siting of parking and turning areas | A1/P1 | Not applicable. The site is not within the Inner Residential Zone, Village Zone, Urban Mixed Use Zone, Local Business Zone or General Business Zone. |
| | A2/P2 | Not applicable. The site is not within the Central Business Zone. |
| **Parking Precinct Plan** | | |
| C2.7.1 Parking precinct plan | A1/P1 | Not applicable. The site is not subject to a Parking Precinct Plan. |

### 6.2.3 Number of accesses for vehicles

An assessment against Clause C2.6.3 of the planning scheme is provided below in

Table 8 - Assessment against the number of accesses for vehicles standard in the Parking and Sustainable Transport Code.

| Acceptable Solutions | Performance Criteria |
|---|---|

**Objective**

That:

(a) access to land is provided which is safe and efficient for users of the land and all road network users, including but not limited to drivers, passengers, pedestrians and cyclists by minimising the number of vehicle accesses;

(b) accesses do not cause an unreasonable loss of amenity of adjoining uses; and

(c) the number of accesses minimise impacts on the streetscape.

| A1 | P1 |
|---|---|
| The number of accesses provided for each frontage must:<br>(a) be no more than 1; or<br>(b) no more than the existing number of accesses,<br>whichever is the greater. | The number of accesses for each frontage must be minimised, having regard to:<br>(a) any loss of on-street parking; and<br>(b) pedestrian safety and amenity;<br>(c) traffic safety;<br>(d) residential amenity on adjoining land; and<br>(e) the impact on the streetscape. |

**Planner Response**

There is one existing vehicle access to the site. No additional accesses are proposed.

The acceptable solution (A1) is met.

# 6.3 Road and Railway Assets Code

## 6.3.1 Application of the code

The Road and Railway Assets Code applies as the use will ultimately increase the movement of vehicles longer than 5.5 m using the existing vehicle crossing.

## 6.3.2 Applicable standards

Table 9 - Applicable standards in the Road and Railway Assets Code.

| Clause | | Applicability |
|---|---|---|
| **Use Standards** | | |
| C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction | A1.1-A1.5/P1 | Applicable. |
| **Development Standards for Buildings and Works** | | |
| C3.6.1 Habitable buildings for sensitive uses within a road or railway attenuation area | A1/P1 | Not applicable. No habitable buildings are proposed. |
| **Development Standards for Subdivision** | | |
| C3.7.1 Subdivision for sensitive uses within a road or railway attenuation area | A1/P1 | Not applicable. No sensitive use proposed. |

## 6.3.3 Traffic generation at a vehicle crossing, level crossing or new junction

An assessment against Clause C3.5.1 of the planning scheme is provided in Table 10.

Table 10 - Assessment against the traffic generation standard in the Road and Railway Assets Code.

| Acceptable Solutions | Performance Criteria |
|---|---|
| **Objective**<br>To minimise any adverse effects on the safety and efficiency of the road or rail network from vehicular traffic generated from the site at an existing or new vehicle crossing or level crossing or new junction. | |
| **A1.1**<br>For a category 1 road or a limited access road, vehicular traffic to and from the site will not require:<br>(a) a new junction;<br>(b) a new vehicle crossing; or<br>(c) a new level crossing. | **P1**<br>Vehicular traffic to and from the site must minimise any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network, having regard to:<br>(a) any increase in traffic caused by the use;<br>(b) the nature of the traffic generated by the use;<br>(c) the nature of the road;<br>(d) the speed limit and traffic flow of the road;<br>(e) any alternative access to a road;<br>(f) the need for the use;<br>(g) any traffic impact assessment; and<br>(h) any advice received from the rail or road authority. |
| **A1.2**<br>For a road, excluding a category 1 road or a limited access road, written consent for a new junction, vehicle crossing, or level crossing to serve the use and development has been issued by the road authority. | |
| **A1.3**<br>For the rail network, written consent for a new private level crossing to serve the use and development has been issued by the rail authority. | |
| **A1.4**<br>Vehicular traffic to and from the site, using an existing vehicle crossing or private level crossing, will not increase by more than:<br>(a) the amounts in Table C3.1; or<br>(b) allowed by a licence issued under Part IVA of the Roads and Jetties Act 1935 in respect to a limited access road. | |
| **A1.5**<br>Vehicular traffic must be able to enter and leave a major road in a forward direction. | |

**Planner Response**

Vehicular traffic to and from the site using the existing vehicle crossing is expected to increase by more than the amounts in Table C3.1, commensurate with the increasing supply of end-of-life tyres over time. Assessment against the performance criteria is required.

The Project site is on Weily Park Road which has direct access to the State Road Network, being Glenstone Road..

Outgoing truck movements will all be northbound on the Midland Highway, driving to either Devonport (for shipment to Victoria) or Railton (for kiln rubber delivery). All vehicular egress from the site turns left onto Weily Park Road, and onto the Midland Highway via Glenstone Road. There will be no interference with the adjacent rail network (South Line) or the associated level crossing at Weily Park Road.

Weily Park Road is a local road managed by Brighton Council. The short section of Weily Park Road connecting the site to Glenstone Road is used by heavy vehicles associated with the existing use. The junction of Weily Park Road and Glenstone Road was designed to accommodate large vehicles as part of the Brighton Industrial Hub. Glenstone Road is an arterial road managed by the Department of State Growth. Arterial roads serve a purpose as transport corridors between major roads. As such, Glenstone Road is designed to accommodate high volumes of truck movements. It feeds into the Midland Highway, which is a Category 1 Road managed by the Department of State

Growth. Category 1 Roads are Tasmania's major highways, carrying significant numbers of heavy freight and passenger vehicles[3].

Overall, it is Era Advisory's opinion that vehicular traffic to and from the site will not have any adverse effects on the safety of a junction, vehicle crossing or level crossing or safety or efficiency of the road or rail network.

The performance criteria (P1) are satisfied.

## 6.4 Natural Assets Code

### 6.4.1 Application of the Code

Part of the site is subject to the Waterway and Coastal Protection overlay, as contained in the planning scheme maps, and shown in. However, no development is proposed within the overlay, and the code does not apply to use.

As such, the Natural Assets Code is not applicable to the Project.


Figure 12 Blue hatching denotes the extent of the Waterway and Coastal Protection Area overlay as it applies to the site.

[3] State Road Hierarchy, Department of State Growth (2015)

## 6.5 Attenuation Code

### 6.5.1 Application of the Code

The Attenuation Code applies to the activities listed in Table C9.1 of the planning scheme. That table makes reference to 'Materials Handling', which is defined in Table C9.1 as:

> *Processing of chemicals, rubber, rock, ores and minerals by crushing, grinding, milling or separating into different sizes by sieving, air elutriation or in any other manner - emissions such as noise and dust.*

The proposal meets the definition of Materials Handling.

However, clause C9.4.1(a) states that use or development assessed as a level 2 activity is exempt from assessment under the provisions of the Code. As such, the Attenuation Code does not apply to the Project.

Emissions generated by the Project, such as noise and dust, will be assessed by the EPA.

## 6.6 Potentially Contaminated Land Code

### 6.6.1 Application of the Code

The development is exempt from the Potentially Contaminated Land Code pursuant to C14.4.1 (b) as it does not involve the disturbance of land.

The use is for a recycling facility, which is listed in Table C14.2 Potentially Contaminating Activities. Clause 14.5.1 Suitability for intended use applies to the proposal.

However, Section 25(2)(f) of the EMPCA directs the Planning Authority to not undertake an assessment as site contamination issues are being assessed by the EPA.

Assessment against Clause 14.5.1 will be satisfied by the EPA's assessment.

# 7 Specific Area Plan assessment

## 7.1 Bridgewater Quarry Specific Area Plan

### 7.1.1 Purpose of the Specific Area Plan

The purpose of the Bridgewater Quarry SAP is:

*BRI-S4.1.1* *To protect the operations of the Bridgewater Quarry from incompatible or conflicting use or development.*

### 7.1.2 Application of the Specific Area Plan

The SAP applies to all use and development within the area of land designated as Bridgewater Quarry SAP on the overlay maps, as shown in Figure 13.


Figure 13 The subject site is in blue. The area shaded lilac is the land subject to the Bridgewater Quarry Specific Area Plan.

### 7.1.3 Applicable standards

Not all standards within the Bridgewater Quarry Specific Area Plan are applicable to the Project. Table 11 identifies the applicable standards. An assessment of the applicable standards is provided in the following sections.

Clause BRI-S4.7.1 Buildings and works within Bridgewater Quarry Specific Area Plan is in addition to the standards of the Attenuation Code. As such, assessment is required under this standard.

Table 11 - Applicable standards in the Bridgewater Quarry Specific Area Plan.

| Clause | | Applicability |
|---|---|---|
| **Use Standards** | | |
| BRI-S4.6.1 Sensitive use | A1/P1 | Not applicable. No sensitive use proposed. |
| **Development Standards for Buildings and Works** | | |
| BRI-S4.7.1 Buildings and works within Bridgewater Quarry Specific Area Plan | A1/P1 | Applicable. |
| **Development Standards for Subdivision** | | |
| BRI-S4.8 Development Standards for Subdivision | A1/P1 | Not applicable. No subdivision proposed. |

### 7.1.4 Buildings and works within Bridgewater Quarry Specific Area Plan

An assessment against Clause BRI-S4.7.1 of the planning scheme is provided below in Table 12.

Table 12 - Assessment against the buildings and works standard in the Bridgewater Quarry Specific Area Plan.

| Acceptable Solutions | Performance Criteria |
|---|---|
| **Objective**<br>That development is compatible with the operations of the Bridgewater Quarry. | |
| **A1**<br>No acceptable solution. | **P1**<br>Buildings and works must not result in potential to interfere or conflict with quarry operations having regard to:<br>(a) the nature of the quarry; including:<br>(i) operational characteristics;<br>(ii) scale and intensity;<br>(iii) degree of hazard or pollution that may be emitted from the activity;<br>(b) the degree of encroachment of development or use into the Bridgewater Quarry Attenuation Area; and<br>(c) measures in the design, layout and construction of the development to eliminated, mitigate or manage effects of the quarry; and<br>(d) any advice from the Bridgewater Quarry operator. |
| **Planner Response** | |

There is no acceptable solution. The proposal must be assessed against the performance criteria.

The Bridgewater Quarry is a large, open-cut basalt quarry, located at 1 Parkholme Drive, Bridgewater, and operates under Mining Lease 1477P/M. The quarry face is approximately 750 m away from the site, wherein the proposed use and development is to be contained, and approximately 400 m east of the Midland Highway.

The mining lease boundary is approximately 50 m from the site, however it is not anticipated that the quarry operations would extend to the western boundary of the lease, as this would result in the loss of, or at least significant impacts to, the Midland Highway, which intersects the quarry's mining lease.

While the proposal encroaches on the Bridgewater Quarry Attenuation Area, it is for an intensification of an existing industrial use on industrial land. As such, there is no apparent conflict between the site and the quarry.

The site will not be affected by emissions from quarry operations, including dust, noise or vibrations. Further, the development will not inhibit quarry operations in any way.

While no advice has been sought from the quarry operator prior to lodging the application, Era Advisory would welcome the planning authority seeking their advice.

It is Era Advisory's opinion that the proposed development will not result in the potential to interfere or conflict with quarry operations.

The performance criteria (P1) are satisfied.


Figure 14 The subject site is shown in blue. The boundaries of Mining Lease 1477P/M for the Bridgewater Quarry are shown in red.

## 7.2 Brighton Industrial Hub Specific Area Plan

### 7.2.1 Purpose of the Specific Area Plan

The purpose of the Brighton Industrial Hub SAP is:

*BRI-S10.1.1 To protect the Brighton Industrial Hub from sensitive use establishing in the area.*

### 7.2.2 Application of the Specific Area Plan

The Specific Area Plan applies to all use and development within the area of land designated as Brighton Industrial Hub SAP on the overlay maps, as shown in Figure 15.


Figure 15 The subject site is shown in blue. The area shaded lilac is the area subject to the Brighton Industrial Hub Specific Area Plan.

### 7.2.3 Applicable standards

The standard contained in BRI-S10.6.1 is a substitution for clause C9.5.2, within the Attenuation Code. As discussed in section 6.5.1, use or development assessed as a level 2 activity is exempt from assessment under the provisions of the Attenuation Code. As such, it follows that clause BRI-S10.6.1 also does not apply to the Project.

There are no other standards in the Brighton Industrial Hub SAP. No further assessment against the Brighton Industrial Hub SAP provisions is required.

# 8 Conclusion

The proposal seeks approval for development and for an intensification of use at 3 Weily Park Road, Bridgewater. The proposal is subject to the provisions of the *Tasmanian Planning Scheme – Brighton*. This proposal requires assessment against the provisions of the Bridgewater Quarry SAP, the General Industrial Zone, the Parking and Sustainable Transport Code and the Road and Railway Assets Code. The proposal also requires consideration against the Potentially Contaminated Land Code, although no Council assessment is required.

An assessment against all relevant standards has been outlined in this report and is summarised in Table 13. The proposal relies on Council exercising its discretion in relation to three of the eight applicable standards. The assessment has demonstrated that the performance criteria are met where discretions are invoked. Accordingly, the proposal should be approved.

Table 13 - Summary of applicable standards

| Clause | | AS, PC or no Council assessment |
|---|---|---|
| **General Industrial Zone** | | |
| Clause 19.4.1 Building height | A1/P1 | Complies with acceptable solution. |
| Clause 19.4.2 Setback | A1/P1 | Complies with acceptable solution. |
| Clause 19.4.3 Landscaping | A1/P1 | Meets performance criteria. |
| **Parking and Sustainable Transport Code** | | |
| Clause C2.5.1 Car Parking Numbers | A1/P1 | Complies with acceptable solution. |
| Clause C2.6.3 Number of accesses for vehicles | A1/P1 | Complies with acceptable solution. |
| **Road and Railway Assets Code** | | |
| Clause C3.5.1 Traffic generation at a vehicle crossing, level crossing or new junction | A1/P1 | Meets performance criteria. |
| **Potentially Contaminated Land Code** | | |
| Clause 14.5.1 Suitability for intended use | A1/P1 | No Council assessment required. |
| **Bridgewater Quarry Specific Area Plan** | | |

| Clause | | AS, PC or no Council assessment |
|---|---|---|
| Clause BRI-S4.7.1 Buildings and works within Bridgewater Quarry Specific Area Plan | A1/P1 | Meets performance criteria. |

This assessment has demonstrated that, even where the acceptable solution is not met, the performance criteria are achieved. Specifically, regarding the three applicable performance criteria:

- The application invokes discretion for landscaping. Existing landscaping at the site is adequate, and no additional landscaping treatment is required.
- Vehicular traffic to and from the site will not have any adverse effects on the safety of a junction, vehicle crossing or level crossing, nor will it adversely affect the safety or efficiency of the road or rail network.
- The proposal is within the Bridgewater Quarry Specific Area Plan overlay. It has been determined that the proposed development will not result in the potential to interfere or conflict with quarry operations.

As site contamination is assessed by the EPA, there is no requirement for Council to undertake assessment of Clause 14.5.1 of the Potentially Contaminated Land Code.

The application for the Project has been found to the meet the requirements of the *Tasmanian Planning Scheme – Brighton* and it is our opinion that the proposal should be approved.

# Appendix A Title documentation

# Appendix B Plans

Era Advisory
Level 1, 125A Elizabeth St
Hobart 7000

(03) 6165 0443
enquiries@era-advisory.com.au
era-advisory.com.au

# Environmental Effects Report

Tyrecycle Bridgewater Capacity Upgrade

era

Final V2 | 15 December 2025

Era Advisory acknowledge palawa as the Traditional Owners of lutruwita (Tasmania).

They are the original custodians of our land, sky and waters.

We respect their unique ability to care for country and deep spiritual connection to it.

We honour and pay our respect to Elders past and present, whose knowledge and wisdom has and will ensure the continuation of culture and traditional practices.

We acknowledge that their sovereignty has never been ceded.

Always was, always will be.

Era Advisory Pty Ltd

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era-advisory.com.au



| | |
|---|---|
| Client | Tyrecycle |
| Document version | Final V2 |
| Date | 15 December 2025 |
| Author | Various |
| Reviewer | Anahita Jungalwalla |
| Job number | 2425-112 |

# Contents

# 1 Part A – Proponent information

| | |
|---|---|
| **Proponent entity name** | Tyrecycle Pty Ltd |
| **Proponent trading name** | Tyrecycle |
| **Registered address of proponent** | 30-56 Encore Avenue, Somerton VIC, 3062 |
| **Postal address of proponent** | As above |
| **ABN/ACN of proponent** | 84 085 545 053 |
| **Contact person's details** | Peter Scioscia<br>Tyrecycle<br>0447 179 602<br>Peter.Scioscia@tyrecycle.com.au |
| **Consultant's details** | Dan Elson<br>Era Advisory Pty Ltd (Era)<br>0411 296 901<br>daniel@era-advisory.com.au |

Tyrecycle Pty Ltd (Tyrecycle) currently operates seven dedicated tyre processing plants across Australia, equipped with advanced rubber recycling capabilities. Nationally, Tyrecycle accept over 20 million tyres per annum and produce complex high quality repurposed materials for the local and global market. Tyrecycle have the experience and financial capacity to undertake the project.

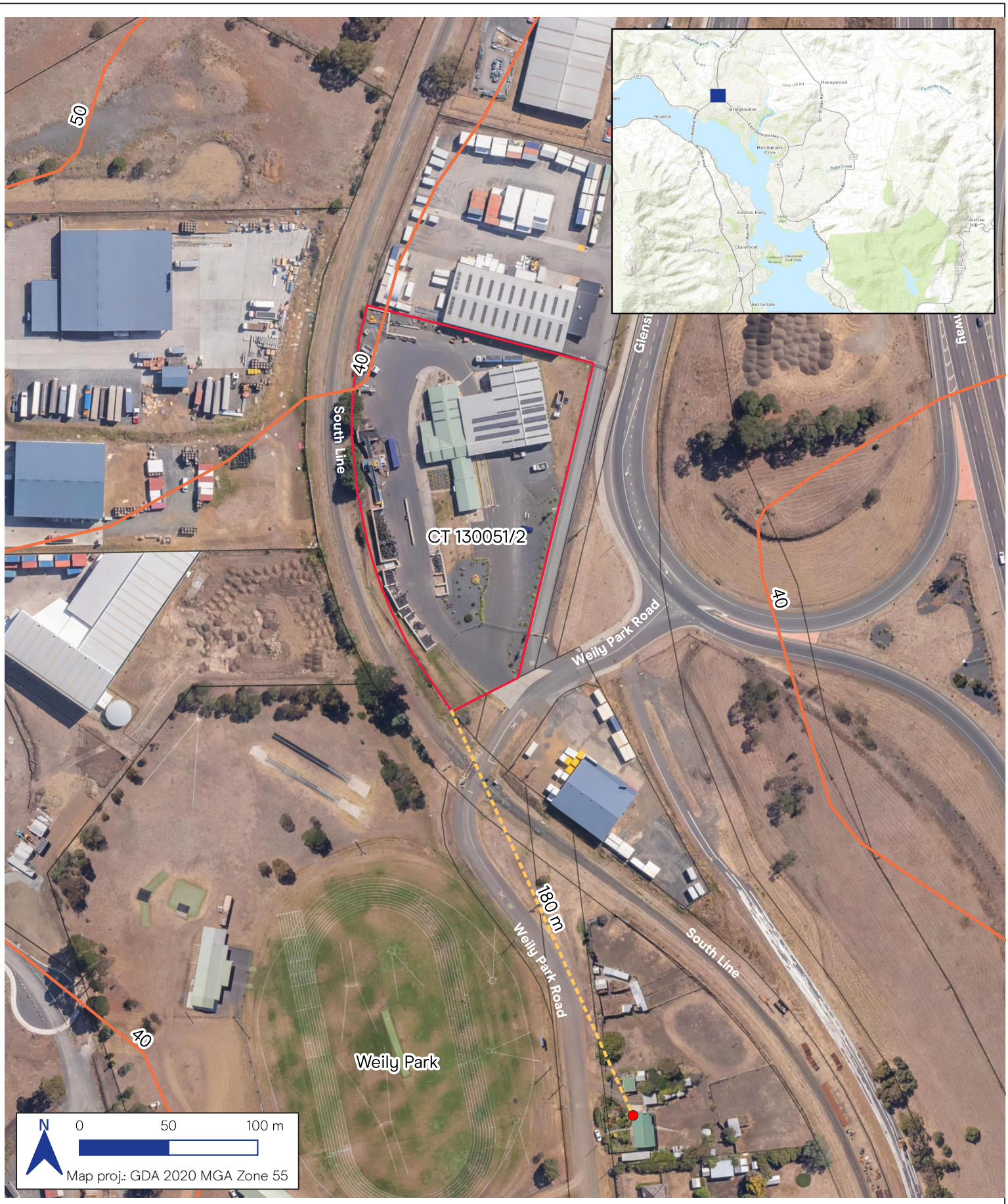
# 2 Part B – Proposal description

Tyrecycle currently operates a tyre recycling facility in Brighton, Tasmania, as shown in Figure 2-1. The facility accepts used passenger and truck tyres from around Tasmania and is currently the only licenced tyre exporter in the state. Tyrecycle acquired the tyre recycling business from Barwick's in December 2024 and have a 10-year lease on the relevant portion of the site. The site is owned by Barwick's, who continue to operate their landscaping business from the same location in a shared facility arrangement.

Tyres are currently shredded at the onsite shredder, packed into shipping containers and then exported to Tyrecycle's mainland facilities for further processing. The facility is licenced under EPN 10195/1 to process up to 5,000 tonnes per year of rubber.

The proposal is seeking approval for the installation and use of an additional shredder unit onsite to allow further processing of rubber for use as a kiln fuel. The proposal also seeks to increase the annual production limit from 5,000 to 10,000 tonnes per year of rubber.

Tyrecycle has negotiated a contract with Cement Australia to supply up to 6,000 tonnes per annum of shredded rubber for use as a fuel for their cement kiln in Railton, northern Tasmania. The proposal will result in a significant reduction in coal use at the kiln site and also reduce the volume of recycled rubber sent to mainland Australia, both positive environmental outcomes.




Project site (the Land)

Distance

Nearest receptor

Contour 10m

40

50

Tyrecycle
Bridgewater
Capacity Upgrade

Figure 2.1
Project Location

era

| | |
|---|---|
| Job No. | 2425-112 |
| Rev. | V.1 |
| Date | 17 September 2025 |
| Size | A4 |

## 2.1 Description of proposed activity

**Proposed activity**

| | |
|---|---|
| **Activity** | The proposed activity is an extension of the existing tyre shredding operation at the Bridgewater site.<br>The Project Site currently shreds tyres to a size referred to as a 'pre-shred', measuring approximately six inches. The pre-shred rubber is a suitable size to feed into the various product lines produced by Tyrecycle across Australia. The proposed activity involves the installation of a new shredder, which will be installed downstream of the existing shredder, to allow further processing of the pre-shred product. A schematic of the new proposed processing arrangement is shown in Figure 2-3.<br>The new shredder will accept the pre-shed rubber and further shred it down to a smaller, 1.5 inch size. This new product stream will be used as a fuel source for a cement kiln in northern Tasmania.<br>The proposal also seek to increase the existing rubber processing limit of 5,000 tonnes per annum (tpa) to 10,000 tpa to accommodate anticipated growth in the market in coming years.<br>The installation of the new shredder and the increase in processing limit are collectively referred to as 'the Project' herein.<br>The land on which the Project will occur is defined as the cadastral title 130051/2 located at 3 Weily Park Road Bridgewater in southern Tasmania (see Figure 2-1), this parcel is referred to as 'the Project Site' herein.<br>Under Schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), the Project is defined as a level 2 activity under section 6(a)(i), that is:<br>*'Materials Handling: Crushing, Grinding or Milling: processing (by crushing, grinding, milling or separating into different sizes by sieving, air elutriation or in any other manner) of – chemicals or rubber at a rate of 200 tonnes or more per year'*<br>An operational overview of the site is presented in Figure 2-2. |
| **New or existing activity** | The Project is a modification and intensification of an existing level 2 activity. |
| **Product or purpose** | The Project will produce two different shredder rubber product streams.<br>The first is the existing 'pre-shred' rubber product, which is essentially tyre rubber cut down to a six inch size. This product is exported to Victoria for further processing in Tyrecycle's mainland operations. There is no proposed change to this part of the operation.<br>The second is the new product that will be produced using the new shredder, which will further shred the 'pre-shred' rubber down to a smaller, 1.5 inch size. This shredded rubber will be sold to Cement Australia for use as a fuel in their cement kiln in Railton, northern Tasmania. Tyrecycle have a contract with Cement Australia to supply up to 6,000 tpa of the smaller shredded tyre product for the next ten years. The kiln fuel product is 3-times more energy dense than coal, which is the current fuel used. |
| **Maximum quantity/limit** | The Project Site is currently licenced to process up to 5,000 tpa of tyres. The Project seeks to increase the annual processing limit to 10,000 tpa to accommodate predicted growth in the market. For reference, the average weight of a waste passenger vehicle tyre is approximately 8kg and a truck tyre generally ranges from approximately 16kg to 40kg depending on the size[1].<br>Tyrecycle track incoming tyres via a weighbridge. The average monthly weight of tyres received during the 2024 calendar year was 416 tonnes per month, and the total for the |

[1] Based on the definition of Equivalent Passenger Units as per schedule 1 of the Approved Management Method for the Storage and Reuse of Waste Tyres (EPA Tasmania, June 2021).

| | |
|---|---|
| | year was 4,990 tonnes. Assuming approximately 20 working days per month, this equates to an average of approximately 21 tonnes of tyres received (and processed) per working day.<br>The proposed increase in annual product limit will allow the Project Site to continue processing existing supply from Tasmania, as well as future proof the operation for increased volumes in the future. The volume of incoming used tyres is expected to gradually increase in the coming years with the growing popularity of electric vehicles, which are significantly heavier than traditional internal combustion engine vehicles and use tyres at close to double the rate.<br>The proposal therefore also seeks to increase the allowable processing rate from the current 5,000 tpa of rubber to 10,000 tpa to allow for any future increases in processing as the supply of waste tyres grows. |
| **Methods** | Tyres are delivered to site via truck on a daily basis from various locations around Tasmania, including tyre shops, wreckers, and waste transfer stations. The delivery trucks enter the site, have their load weighed on the onsite weigh bridge and then deposit the tyres in the stockpile area adjacent to the driveway entrance before leaving site. Tyres are separating into car tyres, truck tyres, and occasionally 'off the road' (OTR) mining truck tyres.<br>Car tyres and truck tyres are then collected from the tyre stockpile by a telehandler or bobcat and loaded onto a conveyor which transports the tyres up to the first shredder system. This first shredder shreds the tyres down into a six-inch pre-shred size suitable for further processing. Truck tyres and car tyres are shredded and exported in separate batches, due to the type of rubber and amount of wire used in the construction of each tyre type, which effects the suitability of their end use.<br>This is currently the maximum extent of processing at the site, with the pre-shred rubber product loaded into shipping containers (refer below), picked up by a semi-trailer, driven to Devonport and then shipped to Tyrecycle's Victorian operations for further processing.<br>The new system will add a split conveyor to the end of the existing pre-shred offloading conveyor which will allow the option of offloading the pre-shredded rubber to a new concrete bunker area (for export as is) or passing it through to the new shredder which will further shred the rubber to a 1.5 inch product and then convey it to a second new concrete bunker for export.<br>In terms of inputs to the shredding process, both shredders (existing and proposed) use a fine water spray mist to dampen the incoming rubber before it hits the shredder blades at a rate of approximately 100 L per hour per shredder. The majority of this water evaporates during shredding or clings to the rubber and evaporates in the stockpile, with very little excess water generated. The Project Site is connected to mains power, which runs all fixed plant. There are no other inputs associated with the operation.<br>All of the truck tyre pre-shred product will continue to be loaded into shipping containers and sent to Victoria (as currently occurs), as it is not suitable for further processing into kiln fuel. A bobcat is be used to load the pre-shred product into the shipping container. A telehandler is then used to load the shipping container onto a truck.<br>The car tyre pre shred will be further processed by the new shredder. The smaller 1.5 inch kiln product (which is expected to make up approximately 85% of the product processed on site) will be loaded directly from the stockpile to various sized contracted struck and trailer combos (up to 49 tonnes) on a daily basis using a telehandler or bobcat. The trucks will then deliver the 1.5 inch product to the Cement Australia Railton site, in northern Tasmania.<br>Occasionally tyres are too worn or dirty to be sent through the shredders, these are manually rejected and sent to a bin for offsite disposal to a licenced landfill; this is the only waste stream from the process. All OTR tyres are sent as is to Victoria as they are not suitable for shredding. There will be no change to this process. |
| **Industry standards** | Waste tyres are considered controlled waste in accordance with the definition of controlled waste in the EMPC Act and their inclusion in Schedule A of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998. Waste tyres are also a prescribed controlled waste in regulation 5 of Tasmania's Environmental Management and Pollution Control (Waste Management) Regulations 2020.<br>Waste tyres must be managed in accordance with the Tasmanian Waste Management Regulations. In accordance with Regulation 6(1) a person must not remove, receive, store, recycle or repurpose a controlled waste other than under a 'relevant authority' or in accordance with an 'approved management method'. In the case of the Project a relevant |

| | |
|---|---|
| | authority is being sought via the submission of this EER (a permit issued under the LUPA Act for a level 2 activity).<br>Regarding bulk storage, to minimise fire risk tyres must be stored in compliance with the Guidelines for Bulk Storage of Rubber Tyres published by Fire and Rescue NSW (2014). |
| **Transport** | The Project Site is on Weily Park Road which has almost direct access to the Midland Highway (via a very short section of Glenstone Road).<br>Workers will arrive at site in light vehicles at approximately 7:30 am and will leave approximately 4 pm from Monday to Friday. There will be 3-4 Tyrecycle staff onsite at any one time (no change in staffing is required for the Project), which equates to approximately 8-16 light vehicle movement per day, depending on whether staff leave site during scheduled breaks. Site staff are expected to access the Project Site via the Midland Highway.<br>There will be truck movements to and from the site daily during operational hours Monday to Friday both importing tyres and exporting the shredded products.<br>Existing incoming truck movements are generally up to 3 to 4 medium rigid trucks (capacity of 650 EPU) plus 3 to 4 heavy rigid trucks (capacity 900 EPU) per day. There is no propose change to this traffic volume, aside from a gradual increase in over the coming years as demand increases.<br>Incoming truck deliveries come from various locations throughout Tasmania, all accessing the Project Site via the Midland Highway.<br>Existing outgoing truck movements are approximately 8 shipping containers leaving the site per week. The proposal will change the composition of export transport as the smaller, 1.5 inch shred will be transported in truck and trailer combos not shipping containers. Once the new shredder is in place outgoing truck movements will be approximately one container per week (to export 6 inch shred to the mainland) and 3 to 4 truck and trailer combos per week (to export the 1.5 inch shred to Railton). Over time the outgoing truck movements will gradually increase commensurate with the increasing supply of end of life tyres.<br>Outgoing truck movements will all be northbound on the Midlands Highway, driving to either Devonport (for shipment to Victoria) or Railton (for kiln rubber delivery). |
| **Stockpiling** | There are two stockpile areas within the Project Site: the incoming tyre storage and the outgoing shredded product bays.<br>The incoming tyre stockpile area houses four main concrete bays, each approximately 18 m x 6 m x 2.5 m high, where tyres are stored after delivery, as shown in Figure 2-2. Incoming tyres are stockpiled in these bays (separated into truck and car tyres) and generally stockpiled to a maximum height of 2.5 meters. Tyres are generally processed at the same rate as they are received on site, with the shredder operating almost every work day as required (except for heavy rainfall days). In this way tyres are received, temporarily stockpiled and then moved through the shredder on a daily basis, such that there is no long term stockpiling of tyres on site. This area, and its operation, will not change as a result of the Project.<br>The incoming tyre storage bays have sufficient capacity to hold approximately 4 days' worth of incoming deliveries at current receival rates. This will reduce to approximately 2 days' worth of storage for incoming deliveries at the eventual maximum production rate (which is approximately twice the current rate). This provides some onsite buffer storage in the event of processing breakdown or equipment malfunction. Spare shredder parts are stored in the maintenance shed as a contingency, including two full sets of shredder blades and at least one of each major long-lead replacement part. These on-site spares provide a degree of redundancy in the event of breakdown. With these onsite spares available, maximum shut down in the event of a major breakdown is approximately 2 days. In the event of a backlog of tyres unable to be stored on site, tyres can be sent directly to Melbourne unprocessed in an extreme event.<br>The other stockpile area will include the two new concrete bays that will store the finished rubber products after shredding. There will be one concrete bay for pre-shred sized rubber which is 4.7 m x 5 m x 3 m high and one for the 1.5 inch kiln product which is 6.9 m x 5 m x 3 m high, as shown in Figure 2-2. The bays will be capable of storing approximately 28 tonnes and 41.4 tonnes of processed rubber product respectively (using an assumed bulk |

| | |
|---|---|
| | density of 400 kg/cubic meters[2]). Assuming an average daily production rate of approximately 21 tonnes[3] (at current receival rates) this provides storage for just over three days of product. Once the site reaches proposed maximum capacity (approximately double the current processing rate), this will provide for approximately 1.5 days' worth of storage. With trucks collecting rubber daily, this provides adequate storage capacity for the shredded product. |
| **Area of disturbance** | The new shredder assembly and associated concrete stockpile bays will require an approximate 320 $m^2$ area adjacent to the existing shredder setup. The area is already completely sealed and so there will be no land clearance required. The shredder and conveyor assembly will be flange bolted to the hardstand surface and the stockpile bays will be formed using pre-cast concrete sections. |
| **Major equipment** | The following existing mobile equipment will be used for the Project:<br>· Telehandler<br>· Forklift<br>· Bobcat x2<br>No new equipment is required for the Project (noting the new shredder is included in new infrastructure below). |
| **Fire management** | The existing operation has a Fire Management and Response Plan (FMRP) (Appendix C) that has been approved by the EPA. The FMRP incorporates many of the recommendations outlined in the *Fire & Rescue NSW Guideline for bulk storage of rubber tyres* (Fire & Rescue NSW, 2014).<br>The following is summary of management and mitigation measures included in the FMRP for storage of tyres at the Project Site, which will continue for the Project:<br>· Tyres and processed rubber will be stored in non-combustible concrete storage bays.<br>· Tyre storage areas will be kept clear of all rubbish and combustible materials.<br>· Tyre storage areas are located at a distance of at least 3 m to the nearest boundary fence.<br>· A hydrant system compliant with Australian Standard 2419.1 is maintained onsite along with several fire extinguishers.<br>· A trained fire warden is present onsite every operational day.<br>· The tyre storage areas are accessible from two directions in the event of a fire.<br>· Several spill kits are available onsite for cleaning up any contaminated extinguisher water. These spill kits will be upgraded to include socks to be deployed in the event of firefighting to contain any firefighting wastewater.<br>· Equipment to plug drainage areas is kept onsite in the event foam is used to fight fires.<br>There are no additional risks introduced as a result of the Project that would require any additional fire management or mitigation. |
| **Infrastructure** | The Project Site contains the following existing infrastructure that will be used for the Project, as shown on Figure 2-2:<br>· Sealed hard stand area<br>· Weigh bridge<br>· Site administration building and facilities<br>· Maintenance building<br>· Staff carpark |

[2] Main Roads Western Australia (MRWA), Crumb Rubber in Bituminous Binders – Stage 1: Literature Review and Best Practice, WARRIP Project Number: PRP16016, Report No. WARRIP 2016-012, published October 2016.

[3] Based on a monthly average during the 2024 calendar year of 416 tonnes, and assuming 20 working days per month.

| | |
|---|---|
| | · Existing incoming tyre storage areas<br>· Existing shredder and conveyor<br>The Project Site also contains an existing concrete storage bay for the 6 inch shred. This bay will be deconstructed to make way for the new shredder; with the old concrete sections used in the construction of the new storage bays.<br>The following new infrastructure is proposed, as shown in Figure 2-2:<br>· New shredder and conveyors<br>· New concrete storage bays x 2 (one for the 6 inch and one for the 1.5 inch shred) |
| **Proposal timeline** | Following receipt of approval, the Project will commence assembly of the new shredder system and storage bays immediately and begin transport of the new 1.5 inch kiln fuel rubber to Cement Australia following the approval of their kiln upgrade which is currently in train.<br>The proponent has a 10-year lease on the portion of the premises relevant to the tyre recycling operation and will likely extend this in 2035 for another 10-year period. |
| **Operating hours** | The site will operate from 7:30am to 4:00pm Monday – Friday, with no work on weekends or public holidays. This is unchanged from existing operations. |


Project site (the Land)

Site entrance

Existing infrastructure

Administration building

Maintenance building

Weigh Bridge

Tyre Bays

Existing shredder

Proposed infrastructure

Proposed shredder

Tyrecycle Bridgewater
Capacity Upgrade

Figure 2.2
Project Site

era

| | |
|---|---|
| Job No. | 2425-112 |
| Rev. | V.1 |
| Date | 17 September 2025 |
| Size | A4 |

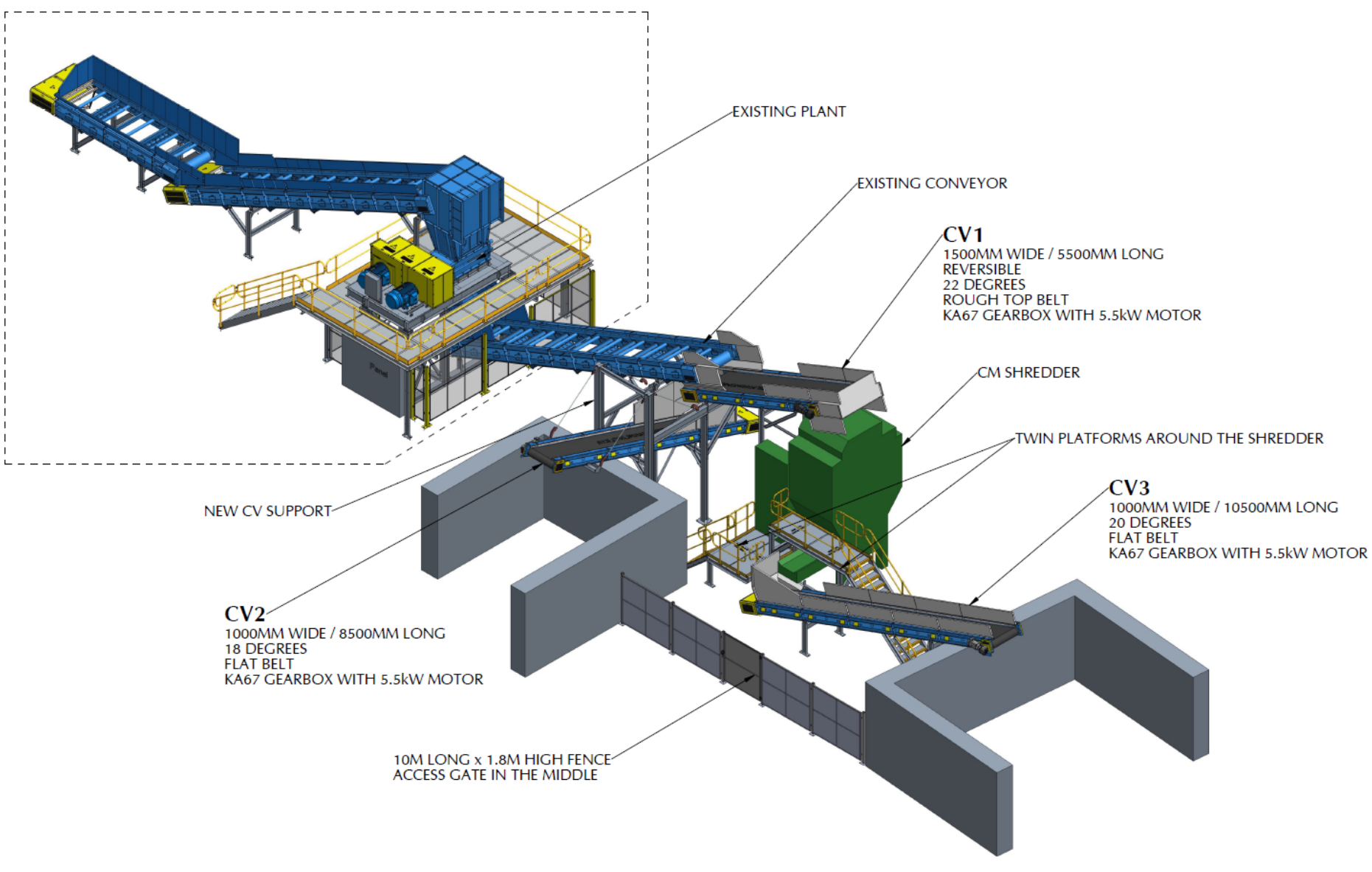



Figure 2-3 Shredding system schematic


Figure 2-4 Existing tyre shredding and stockpile area (a bobcat can be seen loading a shipping container with the pre-shred size rubber)


Figure 2-5 Existing tyre storage area at site entry/exit to be retained

## Location and planning context

| | |
|---|---|
| **Location** | The site is located at 3 Weily Park Road Bridgewater Tasmania 7030<br>· The applicable PID is 1862155<br>· The applicable CT is 130051/2 |
| **Planning permit** | A planning permit is required under the *Land Use Planning and Approvals Act 1993*. Written advice from Council that a planning application is required is provided in Appendix B. |
| **Land zoning and tenure** | The application is subject to assessment under the *Tasmanian Planning Scheme – Brighton*.<br>The site is within the General Industrial Zone of the planning scheme (Figure 2-9). The use class is permitted within the zone and there is no rezoning required.<br>Land tenure is Private Freehold (Figure 2-8). |
| **Use class and permissibility** | The proposal is within the 'Recycling and Waste Disposal' use class, which is defined as:<br>*Use of land to collect, dismantle, store, dispose of, recycle or sell used or scrap material. Examples include a container refund facility, recycling depot, refuse disposal site, scrap yard, vehicle wrecking yard and waste transfer station.*<br>Recycling and Waste Disposal is a permitted use in the General Industrial Zone. |

## Description of site and surrounds

| | |
|---|---|
| **Land use** | The current land use of the Project Site is the existing recycling facility and administration building, also used by Barwick's. The Project site sits within the Brighton Industrial Estate. Surrounding land is generally commercial and industrial use, although there are several residential houses to the south, with the closest approximately 180 m away from the Project Site boundary, as shown in Figure 2-1. There is also a recreational ground to the south. The Project site lies less than 200 m from the Midland Highway and has existing access to the highway via a short section of Weily Park Road and Glenstone Road.<br>There are no reserves[4] within 1km of the Project Site. |
| **Topography** | The Project Site is a flat section of industrial land. Several hundred metres to the east and west hilly terrain becomes dominant. |
| **Climate** | Climate data is available from the Campania (Kincora) weather station (094212). The climate is classified as cool temperate, with an annual mean minimum temperature of 7.3°C and a mean maximum temperature of 18.7°C (BOM, 2025). January is the hottest month with a mean maximum temperature of 24.5°C and July the coldest, with a mean maximum of 13.2°C.<br>An annual mean rainfall of 480.5 mm was recorded between 2000 - 2025.<br>Winds are predominantly northerly in the morning and westerly or north/north-westerly in the afternoons, with the strongest winds recorded in spring and summer, with calmer winter winds (annual average wind roses are provided in Figure 2-6 and Figure 2-7. |

[4] Tasmanian Reserve Estate layer on the LIST, accessed 5 August 2025 (https://maps.thelist.tas.gov.au)

| | |
|---|---|
| **Geology** | The geology of the site is mapped as tholeiite (Tbs) (LISTmap, 2025). Potential for acid forming material is low, with no mapped potential acid forming areas within the Project Site (LISTmap, 2025).<br>There are no geoconservation sites within the Project Site or surrounds. The nearest listed site is the Bedlam Walls Scarp across the River Derwent approximately 1.4 km away. |
| **Soils** | The soil in the area is mapped as black soils on basalt (LISTmap, 2025).<br>There is potential for past contamination of the site from previous industrial or commercial uses and from the adjacent rail line. However, any contamination present in the soils underlying the site is very unlikely to be disturbed during the installation of the new equipment or through the day to day operation of the site. |
| **Hydrology** | The closest waterbodies are the Jordan River to the east and Ashburton Creek to the west, both more than 500 m from the Project Site. |
| **Natural values** | There are extremely limited natural values within or immediately adjacent to the Project site.<br>There is no native vegetation on site or any likely to be affected by the Project in neighbouring areas. The Project Site is mapped as (FUR) Urban areas under TASVEG Live, with surrounding areas mapped as (FUM) Extra-urban miscellaneous.<br>There is one record of a woolly new-holland-daisy (*Vittadinia gracilis*) (listed as rare under the *Threatened Species Protection Act 1995*) within the Project Site boundary. This record is dated 1993 and has a 100m accuracy rating. Given the current condition of the site and the date of the record, it is considered likely the species does not currently occur on site (noting that all Project impacts are contained within already sealed parts of the site nonetheless).<br>In the broader region there are several threatened flora records in nearby road verges including doublejointed speargrass (*Austrostipa bigeniculata*), narrowleaf new holland daisy (*Vittadinia muelleri)*, woolly new holland daisy (*Vittadinia gracilis*), grassland flaxlily (*Dianella amoena*) and crested speargrass (*Austrostipa blackii*). These are all outside the Project Site and will not be impacted by the Project.<br>There are no listed fauna records within the Project Site or immediate surrounds and the Project Site is unlikely to provide habitat values for native fauna. |

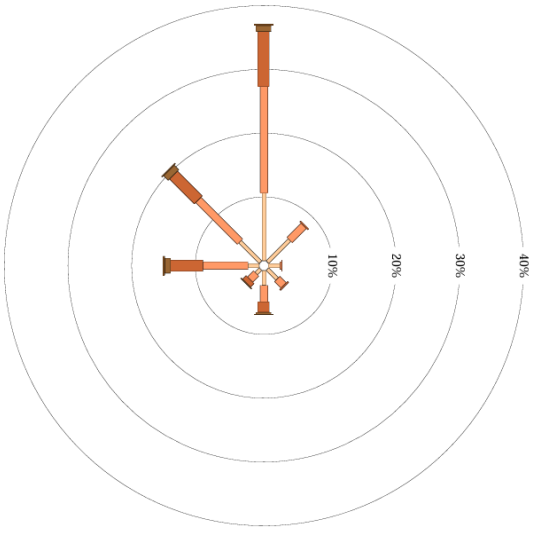



Figure 2-6 9am wind rose (BOM, 2025)

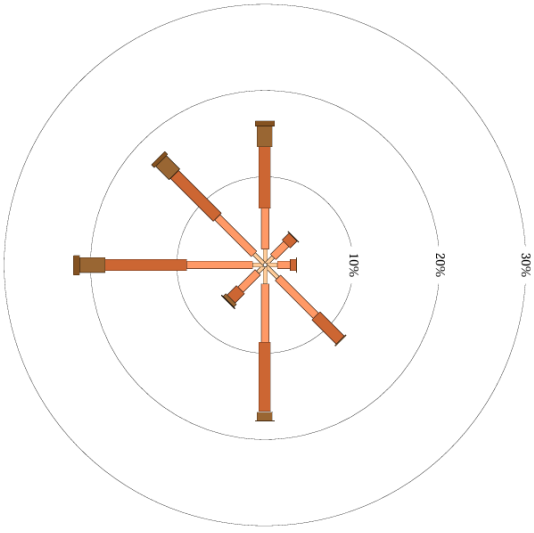



Figure 2-7 3pm wind rose (BOM, 2025)


Land Tenure

- Authority Crown
- Casement
- Local Government
- Private Freehold

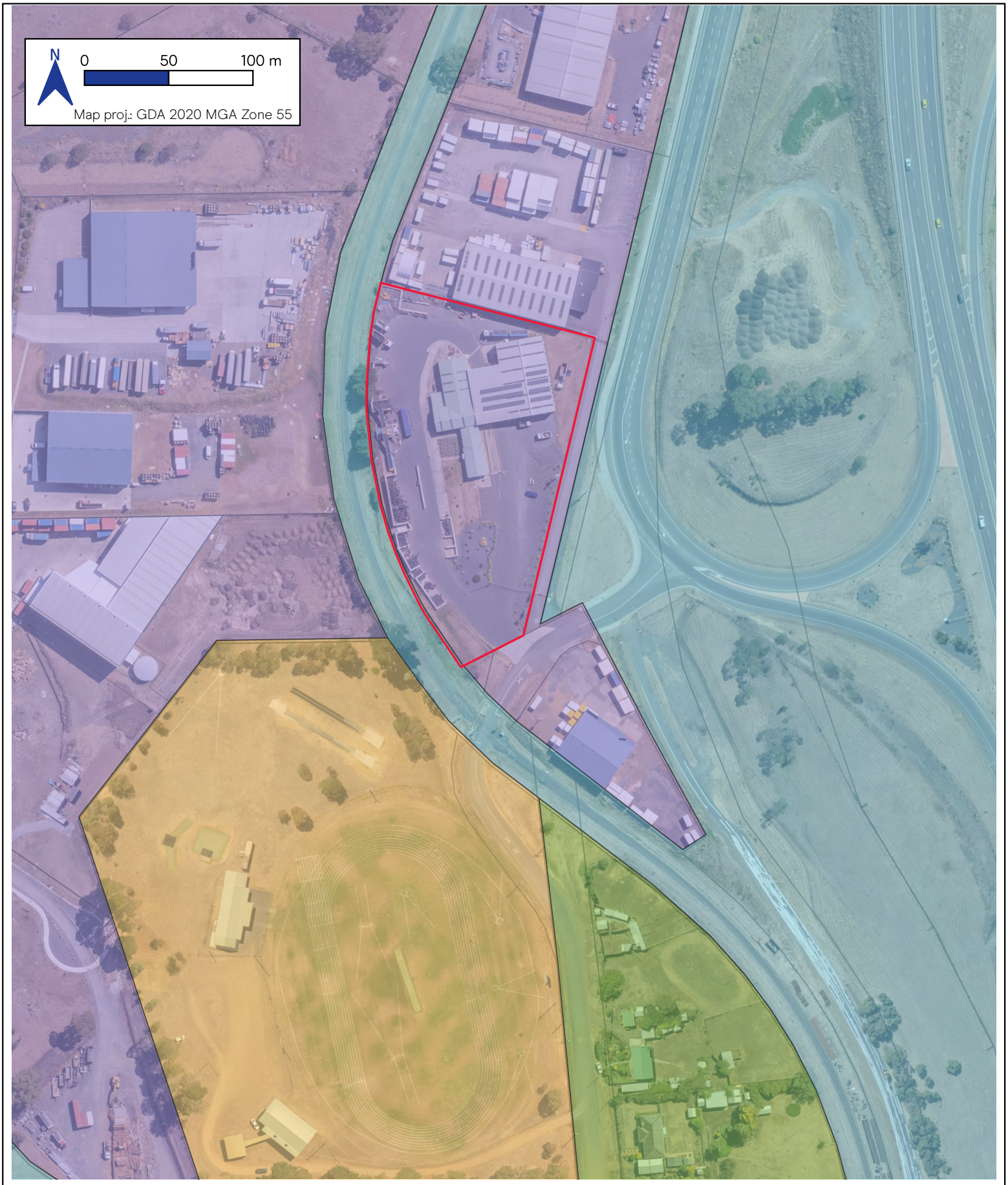
Project site (the Land)

Tyrecycle
Bridgewater
Capacity Upgrade

Figure 2.8
Land Tenure

era

| | |
|---|---|
| Job No. | 2425-112 |
| Rev. | V.1 |
| Date | 19 September 2025 |
| Size | A4 |




Tasmanian Planning Scheme- Zones

Project site (the Land)

General Industrial

Recreation

Utilities

Rural Living

Tyrecycle
Bridgewater
Capacity Upgrade

Figure 2.9
Zoning

era

Job No. 2425-112
Rev. V.1
Date 19 September 2025
Size A4

## 2.2 Project rationale and alternatives

The rationale for the Project is to allow the existing facility to process tyre rubber to a smaller size to allow resale of a new rubber product within Tasmania. This allows the Proponent to enter a new market and reduces the amount of tyre rubber being exported to mainland Australia, which was previously all the rubber produced at the facility. The Project also allows for future growth in throughput of the facility, to accommodate predicted growth in the market.

The only alternative for the Project would be for Tyrecycle to continue their operations as currently occurs; which would limit their ability to keep up with demand from the Tasmanian market and negate the possibility of accessing the new market of kiln fuel in northern Tasmania.

There were no alternative sites or machinery considered, given the available space at the existing site and suitability of the selected shredder to 'bolt on' to the existing process.

## 2.3 Existing activity

The following is a brief description of the existing activity:

- Tyres are delivered to site via truck on a daily basis from various locations around Tasmania, including tyre shops, wreckers, and waste transfer stations.
- The delivery trucks enter the site, have their load weighed on the onsite weigh bridge and then deposit the tyres in the stockpile area adjacent to the driveway entrance before leaving site.
- Tyres are separated into car tyres, truck tyres, and occasionally OTR mining truck tyres and stockpiled in the concrete bays.
- Car tyres and truck tyres are then collected from the tyre stockpile by a telehandler or bobcat and loaded on to a conveyor which transports the tyres up to the shredder system.
- This shredder shreds the tyres down into a six-inch pre-shred size suitable for further processing offsite.
- The pre-shred rubber product is loaded into shipping containers, picked up by a semi-trailer, driven to Devonport and then shipped to Tyrecycle's Victorian operations for further processing.
- Truck tyres and car tyres are shredded and exported in separate batches due to the type of rubber and amount of wire used in the construction of each tyre type, which effects the suitability of their end use.

Further detail about existing operations, stockpiling, site layout and how the existing activity will change as a result of the Project is provided in Section 2.1.

The Project will involve the installation of a new shredder, allowing for the existing pre shred product to be further processed on site into a smaller, 1.5 inch size, prior to export.

The existing activity is regulated under EPN 10195/1 (this is an amended approval under the original Permit 2016/00062). There are no environmental monitoring requirements under the existing approval, other than a noise survey which can be requested by the EPA Director. Since taking on the Project Site in 2024 Tyrecycle have not undertaken any environmental monitoring. The incoming weight of tyres is recorded daily and records kept by Tyrecycle.

To date, there have been no public complaints, no breaches of conditions of current regulatory approvals and there have been no contraventions of environmental law.

# 3 Part C – Environmental impacts and management

## 3.1 Noise emissions

A noise impact assessment was undertaken for the Project by Noise Vibration Consulting (NVC) and is provided in full at Appendix A. The following sections draw directly from the NVC report, summarising the salient points of the assessment.

### 3.1.1 Existing environment

Long-term unattended and short-term attended background noise measurements were taken by NVC to characterise the existing acoustic environment. Additionally, NVC took on-site noise measurements to quantify the existing noise emissions from the site to inform noise modelling. Figure 3-1 shows the locations of all noise measurement sites.

Long-term unattended noise monitoring was undertaken over a one-week period in August 2025 at Location 1, which represents the existing noise environment surrounding the two nearest residential dwellings to the site. NVC notes that noise from nearby industrial businesses was intermittently audible (and dominant when occurring) at this location. Noise from vehicles on the Midland Highway was continuously audible and was the dominant noise source when industrial noise was not present. Noise from the existing site was intermittently audible when the shredder was in use and largely inaudible when the shredder was not running. A summary of the unattended noise measurements is provided in Table 3-1. This table also presents the Rating Background Level (RBL) which is a single figure that represents the background noise level calculated in accordance with the Tasmanian Noise Measurements Procedures Manual.

Table 3-1 - Summary of unattended noise measurements at Location 1 (Source: NVC 2025)

| Time period | Sound pressure level, dBA | | | |
|---|---|---|---|---|
| | $L_{10}$ | $L_{90}$ | $L_{EQ}$ | RBL |
| Day (6am – 10pm) | 53.0 | 47.1 | 51.3 | 43.7 |
| Night (10pm – 6am) | 47.6 | 36.7 | 44.8 | 30.8 |
| Tyrecycle Operating hours (7:30am – 4pm) | 53.5 | 48.0 | 51.9 | 45.1 |

Additional short-term attended noise measurements were conducted at three locations surrounding the site (namely locations 2, 3 and 4 – refer Figure 3-1) to quantify existing noise levels in the surrounding area and provide measured noise levels from existing operations against which the accuracy of the noise modelling could be verified.

Location 2 was observed to be relatively quiet, given its proximity to the industrial zone and the Midland Highway. Background noise at this location was controlled by distant traffic noise from the Midland Highway and other nearby roads. The Project site was not distinguishable at this location. Measurements at this location were considered broadly representative of the existing noise levels experienced by sensitive receivers within the rural living zone to the west of the Project site.

Attended noise measurements were conducted at locations 3 and 4 in the areas adjacent to the Project site, to determine existing noise levels due to on-site activities in carious directions. These measurements were then used to verify the accuracy of the software noise model (refer Section 3.1.2.2).

Location 3 has uninterrupted line of site to all equipment at the Project site, however location 4 had views of the top of the existing shredder and in-feed conveyor but was screened from all other noise sources from the Project site. At location 3 noise from the Project Site was audible and dominant during a period where the existing shredder, bobcat and telehandler were all operational. Similarly, the Project Site was audible at location 4, with the shredder perceived to be the dominant noise source.

The measured $L_{EQ}$ at Locations 2 was 42 dBA. Over a short period where site noise was the clearly dominant noise source, a noise level of 50 dBA and 40 dBA were measured for locations 3 and 4, respectively. Further information on measured background noise at these locations is provided in Section 2.2 of Appendix A.

Overall background noise measurements indicate the region surrounding the project site is impacted by local industrial and road noise, with the existing Project Site audible and in some cases dominant, at nearby receptors during periods when the shredder and associated equipment is operating.


Figure 3-1 Noise measurement locations (Source: NVC 2025)

### 3.1.2 Potential impacts

To assess the potential noise impacts from the Project NVC prepared a noise model to assess predicted impacts against adopted criteria.

#### 3.1.2.1 Noise Criteria

NVC referenced the Project Specific Guidelines, Environment Protection Policy (Noise) 2009 (Noise EPP) and the NSW EPA's Noise Policy for Industry (EPA NSW, 2017) to determine appropriate numerical criteria for the Project to ensure protection of the existing acoustic amenity of surrounding noise sensitive premises.

The objectives of the Noise EPP are to further the objectives of the EMPC Act as they relate to the acoustic environment and to protect the environmental values specified, which generally include the wellbeing of the community and individuals, including an individual's health and opportunity to work, study, sleep, relax and converse within unreasonable interference from noise. The Noise EPP provides acoustic environmental indicator levels for which the environmental values specified in the Noise EPP will be protected. The most relevant indicator levels for the Project are shown in Table 3-2 (noting that the site operates only during daytime hours, hence the outdoor living area criteria are most relevant).

Table 3-2 - Acoustic Environmental Indicator Levels (extract) - Tasmanian Noise EPP

| Specific environment | Critical health effects | LAeq (dBA) | Time base (hours) | LAmax (dB) |
|---|---|---|---|---|
| Outdoor living area | Serious annoyance, daytime and evening | 55 | 16 | - |
| | Moderate annoyance, daytime and evening | 50 | 16 | - |
| Outside bedrooms | Sleep disturbance, window open (outdoor values) | 45 | 8 | 60 |

For a typical 16 hour day period (6am to 10pm) the Tasmanian Noise EPP is deemed relevant in assessing formal operating conditions on the site as this is representative of everyday nose experienced by nearby residential receptors. The moderate annoyance daytime and evening criteria from the Noise EPP is thus adopted for normal operating conditions.

The Project Specific Guidelines also require consideration of worst-case noise. For worst case operating conditions, a 15 minute period when all operations are occurring simultaneously was considered appropriate. The most relevant noise legislation for Tasmania is the Noise EPP, however it does not specify noise emission limits applicable over a 15 minute period. As such the NSW EPA Noise Policy for Industry was considered. The NSW EPA Noise Policy for Industry specifies that the intrusiveness of an industrial noise source may generally be considered acceptable if it does not exceed the background noise level (taken as the RBL) by more than 5 dB. A criterion of RBL + 5dB is considered appropriate for the 15 minute worst case period.

Given the above, NVC adopted the following Project specific noise criteria as shown in Table 3-3.

For normal daytime operating conditions, the criteria are taken as the 'moderate annoyance daytime and evening' criteria from the Noise EPP (50 dBA). For the worst case 15 minute scenario the RBL + 5 dBA was adopted. The RBL for location A (southern rural living zone) is drawn from data collected at location 1, which had an RBL of approximately 45 dBA (refer Table 3-2). The RBL for location B (western rural living zone) was drawn from data collected at location 2 which had an $L_{90}$ of ~ 35 dBA, which has been adopted as the RBL for this location (section 3 of Appendix A explains why this is appropriate).

Tyrecycle only operates during the daytime, therefore no assessment within the nighttime period is required.

Table 3-3 - Project specific noise criteria

| Location[5] | Time Period | Source of criteria | Criteria |
|---|---|---|---|
| **Location A - Southern rural living zone** | Daytime (6am – 10pm) | Noise EPP 'moderate annoyance, daytime and evening' | 50 dBA, $L_{eq\ (16\ hour)}$ |
| | Worse-cast 15 minutes | RBL + 5 dB (EPA NSW, 2017) | 50 dBA $L_{eq\ (15\ minute)}$ |
| **Location B - Western rural living zone** | Daytime (6am – 10pm) | Noise EPP 'moderate annoyance, daytime and evening' | 50 dBA $L_{eq\ (16\ hour)}$ |
| | Worst-cast 15 minutes | RBL + 5 dB (EPA NSW, 2017) | 40 dBA $L_{eq\ (15\ minute)}$ |

#### 3.1.2.2 Noise modelling

NVC undertook noise modelling to predict the noise impacts of both the existing operations and the proposed expansion (the Project). Both existing operations and proposed expansion were modelled for normal conditions (which predicts noise levels across a full 16 hour day) and worst-case conditions (which models a 15-minute period where all equipment on site is operating simultaneously).

Noise sources, their predicted sound power level and hours in operation for each scenario were identified and mapped by NVC (refer Section 4 of Appendix A). For the existing operations key noise sources included telehandler, bobcat, forklift, existing shredder and several truck types both moving and idle. For the proposed expansion, the same noise sources were modelled, with a slight adjustment to truck numbers (commensurate with predicted changes) and the addition of the new shredder.

Modelling results are provided as noise contours in Figure 3-2 and Figure 3-3 for existing operations and Figure 3-4 and Figure 3-5 for the proposed Project. Locations A and B as shown on the noise contour maps represent the properties which are most affected by potential Tyrecycle noise to the south and west respectively. Predicted noise levels are summarised in Table 3-4.

The results of the modelling of existing operations were compared to attended and unattended noise monitoring data to provide context to the accuracy of the model in predicting noise levels at nearby locations. The modelling for Location A was generally consistent with the measured worst case noise levels at this location, indicating the model is predicting accurately to the south. In contrast, the predicted 15-minute worst case noise levels at location 4 to the west were generally 13 dB greater than equivalent measurements taken at this location (which were taken during a period in which all site equipment was operating simultaneously and thus is representative of worst case noise emissions from the site); indicating the model is over predicting noise levels in this direction. NVC attribute this difference to directionality of noise from the shredder and additional screening to the west of the Project site which were not fully considered in the software of the model (refer to Section 4.1.3 of Appendix A for further details).

The results of the modelling of the proposed expansion were compared against the predicted noise levels for the existing operations, the adopted criteria and the indicator levels in the Noise EPP. Predicted noise levels are summarised below, in Table 3-4.

[5] The Locations below represent the two most affected sensitive receiver locations, namely the nearest sensitive received at 4 Wiely Park Road to the south (Location A) and the worst affected sensitive receiver to the west at 24 Cobbs Hill Road (Location B). Refer to Figure 1.1 in Appendix A.

Table 3-4 - Summary of predicted noise levels from software noise modelling (Source: NVC)

| | Sound pressure level (dBA) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tyrecycle Operating hours (7:30am – 4pm) Leq (8.5 hour) | | | Full day (6am – 10pm) Leq (16 hour) | | | Worst-case Leq (15 minute) | | |
| | Existing | Expansion[6] | Criteria | Existing | Expansion[6] | Criteria | Existing | Expansion[6] | Criteria |
| **Location A** | 48 | 48 | 50 | 45 | 46 | 50 | 50 | 50 | 50 |
| **Location B** | 37 | 37 | 50 | 35 | 35 | 50 | 39 | 39 | 40 |

The modelled difference in noise levels between the existing operations and proposed operations at each location are predicted to be 1 dB or less, and thus the difference in noise level as a result of the Project is expected to be imperceptible. All predicted noise levels across the full daytime period satisfy the 50 dBA criterion for 'moderate annoyance' outlined by the TAS Noise EPP. It is noted that the TAS Noise EPP's 50 dBA criterion assumes an Leq over 16-hour period, and thus when comparing the predicted 16-hour Leq from Tyrecycle, noise emissions from site comfortably satisfy this criterion. Therefore, annoyance due to noise from Tyrecycle is not expected. Additionally, all locations are predicted to see noise levels below the respective worst-case 15-minute criteria.

NVC note that the predicted noise levels at location B are a conservative representation, with noise levels likely to be substantially lower in practice due to the noise model over predicting noise levels to the west by nominally 13 dB.

The existing shredder is noted as being the dominant noise source on site during both existing and proposed operational scenarios due to its raised position and high sound power level. However, the noise generated by the shredder was observed to be broadband, reducing its intrusiveness in the presence of other external noise sources such as traffic noise. NVC assessed the results for intrusive or dominant characteristics in accordance with the Tasmanian Noise Measurement Procedures Manual at the worst affected sensitive premises with no adjustments required.

NVC concludes that noise levels from the proposed expansion are predicted to be acceptable at all nearby sensitive premises and thus screening of any noise equipment on site is not specifically required to meet the adopted criteria (NVC, 2025).

[6] The modelled noise levels with the expansion in place shown in this table assume the new shredder and increased capacity are in place (the Project) but do not include noise mitigation achieved as a result of proposed acoustic barrier on existing shredder as described below. This is to demonstrate that the Project is compliant with adopted criteria without additional screening, noting the proposed acoustic barrier on the existing shredder is an additional measure to achieve best practice for existing operations.

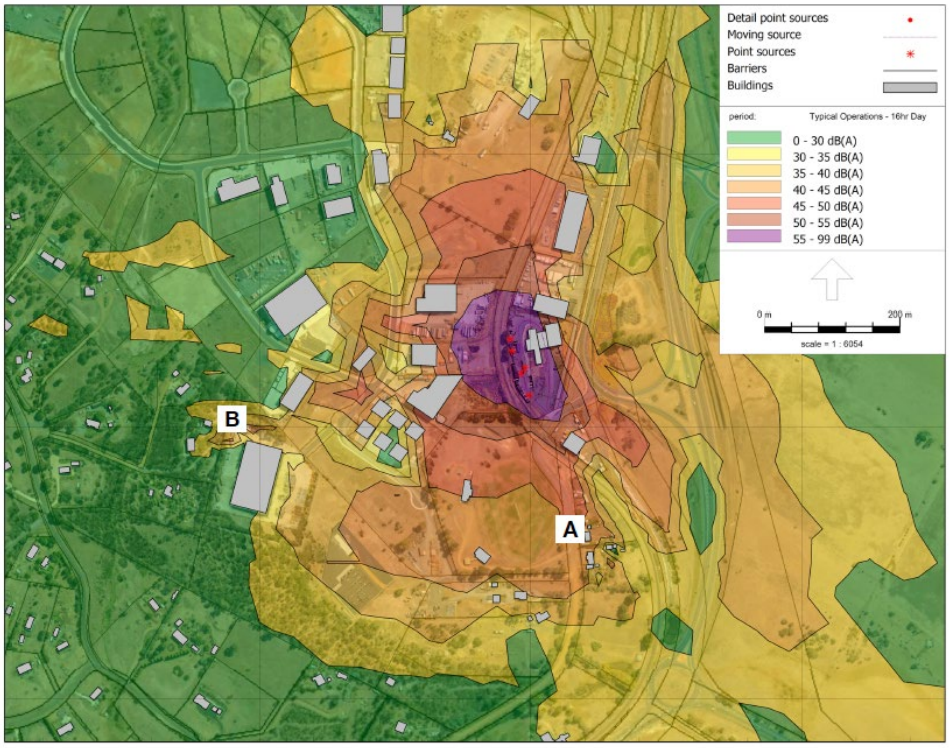



Figure 3-2 Predicted noise contours existing operations – typical (Source: NVC)

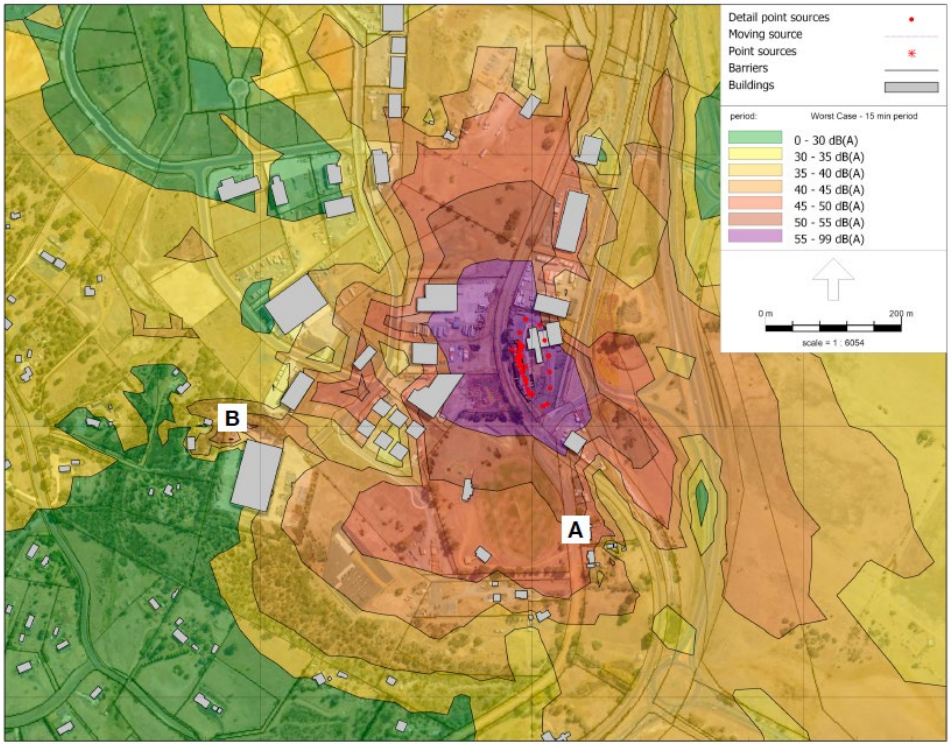



Figure 3-3 Predicted noise contours existing operations – worst case (Source: NVC)

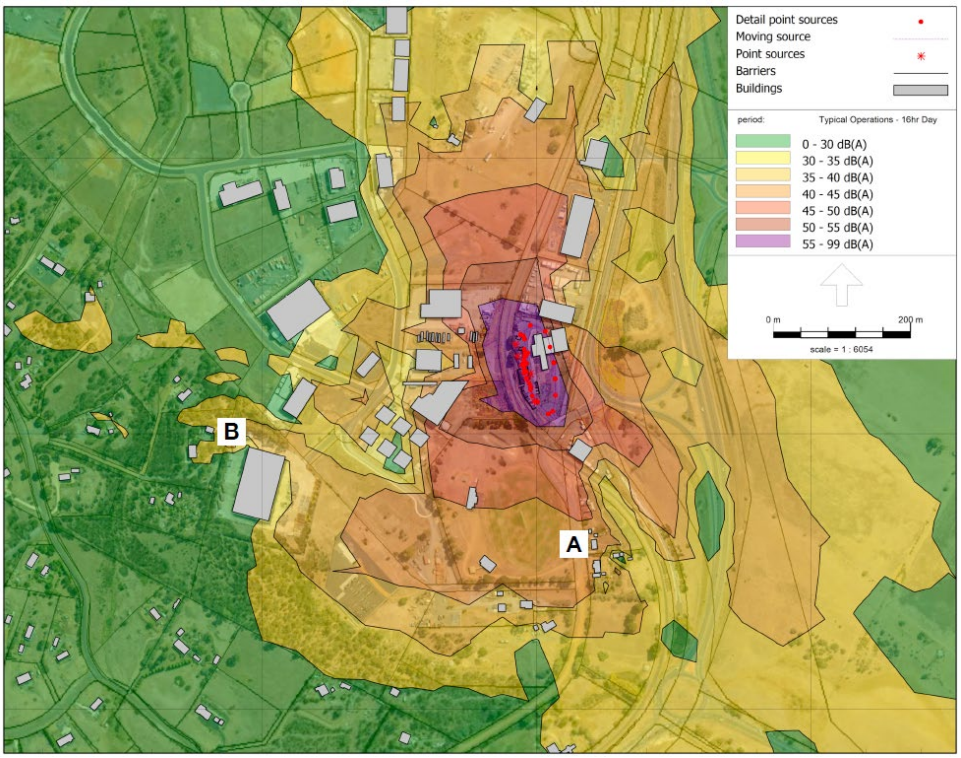



Figure 3-4 Predicted noise contours proposed expansion – typical (Source: NVC)

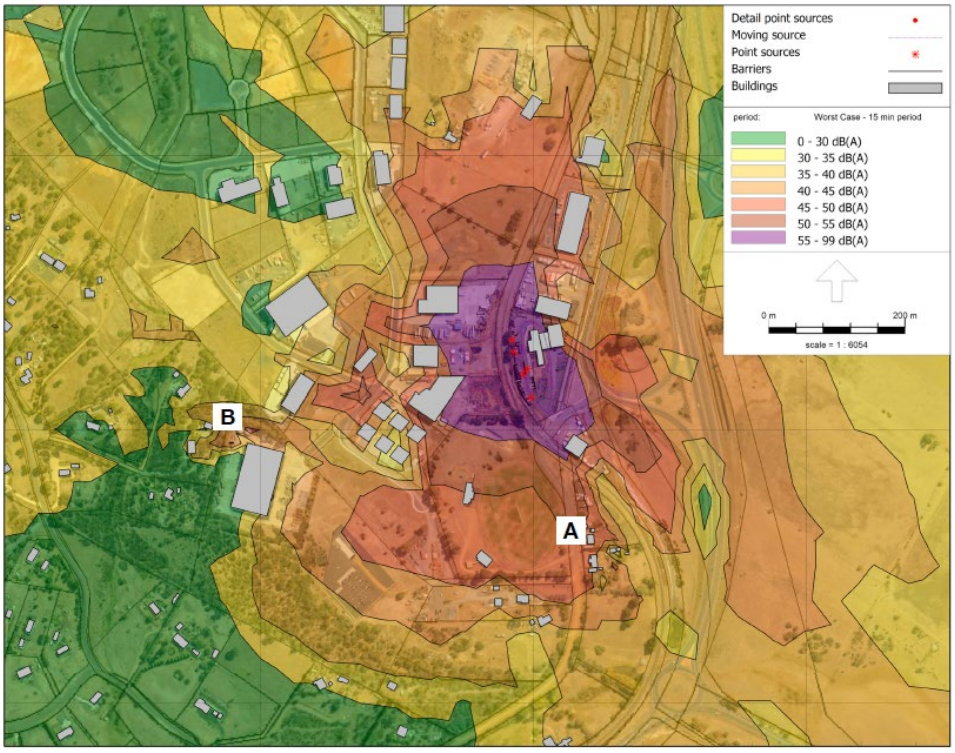



Figure 3-5 Predicted noise contours proposed expansion – worst case (Source: NVC)

NVC note that, although the adopted criteria are met and the proposed new shredder has a very small effect on modelled noise emissions, it is considered best practice to screen any noisy fixed plant equipment that has line of sight to any sensitive receptor. The new shredder will have significant screening to the south of site due to the existing shredder platform and equipment. The new shredder alone is predicted to result in a noise level of 28 dBA over a 15-minute worst-case period and thus is not deemed noisy in the context of the existing background noise levels. Software noise modelling and on-site observations suggest that noise emissions from the existing shredder are the dominant noise source on site due to their magnitude, location, and up-time. As such, screening the existing shredder is deemed appropriate to achieve best-practice, as outlined within the Project Specific Guidelines. NVC recommend the installation of an acoustic barrier to the south of the existing shredder to screen line of sight between the existing shredder and residential dwellings to the south (Location A). Specifications for the proposed acoustic barrier are provided in section 6 of Appendix A. Tyrecycle have committed to the installation of an acoustic barrier on the existing shredder (refer Section 3.1.3).

NVC undertook modelling of the proposed expansion with the addition of the proposed acoustic barrier on the existing shredder and found that predicted noise emissions from the site are predicted to be *lower* than current conditions at receivers to the south (Location A) as a result of the Project. Refer to section 6 of Appendix A for further details. It is noted that the implementation of the barrier on the existing shredder is proposed to achieve best practice and is not a strict requirement to meet the numerical criteria adopted for the Project.

NVC provide a comparison of the predicted noise levels at sensitive receptors with the expansion and the proposed acoustic barrier (on the existing shredder) in place and the measured existing background noise at Location A and B. NVC conclude that, after the implementation of the proposed acoustic barrier, noise levels across a full 16-hour day and during a worst-case 15-minute period do not exceed the existing background noise level (NVC, 2025). Thus, following the implementation of the proposed acoustic barrier on the existing shredder, the Project is predicted to have no increase to the existing background noise levels at nearby sensitive premises (NVC, 2025).

### 3.1.3 Management, mitigation and monitoring

The noise assessment undertaken by NVC concluded that the difference in noise levels between existing and proposed operations at each location are predicted to be less than 1 dB and not expected to be perceivable. Additionally, all predicted noise levels at nearby sensitive receptors are well within the relevant indicator levels from the Noise EPP and the 15 minute worst case criteria from the NSW Noise Policy for Industry.

As such, NVC conclude that specific mitigation or noise screening is not required to meet the adopted criteria. However, in order to achieve best practice NVC suggests an acoustic barrier be fitted to the existing shredder to screen line of sight between the existing shredder and residential dwellings to the south.

A complaints procedure will be maintained to address any noise complaint that may be received.

| Reference | Management, mitigation or monitoring measure |
|---|---|
| Noise MM 1 | An acoustic barrier, consistent with the specifications provide by NVC in Appendix A will be fitted to the existing shredder on site, to screen line of sight between the existing shredder and residential dwellings to the south of the site. |
| Noise MM 2 | Contact details will be provided on the Tyrecycle website to facilitate any feedback or complaints from the public.<br>If a complaint is received Tyrecycle will enact existing internal protocols which include investigating the complaint, addressing any identified issues, communicating the outcomes to the complainant and record keeping. |

### 3.1.4 Residual impacts

NVC found that noise levels from the proposed expansion at Tyrecycle's Bridgewater site are predicted to satisfy both the Tasmanian Noise EEP for typical daytime operations and the NSW EPA's Noise Policy for Industry during a worst-case 15-minute period.

Following the proposed expansion, assuming no new noise control is implemented, noise levels are predicted to increase by an imperceptible amount (≤ 1 dB) at the nearest sensitive receivers and therefore are unlikely to result in environmental nuisance or harm.

As best-practice, Tyrecycle propose to install an acoustic barrier to the south of the existing shredder, screening line of sight between the existing shredder and the nearest sensitive receivers to the south. After implementing the acoustic barrier noise levels from Tyrecycle following the proposed expansions are predicted to decrease compared to existing operations and be below the existing background noise level at the surrounding noise sensitive premises.

Given the results of the noise assessment, the proposal is deemed to be consistent with Part 5 of the Noise EPP.

## 3.2 Air quality

### 3.2.1 Existing environment

The Project Site is within the Brighton Industrial Estate, surrounded by commercial and industrial operations. As documented in Section 2.1, there are several residential houses and a recreational cricket ground to the south; the closest sensitive receptor to the Project Site boundary is a residential house approximately 180 m away, as shown in Figure 2-1. Other uses of the area surrounding the Project Site include the Midland Highway, which is less than 200 m away, and the Boral Bridgewater Quarry, which is approximately 750 m to the east.

The terrain in the immediate vicinity of the Project Site is relatively flat, sitting in the plain around the Jordan River. Further afield there are areas of hills to the west and north and the Derwent River is to the south.

Winds are predominantly northerly in the morning and westerly or north/north-westerly in the afternoons, with the strongest winds recorded in spring and summer; the annual mean rainfall of the area is 480.5 mm (BOM, 2025). The Project Site is predominantly sealed hardstand, surrounded by grassed verges and landscaped garden beds. The site is not considered especially windy or prone to dust generation due to the temperate nature of the location and sealed nature of the trafficable parts of the Project Site. The closest air monitoring station to the Project is the New Town station approximately 12.5 km away, likely too far away to make any inferences about the behaviour of the airshed around the Project Site and surrounds.

The existing operation does not generate significate air emissions. The tyre shredding operation uses a water spray to wet the rubber material down which minimises the risk of any dust or other airborne particulates during shredding. The shredder runs on mains power and so does not emit any exhaust. The machinery used on site, including the bobcats and telehandler run on either gas or diesel and emit small volumes of exhaust emissions. Trucks supplying tyres to the Project Site and exporting shredded product generate exhaust emissions. Vehicle movements within and accessing the Project Site are unlikely to generate significant dust emissions as the site entrance and access roads are all sealed. There is very low risk of airborne particulates from the loads themselves, with all incoming tyres arriving whole and all outgoing product exported in sealed shipping containers.

There have been no complaints received in the last 5 years relating to air emissions.

The main source of potential emissions outside the Project Site but in the vicinity of the Project are likely to be related to vehicle emissions from the adjacent Midland highway, and dust generation from quarrying activities at the nearby Boral Quarry.

### 3.2.2 Potential impacts

The operation of the Project will not introduce any new air emissions sources, nor significantly increase the risk, compared to the existing operational scenario.

The addition of the new shredder will not result in any significant increase in airborne particulate matter being released, with the new shredder also fitted with a water spray to wet down incoming rubber material, decreasing the risk of generating any particulate matter. There will be a slight increase in the use of machinery, including the bobcats and telehandler, which will result in a slight increase in exhaust emissions.

There will be a gradual increase in both incoming and outgoing trucks over time as demand grows, up to double the current rate of movements once the site reaches maximum capacity. This will result in an increase in vehicle exhaust emissions to the local airshed. Incoming deliveries are whole tyres, presenting little to no risk of airborne particulates, and outgoing product will be transported either in sealed shipping containers (6 inch shred) or covered semitrailer loads (1.5 inch shred). The majority of the Project Site is

sealed, with the remaining areas either gardens or areas of grass. There is unlikely to be dust generated from any of these areas.

There are no additional risks to air quality as a result of the Project under normal operation. There are no specific operational scenarios (e.g. periods of higher than usual processing or periods of very heavy rains where processing may pause) or atmospheric conditions (e.g. dry, windy days) that would be expected to have any measurable effect on air emissions from the Project Site.

The one exception is in the event of an emergency, such as a tyre fire, where there would be significant volumes of toxic smoke released into the atmosphere. The site operates under a FRMP to mitigate the risk of this occurring (refer Section 2.1).

### 3.2.3 Management, mitigation and monitoring

The following management and mitigation measures are proposed for the Project.

| Reference | Management, mitigation or monitoring measure |
|---|---|
| Air quality MM 1 | Water sprays will be fitted to both the tyre shredders, and will be properly maintained, to minimise the release of any particulate matter. |
| Air quality MM 2 | Machinery used onsite will be regularly maintained to ensure emissions are minimised. |
| Air quality MM 3 | Shredded tyres will be exported from the site in a manner that minimises the risk of air emissions; either in sealed shipping containers or covered truck loads. |

Given the relatively low risk of impact, no specific monitoring is proposed for air quality for the Project.

### 3.2.4 Residual impacts

With the application of the proposed management measures related to water sprays, vehicle maintenance and covering of exported product, the Project poses a low risk of air emissions and has a very low likelihood of causing environmental nuisance or harm at or beyond the boundary of the land.

The key air emission expected to increase as a result of the Project is a gradual increase in truck exhaust emissions associated with the increased production capacity of the Project Site. This is an unavoidable indirect impact of the Project, which would not be avoided by the Project not proceeding as waste tyres will continue to be generated and require some form of recycling or disposal in Tasmania.

The *Tasmanian Environment Protection Policy (Air Quality) 2004* (Air EPP) provides a framework for the management and regulation of point source and diffuse emissions to air for pollutants with the potential to cause environmental harm. The Project does not propose any point sources of air pollution (as defined by the Air EPP) but will result in diffuse sources of air pollution, most notably vehicle emissions from truck deliveries and export. In accordance with the Air EPP diffuse sources of air pollution will be managed using best practice environmental management (including covering of loads and maintenance of vehicles) such that the Project does not prejudice the environmental values identified by the Air EPP.

## 3.3 Water quality

### 3.3.1 Existing environment

The only water input to the existing operation is water sprayed onto the shredder. The sprayed water adheres to the tyres as they enter the shredder and helps to lubricate the shredding process. Approximately 100 L per hour of water is sprayed onto the tyres as they enter the shredder. This water either evaporates in the shredding process or adheres to the rubber product and evaporates in the storage bay. In wet conditions the water spray can pool on the ground under the shredder and combines with other site runoff.

The Project site is almost completely flat, with the far western edge sloping slightly towards the adjacent railway line. Stormwater from the majority of the site drains into the stormwater drains adjacent the main buildings and a small portion along the western boundary of the site diffusely drains offsite into the adjacent grassed area along the railway line. The majority of stormwater from the Project Site is discharged to the stormwater network via the abovementioned drains.

The existing buildings on site are all connected to stormwater (roof water) and sewer (amenities). There is no proposed change to these buildings and no risk of impact to local surface or groundwater from these features.

There are no natural waterways within, or directly surrounding, the Project Site and no immediately downgradient sensitive water uses. The closest waterbodies to the Project Site are the Jordan River to the east and Ashburton Creek to the west, both more than 500 m from the Project Site. The Protected Environmental Values (PEVs) for these water bodies include:

- A: Protection of Aquatic Ecosystems
  - (ii) Protection of modified (not pristine) ecosystems
    - a. from which edible fish are harvested
- B: Recreational Water Quality & Aesthetics
  - (i) Primary contact water quality (New Town Rivulet above Lady Franklin Gallery and where Lenah Valley Road crosses the rivulet)
  - (ii) Secondary contact water quality
  - (iii) Aesthetic water quality
- D: Agricultural Water Uses
  - (i) Irrigation
  - (ii) Stock watering
- E: Industrial Water Supply (Cascade Brewery, Cuthbertson Tannery)

*"That is, as a minimum, water quality management strategies should seek to provide water of a physical and chemical nature to support a healthy, but modified aquatic ecosystem from which edible fish may be harvested; that is acceptable for irrigation and stock watering purposes; which will allow people to safely engage in primary contact recreation activities such as swimming at New Town Rivulet above Lady Franklin Gallery and where Lenah Valley Road crosses the rivulet and secondary contact recreation activities such as paddling or fishing in aesthetically pleasing waters; and which is suitable for industrial use by Cascade Brewery and Cuthbertson Tannery"* (Department of Primary Industries, December 2023).

The nearest mapped groundwater bores to the Project Site lie just over 120m to the south at Weily Park (Bore IDs 17344 and 17345). Publicly available data indicates these bores were drilled in 1995, with their last recorded status the same year. The standing water level in these bores is not recorded. It is unclear if these groundwater bores are currently used. The Project poses no risk to local groundwater (refer below).

### 3.3.2 Potential impacts

The Project does not introduce any novel liquid waste streams, with the only day-to-day liquid waste to be managed being water spray to the shredders and site stormwater.

With the addition of the new shredder there will be an additional 100 L/h of water spray required. As outlined above, this water will generally evaporate from the shredded tyres, but may occasionally pool under the shredder in wetter conditions. The combined volume of the water residue that would be emitted from both the shredders would still be very low. The proposed new shredder will be equipped with a bund around the base to contain any residual tyre pieces as well as containing any water dripping from the shredder (refer Figure 3-6). As part of the Project Tyrecycle propose to install a similar bund around the base of the existing shredder. These proposed bunds will assist in containing any water coming from the shredder (either the water spray or rainfall). In extreme weather events the bunds could overtop and overflow would be captured in the overall stormwater flows from the site.

There are no proposed changes to stormwater flows at the site, with the majority of the site draining to the stormwater drainage network, and a small part of the western side of the site diffusely draining to a grass swale west of the site. Stormwater has the potential to have entrained particulate matter including sediment and tyre dust. With the proposed bunding systems in place around the shredders, the majority of tyre dust will be contained (noting the bunds will be regularly cleaned to minimise dust build up). To further minimise the potential for entrained materials to enter the stormwater system, Tyrecycle will deploy sediment socks or bags at the main stormwater drainage inlets. With these measures in place, stormwater runoff presents a low risk to the environment.

In the event of a tyre fire, wastewater from firefighting (likely to contain ash and debris) has the potential to report to the receiving environment either via draining into the surrounding environment or through the stormwater drainage network. Firefighting foams (particularly aqueous film forming foam) contain pollutants, including PFAS (per and poly fluoroalkyl substances) that have the potential to impact on natural waterways if not contained. Ash and debris from the fire itself can contain harmful substances, which if left uncontrolled could pollute waterways or the receiving environment. In accordance with the FMRP, in the event of a fire, on site drain plugs will be deployed to capture any firefighting wastewater. Additionally, spill kits on site will be upgraded to include absorbent socks which will be deployed in the event of firefighting to capture any firefighting water that may drain to other locations not protected by drain plugs. With these measures in place firefighting wastewater can be contained to minimise any risk to the environment. The Project does not introduce any additional fire risk compared to current operations.

As outlined above in Section 3.3.1, there are no water bodies within or adjacent to the Project Site. The nearest water bodies lie a considerable distance from the Project Site and, given that the only potential liquid waste discharge from the site is diffuse release of stormwater, there is no impact to these waterways anticipated.

The Project does not present any risk to groundwater as all actively used parts of the site are sealed hardstand.

Figure 3-6 Example of proposed shredder bund to be installed under existing and proposed new shredder (Source: Tyrecycle)

### 3.3.3 Management, mitigation and monitoring

The following management and mitigation measures are proposed for the Project.

| Reference | Management, mitigation or monitoring measure |
|---|---|
| **Management and mitigation** | |
| Water Quality MM 1 | The new and existing shredders will be fitted with bunds to capture any tyre dust and water. The bunds will be inspected weekly and cleaned out regularly to ensure no build-up of tyre dust or tyre pieces. Tyre pieces will be added to the shred stockpiles and tyre dust will be placed in the onsite skip bin for disposal at landfill. |
| Water Quality MM 2 | Sediment socks or bags will be deployed (and appropriately maintained) at entrances to the existing site stormwater drains to capture any sediment or tyre dust entrained in site stormwater. |
| Water Quality MM 3 | Spill kits will be kept on site and all relevant staff trained in their use. The existing spill kits will be upgraded to include absorbent socks to be used in the event of firefighting. |
| Water Quality MM 4 | In the event of firefighting on site, drain plugs will be installed in existing stormwater drains and absorbent socks used around other drainage points to contain any firefighting water. |
| **Monitoring** | |
| Water Quality MON 1 | Daily visual inspections of the Project site will be undertaken to ensure all water management measures are functioning as intended (i.e. free of obstruction/blockage) and any issues rectified. |

The proponent does not currently monitor stormwater quality on site. The Project does not present any increased risk of stormwater contamination (compared to current operations) and will improve the quality of stormwater leaving the site via the addition of bunds under the existing (and proposed) shredder to capture tyre dust and the installation of sediment socks or bags at entrances to the existing site

stormwater drains. With these measures in place, stormwater management at the site will improve and overall presents a very low risk of impact, therefore no specific monitoring or water quality targets are proposed.

### 3.3.4 Residual impacts

With the proposed mitigation measures in place, the risk of polluted discharge reaching the adjacent environment will reduce even further compared to the existing operation. Overall, the Project presents a very low risk of impact to surface or groundwaters.

The Project does not present a risk to any waterway in the vicinity of the Project and hence does not present a risk to the PEVs of any such waterway and therefore the Project is consistent with the requirements of the *State Policy on Water Quality Management 1997*.

## 3.4 Natural values

### 3.4.1 Existing environment

The Project Site itself is mainly sealed or has existing buildings. There are several grassed areas and an area of garden. There are several pine trees along the western fence line that overhang the production area slightly. The Project Site is mapped as urban areas (FUR) on TasVeg 4.

A Natural Values Atlas Report was generated for the Project and a search of the Project Site and surrounds undertaken on the LISTMap. The following ecological values were identified within or nearby to the Project Site:

- A single record of the woolly new-holland-daisy (*Vittadinia gracilis*) (listed as rare under the *Threatened Species Protection Act 1995*) within the Project Site boundary. This record is dated 1993 and has a 100m accuracy rating. Given the current condition of the site and the date of the record, it is considered likely the species does not currently occur on site (noting that all Project impacts are contained within already sealed parts of the site nonetheless).
- In the broader region there are several threatened flora records in nearby road verges, including doublejointed speargrass (*Austrostipa bigeniculata*), narrowleaf new holland daisy (*Vittadinia muelleri*), woolly new holland daisy (*Vittadinia gracilis*), grassland flaxlily (*Dianella amoena*) and crested speargrass (*Austrostipa blackii*) and basalt guineaflower (*Hibbertia basaltica*). These are all outside the Project Site and will not be impacted by the Project. It is unlikely any of these species would occur on site (given the highly disturbed nature of the site).
- There is no native vegetation within the Project Site or any likely to be affected by the Project in neighbouring areas. The Project Site is mapped as (FUR) Urban areas under TASVEG, with surrounding areas mapped as (FUM) Extra-urban miscellaneous and (FUR) Urban areas.
- There are no listed fauna records within the Project Site or immediate surrounds, and the Project Site is unlikely to provide habitat values for native fauna.

  No weeds records occur within the Project Site, but the following declared weeds were identified nearby to the Project Site within the surrounding road reserve areas: espartillo (*Amelichloa caudata*), fennel (*Foeniculum vulgare*), montpellier broom (*Genista monspessulana*), hoary cress (*Lepidium draba*), African boxthorn (*Lycium ferocissimum*), white horehound *(Marrubium vulgare*) and blackberry (*Rubus fruticosus*).

### 3.4.2 Potential impacts

As the Project does not involve any land clearing and is limited to erecting new equipment on existing sealed surfaces, no natural values are likely to be impacted through construction. The Project does not present any risk to threatened vegetation communities, flora or fauna (noting the isolated threatened flora record on site is likely to be erroneous and all works are contained within existing sealed areas of the site).

The construction and operation of the Project pose very low risk of weed or pathogen introduction or spread. All vehicles access the site, and move around the site, via fully sealed roads and surfaces, hence the risk of spreading mud which could contain weed seeds is very low. Tyres received at the site are generally free of large clods of soil or mud that could harbour seeds or other weed propagules. Any heavily soiled tyres are discarded (refer Section 3.5) as they cannot be readily processed by the shredder.

There are no Matters of National Environmental Significance listed under the *Environment Protection Biodiversity Conservation Act 1999* likely to be impacted by the Project, and Commonwealth approval is not expected to be required.

### 3.4.3 Management, mitigation and monitoring

As all vehicles access the site via sealed roads, there is no proposed vehicle washdown due to the very low risk of weed introduction.

| Reference | Management, mitigation or monitoring measure |
|---|---|
| Natural Values MM 1 | The Project Site will be subject to routine visual inspection and any environmental weeds treated by a suitably qualified operator using appropriate weed treatments. |

### 3.4.4 Residual impacts

The Project poses no risk to threatened flora, fauna or vegetation communities. The Project poses very little risk of weed, pest or pathogen introduction and the residual impact of the Project on natural values is considered to be very low.

## 3.5 Waste

The Project will produce the following waste streams:

- Rejected whole waste tyres (around 0.5% of incoming tyres)
- Small volumes of waste oil from machinery servicing (10s of litres)
- Small volumes of general refuse including general recyclables (several tonnes per year)
- Tyre dust removed from below the shredders

Some tyres received on site are unsuitable for shredding due to being overly dirty or contaminated by rocks and other materials. These reject tyres are placed in a skip bin that is regularly collected and disposed of to a licenced landfill.

Waste that is considered environmentally hazardous (i.e. waste oil) will be stored in bunded containers (or in the existing chemical storage locker) inside the service warehouse prior to collection.

The remaining waste streams will be disposed of into their relevant site bins at the site waste collection area and also collected for disposal at a licenced facility. Recyclable general waste will be recycled where suitable into onsite recycling bins. Tyre dust will be routinely cleaned out from below the shredders and disposed of in the skip bin on site for disposal at landfill.

There are no other byproducts or residues separated from the tyres (aside from the small amount of tyre dust generated by the shredder as described above).

The Project is considered a Class B Resource Recovery Facility under the *Waste and Resource Recovery Act 2022*. The proponent therefore must adhere to the recording and reporting requirements under the Act and associated regulations. The main requirement for the Project is ensuring a resource recovery movement record[7] is maintained for each movement into and out of the facility.

The resource recovery movement record is to contain:

- The source of waste

[7] See Section 21 of the *Waste and Resource Recovery Regulations 2022*

- The quantity of the waste (incoming tyre quantities will measured on the weighbridge)
- The material that makes up the waste (including tyre type)

The Project must submit an annual return every year before 1 November for all data from the previous financial year.

### 3.5.1 Management, mitigation and monitoring

The following management, mitigation and monitoring is proposed for the Project.

| Reference | Management, mitigation or monitoring measure |
|---|---|
| **Management and mitigation** | |
| Waste MM 1 | A waste management area will be delineated within the existing site compound, with all wastes to be segregated (into recyclables and non-recyclables) and stored in sealed bins. |
| Waste MM 2 | All waste classed as environmentally hazardous materials will be stored in appropriately bunded containers or in the existing chemical storage locker in the maintenance building. |
| Waste MM 3 | Waste will be removed from site on a regular basis by a suitably qualified operator and disposed of at a suitably licensed facility. |
| **Monitoring** | |
| Waste MON 1 | A resource recovery movement record will be maintained for each movement into and out of the facility.<br>The resource recovery movement record will contain:<br>· The source of waste<br>· The quantity of the waste<br>· The material that makes up the waste<br>Records will be maintained electronically. |
| Waste MON 2 | The facility will submit an annual return every year before 1 November for all data from the previous financial year. |

### 3.5.2 Residual impacts

The Project does not generate significant volumes of waste. Ensuring waste produced is stored and disposed of correctly will ensure the Project effectively manages all waste streams.

The overall residual impact of the Project in relation to waste management is a positive one. The recycling of waste tyre rubber contributes significantly to the reuse of waste materials and reduction of landfilling in Tasmania.

## 3.6 Environmentally hazardous substances

The Project stores and handles very small quantities (no more than 100 L) of machinery oil which is stored in a purpose-built chemical storage locker in the maintenance building. Any machinery maintenance required is undertaken within the maintenance building, to minimise the risk of leaks or spills. Very small quantities of domestic cleaning products are also stored and used within the kitchen and amenities in the administration building.

On site vehicles are powered by diesel and are currently refuelled via a mobile refuelling unit which is housed offsite and comes as required for refuelling purposes. In the future Tyrecycle may change to using a small (500 L) self-bunded fuel storage container on site for refuelling purposes. All refuelling occurs within the fully sealed operational area of the site. Spill kits are kept on site to clean up any spill if required (refer to management measures Water Quality MM3 and Water Quality MM4 in Section 3.3.3 for details).

The waste tyres processed by the facility are classified as controlled wastes in accordance with the definition of controlled waste in the EMPC Act and their inclusion in Schedule A of the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998*. Waste tyres are also a prescribed controlled waste in regulation 5 of Tasmania's *Environmental Management and Pollution Control (Waste Management) Regulations 2020*. Tyres have a Waste Code classification of T140[8].

As a controlled waste, tyres are handled in accordance with all relevant guidelines, and the methodologies for receipt, handling and export of waste tyres are documented in Section 2. The methods for data collection and reporting on waste tyre volumes is described in Section 3.5 (refer to management measure Waste MON 1 in Section 3.5.1).

| Reference | Management, mitigation or monitoring measure |
|---|---|
| Environmentally hazardous substances MM 1 | Machinery oil will be stored in a bunded chemical storage locker in the maintenance building and any fuel to be stored on site will be within a self-bunded fuel storage container. |

## 3.7 Greenhouse gas emissions and climate change

The Project will implement best practice environmental management in energy consumption by running both existing and proposed new shredders via mains power. Having achieved a target of 100% renewable energy in 2020, the majority of electricity supplied by mains power in Tasmania is sourced from renewable energy generation (noting that electricity used in Tasmania is not always from renewable sources as the state also imports electricity as required via Basslink).

Mobile machinery on site (bobcats and telehandlers) currently run on diesel. Energy consumption and emissions from these vehicles can be minimised by ensuring they are well maintained and opting for lower emission options in the future when the time comes to replace any aging units. End of life tyres are transported to site by the existing Tyrecycle transport fleet, and as this fleet ages Tyrecycle will investigate newer lower emission vehicles where possible.

The Project facilitates several improvements in relation to the greenhouse gas emissions from shredded tyre export. Specifically, the Project will result in the use of fewer, larger, trucks to export the new shred

[8] https://epa.tas.gov.au/business-industry/regulation/waste-management/controlled-waste/controlled-waste-category-codes

size as well as a reduction in shipping related impacts as a significant proportion of the shredded product will be used within Tasmania rather than being exported to the mainland as is currently the case. Additionally, Tyrecycle will continue working with transport partners to encourage the use of vehicles with lower emissions where possible.

Tasmania's Climate Change Action Plan 2023-25 outlines the government's plan for action on climate change and is intended to help Tasmania reach its target to maintain net zero greenhouse gas emissions, or lower, from 2030. The Action Plan is supported by Emissions Reduction and Resilience Plans. The Project furthers the objectives of the Waste Emissions Reduction and Resilience Plan 2024 – 2029 (the Plan), specifically the focus on increasing recycling and recovery of high emission waste streams (which includes waste tyres). One of the key actions in the Plan is providing support for the recycling and recovery of end-of-life tyres through the Waste Tyre Reprocessing Grant Program, which Tyrecycle received funding from for the Bridgewater Project. By providing ongoing services to the Tasmanian market to recycle end-of-life tyres and shredding to a smaller size for use as an alternative fuel source for the Cement Australia kiln, the Project will help reduce the state's carbon emissions and provide more sustainable use of end-of-life tyres produced in Tasmania (Climate Change Office | RECFIT, 2024), directly contributing to the state's climate change goals.

The potential impacts of climate change on the project could include changed weather patterns, more intense storm events or more severe fire weather. These changes could increase the potential for dust and stormwater runoff and increase the risk of fire on site. However, these potential impacts have been considered in the design of the facility and the proposed management measures in this EER including the management of airborne particulates (Section 3.2.3.), stormwater (Section 3.3.3) and fire (addressed in the site's FMRP as per Section 2.1).

## 3.8 Monitoring

The following table summarises the proposed monitoring and reporting for the Project as documented in the preceding sections.

| Reference | Monitoring and reporting |
|---|---|
| Water Quality MON 1 | Daily visual inspections of the Project site will be undertaken to ensure all water management measures are functioning as intended (i.e. free of obstruction/blockage) and any issues rectified. |
| Waste MON 1 | A resource recovery movement record will be maintained for each movement into and out of the facility.<br>The resource recovery movement record will contain:<br>· The source of waste<br>· The quantity of the waste<br>· The material that makes up the waste<br>Records will be maintained electronically. |
| Waste MON 2 | The facility will submit an annual return every year before 1 November for all data from the previous financial year. |

## 3.9 Decommissioning and rehabilitation

There are no current plans to cease operations at the site at any given date. The proposed new shredder will extend the lifespan of the existing operation, which can then be progressively extended indefinitely via maintenance and replacement parts. The activity is likely to continue operation until such time as there is no longer a demand for tyre shredding in Tasmania.

In general terms decommissioning and rehabilitation measures are likely to include:

- Decommissioning and removal of all tyre processing plant and the removal of other infrastructure in the event it is not to be used for other purposes (noting that the activity is on a shared site, with common use of infrastructure such as roads, buildings and weigh bridge).
- Removal or mitigation of any environmental hazards of land contamination that may pose a risk of environmental harm.
- Stabilisation of any land surfaces that may be subject to erosion.

The final details of decommissioning will depend on the end use of the site, which is likely to be influenced by other shared user requirements at that time. All tyre processing equipment is surface mounted to the existing hardstand and thus can readily be removed leaving the existing hardstand available for other future uses.

Prior to any planned cessation of the activity a Decommissioning and Rehabilitation Plan (DRP) will be prepared, in accordance with any relevant guidelines available at the time and submitted to the EPA for approval.

# 4 Part D – Summary of proposed management measures

The following summary tables outline the management and mitigation measures committed to by the proponent for the Project, as described in Section 3.

| Reference | Proposed management measure | Timeframe |
|---|---|---|
| Noise MM 1 | An acoustic barrier, consistent with the specifications provide by NVC in Appendix A will be fitted to the existing shredder on site, to screen line of sight between the existing shredder and residential dwellings to the south of the site. | Prior to commencement |
| Noise MM 2 | Contact details will be provided on the Tyrecycle website to facilitate any feedback or complaints from the public.<br>If a complaint is received Tyrecycle will enact existing internal protocols which include investigating the complaint, addressing any identified issues, communicating the outcomes to the complainant and record keeping. | Prior to commencement |
| Air quality MM 1 | Water sprays will be fitted to both the tyre shredders, and will be properly maintained, to minimise the release of any particulate matter. | Prior to commencement and ongoing during operations |
| Air quality MM 2 | Machinery used onsite will be regularly maintained to ensure emissions are minimised. | During operations - ongoing |
| Air quality MM 3 | Shredded tyres will be exported from the site in a manner that minimises the risk of air emissions; either in sealed shipping containers or covered truck loads. | During operations - ongoing |
| Water Quality MM 1 | The new and existing shredders will be fitted with bunds to capture any tyre dust and water. The bunds will be inspected weekly and cleaned out regularly to ensure no build-up of tyre dust or tyre pieces. Tyre pieces will be added to the shred stockpiles and tyre dust will be placed in the onsite skip bin for disposal at landfill. | Prior to commencement and ongoing during operations |
| Water Quality MM 2 | Sediment socks or bags will be deployed (and appropriately maintained) at entrances to the existing site stormwater drains to capture any sediment or tyre dust entrained in site stormwater. | Prior to commencement and ongoing during operations |
| Water Quality MM 3 | Spill kits will be kept on site and all relevant staff trained in their use. The existing spill kits will be upgraded to include absorbent socks to be used in the event of firefighting. | Prior to commencement and ongoing during operations |

| Reference | Proposed management measure | Timeframe |
|---|---|---|
| Water Quality MM 4 | In the event of firefighting on site, drain plugs will be installed in existing stormwater drains and absorbent socks used around other drainage points to contain any firefighting water. | During operations – as required |
| Natural Values MM 1 | The Project Site will be subject to routine visual inspection and any environmental weeds treated by a suitably qualified operator using appropriate weed treatments. | During operations - annual |
| Waste MM 1 | A waste management area will be delineated within the existing site compound, with all wastes to be segregated (into recyclables and non-recyclables) and stored in sealed bins. | During operations – ongoing |
| Waste MM 2 | All waste classed as environmentally hazardous materials will be stored in appropriately bunded containers or in the existing chemical storage locker in the maintenance building. | During operations – ongoing |
| Waste MM 3 | Waste will be removed from site on a regular basis by a suitably qualified operator and disposed of at a suitably licensed facility. | During operations - ongoing |
| Environmentally hazardous substances MM 1 | Machinery oil will be stored in a bunded chemical storage locker in the maintenance building and any fuel to be stored on site will be within a self-bunded fuel storage container. | During operations - ongoing |

# 5 Part E – Public and stakeholder consultation

Tyrecycle has engaged with Barwicks (who own and co-occupy the Project Site), Brighton Council and the Tasmanian EPA in relation to the Project. Broader community consultation has not been undertaken as the Project represents a very small change from existing operations and the Project Site lies within an established industrial area.

Tyrecycle provides contact details on its website for any feedback or complaints and has a protocol for recording and responding to complaints received at any of its facilities nationwide. Tyrecycle has not received any complaints from neighbours or the general public in relation to is Bridgewater facility.

# 6 References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# Appendix A  Noise Assessment

# Appendix B Council correspondence

# Appendix C  Tyrecycle Fire Management and Response Plan

# Appendix D Natural Values Atlas Report

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# Natural Values Atlas Report

*Authoritative, comprehensive information on Tasmania's natural values.*

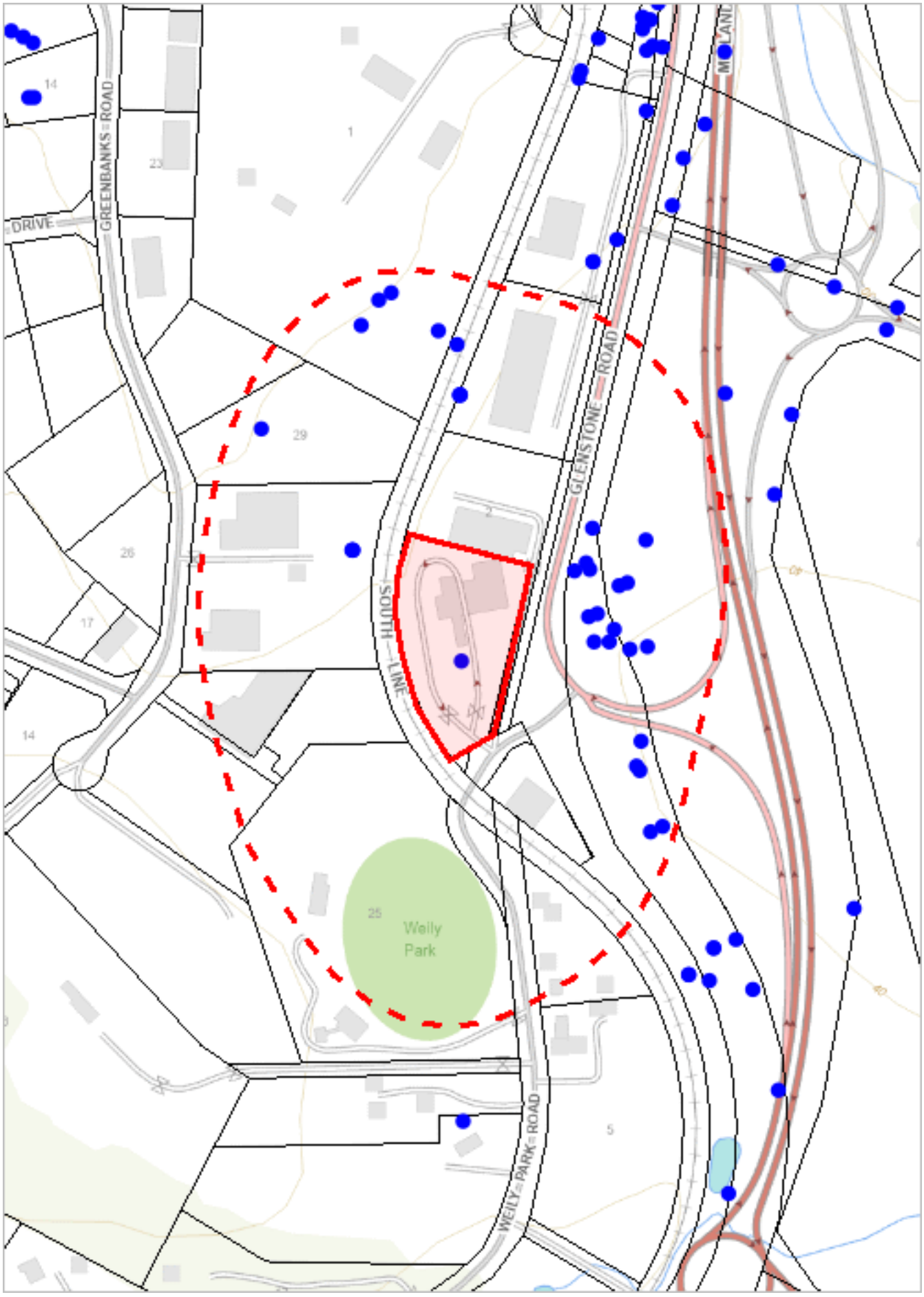
| | |
|---|---|
| Reference: | 3 Weily Road, Bridgewater |
| Requested For: | Era Advisory |
| Report Type: | Summary Report |
| Timestamp: | 12:06:36 PM Wednesday 06 August 2025 |
| Threatened Flora: | buffers Min: 200m Max: 5000m |
| Threatened Fauna: | buffers Min: 200m Max: 5000m |
| Raptors: | buffers Min: 200m Max: 5000m |
| Tasmanian Weed Management Act Weeds: | buffers Min: 200m Max: 1000m |
| Geoconservation: | buffer 1000m |
| Acid Sulfate Soils: | buffer 1000m |


The centroid for this query GDA94: 519210.0, 5269301.0 falls within:

Property: 1862155

# Threatened flora within 200 metres

519560, 5269778




518866, 5268808

Please note that some layers may not display at all requested map scales

# Threatened flora within 200 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

# Threatened flora within 200 metres

## Verified Records

| Species | Common Name | SS | NS | Bio | Observation Count | Last Recorded |
|---|---|---|---|---|---|---|
| Austrostipa bigeniculata | doublejointed speargrass | r | | n | 16 | 04-Jul-2020 |
| Austrostipa blackii | crested speargrass | r | | n | 2 | 07-Jan-2004 |
| Dianella amoena | grassland flaxlily | r | EN | n | 8 | 10-Dec-2024 |
| Hibbertia basaltica | basalt guineaflower | e | EN | e | 1 | 10-Dec-2024 |
| Vittadinia gracilis | woolly new-holland-daisy | r | | n | 2 | 14-Apr-2008 |
| Vittadinia muelleri | narrowleaf new-holland-daisy | r | | n | 4 | 08-Apr-2020 |
| Vittadinia muelleri (broad sense) | narrow leaf new holland daisy | p | | n | 1 | 01-Jan-1993 |

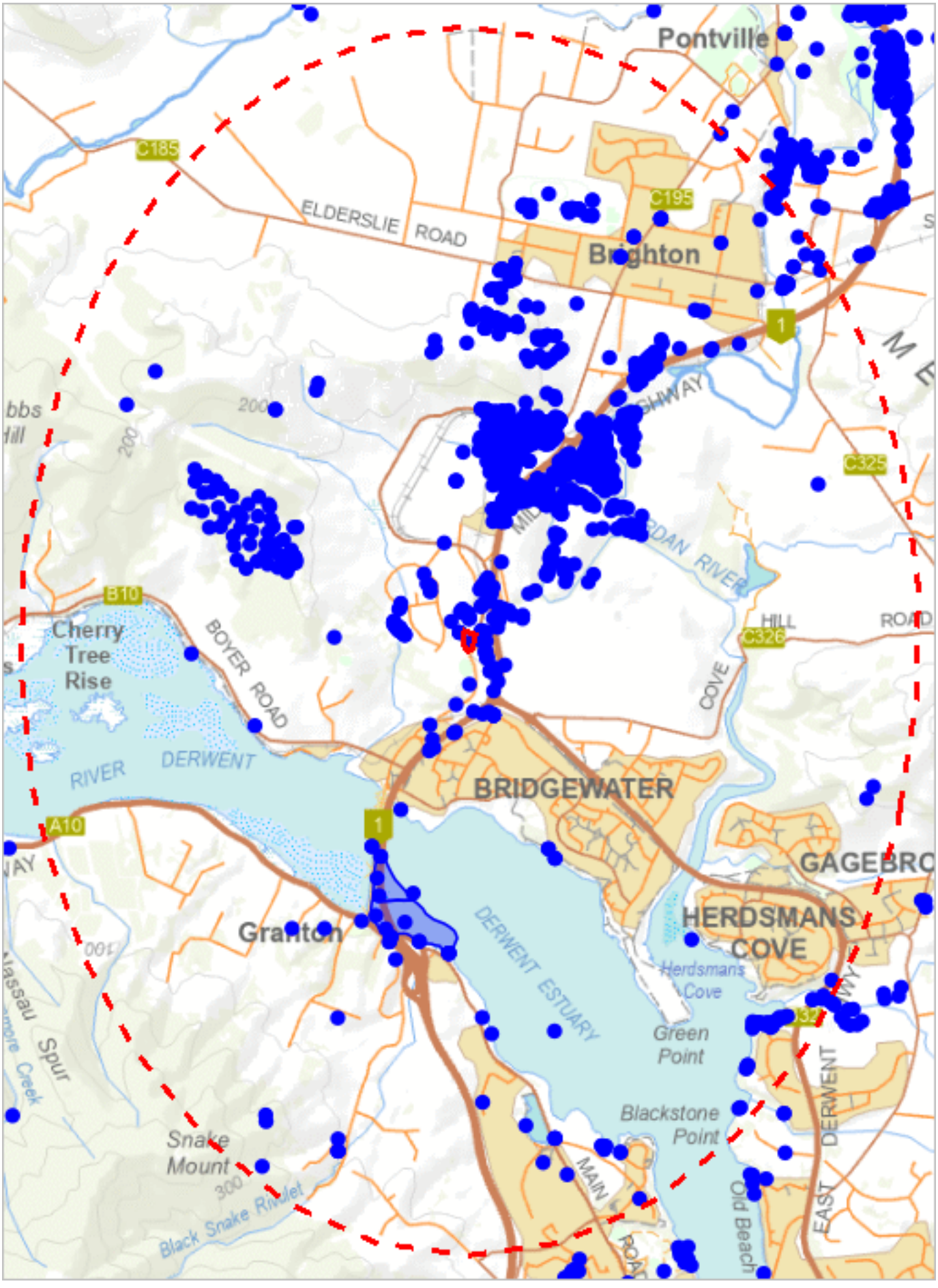
## Unverified Records

No unverified records were found!

For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

# Threatened flora within 5000 metres

523103, 5274585




515322, 5263999

Please note that some layers may not display at all requested map scales

# Threatened flora within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

# Threatened flora within 5000 metres

## Verified Records

| Species | Common Name | SS | NS | Bio | Observation Count | Last Recorded |
|---|---|---|---|---|---|---|
| Asperula scoparia subsp. scoparia | prickly woodruff | r | | n | 3 | 27-Jul-2016 |
| Austrostipa bigeniculata | doublejointed speargrass | r | | n | 132 | 11-Feb-2022 |
| Austrostipa blackii | crested speargrass | r | | n | 2 | 07-Jan-2004 |
| Bolboschoenus caldwellii | sea clubsedge | r | | n | 30 | 01-Jun-2017 |
| Bolboschoenus medianus | marsh clubsedge | r | | n | 25 | 23-Aug-2024 |
| Brachyscome rigidula | cutleaf daisy | v | | n | 1 | 01-Jan-1985 |
| Caladenia anthracina | blacktip spider-orchid | e | CR | e | 1 | 01-Nov-1842 |
| Caladenia caudata | tailed spider-orchid | v | VU | e | 3 | 22-Sep-1969 |
| Caladenia filamentosa | daddy longlegs | r | | n | 1 | 22-Oct-1947 |
| Calocephalus citreus | lemon beautyheads | r | | n | 58 | 16-Oct-2023 |
| Calocephalus lacteus | milky beautyheads | r | | n | 8 | 01-Dec-1992 |
| Carex gunniana | mountain sedge | r | | n | 2 | 01-Nov-1984 |
| Coronidium gunnianum | swamp everlasting | e | | n | 1 | 01-Jan-1900 |
| Cryptandra amara | pretty pearlflower | e | | n | 21 | 16-Nov-2024 |
| Damasonium minus | starfruit | r | | n | 1 | 21-Apr-1917 |
| Desmodium varians | slender ticktrefoil | e | | n | 4 | 09-Jan-2016 |
| Dianella amoena | grassland flaxlily | r | EN | n | 454 | 10-Dec-2024 |
| Diuris palustris | swamp doubletail | e | | n | 1 | 01-Oct-1977 |
| Eryngium ovinum | blue devil | v | | n | 1 | 06-Dec-2004 |
| Eucalyptus risdonii | risdon peppermint | r | | e | 63 | 10-Apr-2015 |
| Glycine latrobeana | clover glycine | v | VU | n | 3 | 21-Nov-2008 |
| Goodenia paradoxa | spur velleia | v | | n | 3 | 01-Jan-1995 |
| Gratiola pubescens | hairy brooklime | r | | n | 1 | 01-Feb-1892 |
| Haloragis aspera | rough raspwort | v | | n | 1 | 05-Mar-1945 |
| Haloragis heterophylla | variable raspwort | r | | n | 36 | 23-Nov-2021 |
| Hibbertia basaltica | basalt guineaflower | e | EN | e | 141 | 10-Dec-2024 |
| Isoetopsis graminifolia | grass cushion | v | | n | 144 | 13-Jan-2022 |
| Lachnagrostis robusta | tall blowngrass | r | | n | 1 | 23-Dec-1943 |
| Lepidium hyssopifolium | soft peppercress | e | EN | n | 11 | 01-Jun-2006 |
| Lepilaena patentifolia | spreading watermat | r | | n | 1 | 27-Feb-1976 |
| Lythrum salicaria | purple loosestrife | v | | n | 1 | 01-Mar-1894 |
| Pellaea calidirupium | hotrock fern | r | | n | 5 | 12-Jan-2022 |
| Pterostylis ziegeleri | grassland greenhood | v | VU | e | 27 | 04-Nov-2016 |
| Pultenaea prostrata | silky bushpea | v | | n | 25 | 16-Nov-2017 |
| Ranunculus pumilio var. pumilio | ferny buttercup | r | | n | 1 | 27-Sep-1993 |
| Ruppia megacarpa | largefruit seatassel | r | | n | 12 | 10-Mar-2021 |
| Schoenoplectus tabernaemontani | river clubsedge | r | | n | 2 | 08-Apr-2020 |
| Scleranthus diander | tufted knawel | v | | n | 2 | 09-Nov-2021 |
| Scleranthus fasciculatus | spreading knawel | v | | n | 6 | 01-May-2024 |
| Senecio squarrosus | leafy fireweed | r | | n | 18 | 02-Dec-2021 |
| Stackhousia subterranea | grassland candles | e | | n | 7 | 02-Nov-2021 |
| Stuckenia pectinata | fennel pondweed | r | | n | 3 | 22-Jan-2018 |
| Thesium australe | southern toadflax | x | VU | n | 1 | 01-Jan-1804 |
| Triptilodiscus pygmaeus | dwarf sunray | v | | n | 61 | 09-Nov-2021 |
| Vallisneria australis | river ribbons | r | | n | 3 | 16-Mar-2001 |
| Vittadinia burbidgeae | smooth new-holland-daisy | r | | e | 3 | 01-Oct-2008 |
| Vittadinia cuneata var. cuneata | fuzzy new-holland-daisy | r | | n | 2 | 05-Jan-1991 |
| Vittadinia gracilis | woolly new-holland-daisy | r | | n | 80 | 04-Nov-2020 |
| Vittadinia muelleri | narrowleaf new-holland-daisy | r | | n | 308 | 04-Jul-2022 |
| Vittadinia muelleri (broad sense) | narrow leaf new holland daisy | p | | n | 39 | 05-Jan-2005 |
| Xanthoparmelia amphixantha | | e | | n | 13 | 01-Oct-2008 |
| Xanthoparmelia molliuscula | | e | | n | 5 | 31-Mar-2004 |
| Xanthoparmelia vicariella | | r | | e | 10 | 17-Mar-2023 |

## Unverified Records

No unverified records were found!

For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

# Threatened flora within 5000 metres

# Threatened fauna within 200 metres

519560, 5269778


518866, 5268808

Please note that some layers may not display at all requested map scales

# Threatened fauna within 200 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

## Threatened fauna within 200 metres

(based on Range Boundaries)

| Species | Common Name | SS | NS | BO | Potential | Known | Core |
|---|---|---|---|---|---|---|---|
| Litoria raniformis | green and gold frog | v | VU | n | 1 | 0 | 1 |
| Lathamus discolor | swift parrot | e | CR | mbe | 1 | 0 | 1 |
| Prototroctes maraena | australian grayling | v | VU | ae | 1 | 0 | 0 |
| Antipodia chaostola | chaostola skipper | e | EN | ae | 1 | 0 | 0 |
| Pseudemoia pagenstecheri | tussock skink | v | | n | 1 | 0 | 0 |
| Haliaeetus leucogaster | white-bellied sea-eagle | v | | n | 2 | 0 | 0 |
| Tyto novaehollandiae subsp. castanops | masked owl (Tasmanian) | e | VU | e | 1 | 0 | 1 |
| Dasyurus maculatus subsp. maculatus | spotted-tailed quoll | r | VU | n | 1 | 0 | 0 |
| Accipiter novaehollandiae | grey goshawk | e | | n | 1 | 0 | 0 |
| Sarcophilus harrisii | tasmanian devil | e | EN | e | 1 | 0 | 0 |
| Pardalotus quadragintus | forty-spotted pardalote | e | EN | e | 1 | 0 | 0 |
| Perameles gunnii | eastern barred bandicoot | | VU | n | 1 | 0 | 1 |
| Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | e | EN | e | 1 | 0 | 0 |
| Dasyurus viverrinus | eastern quoll | | EN | n | 0 | 0 | 1 |

For more information about threatened species, please contact Threatened Species Enquiries.
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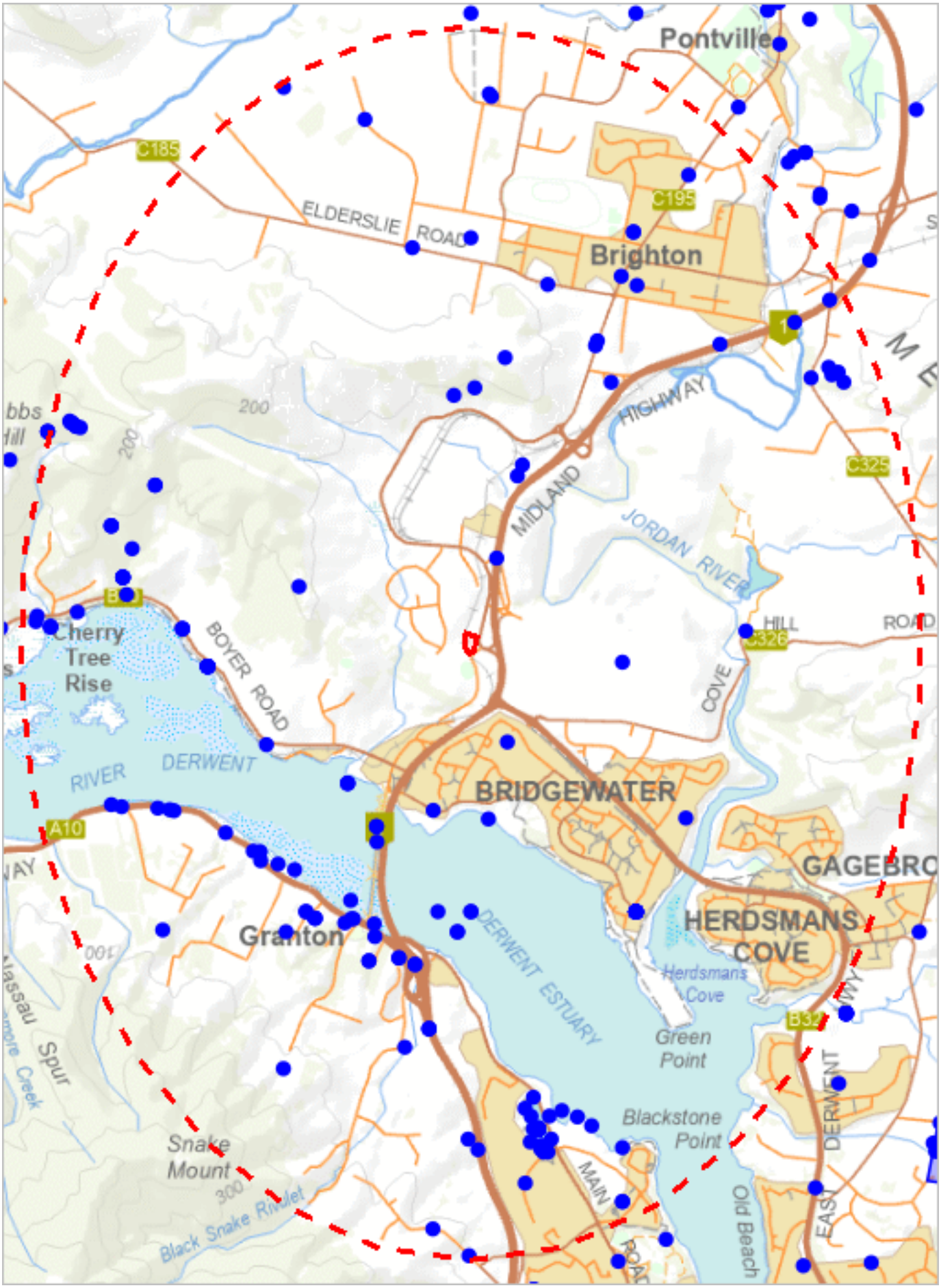
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

# Threatened fauna within 5000 metres

523103, 5274585




515322, 5263999

Please note that some layers may not display at all requested map scales

# Threatened fauna within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

# Threatened fauna within 5000 metres

## Verified Records

| Species | Common Name | SS | NS | Bio | Observation Count | Last Recorded |
|---|---|---|---|---|---|---|
| Accipiter novaehollandiae | grey goshawk | e | | n | 15 | 23-Feb-2023 |
| Alcedo azurea subsp. diemenensis | azure kingfisher or azure kingfisher (tasmanian) | e | EN | e | 1 | 01-Jan-1900 |
| Aquila audax | wedge-tailed eagle | pe | PEN | n | 29 | 12-Jun-2023 |
| Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | e | EN | e | 12 | 20-Jan-2025 |
| Botaurus poiciloptilus | australasian bittern | | EN | n | 4 | 17-Dec-2021 |
| Dasyurus maculatus | spotted-tailed quoll | r | VU | n | 4 | 12-Feb-2023 |
| Dasyurus maculatus subsp. maculatus | spotted-tailed quoll | r | VU | n | 1 | 16-Feb-2024 |
| Dasyurus viverrinus | eastern quoll | | EN | n | 6 | 09-Dec-2019 |
| Eagle sp. | Eagle | e | EN | n | 2 | 07-May-2020 |
| Gallinago hardwickii | Lathams snipe | | VU | n | 148 | 24-Nov-2024 |
| Haliaeetus leucogaster | white-bellied sea-eagle | v | | n | 54 | 24-Jun-2023 |
| Hirundapus caudacutus | white-throated needletail | | VU | n | 2 | 31-Dec-1980 |
| Lathamus discolor | swift parrot | e | CR | mbe | 19 | 03-Nov-2022 |
| Neophema chrysostoma | blue-winged parrot | | VU | n | 7 | 09-Feb-2019 |
| Pardalotus quadragintus | forty-spotted pardalote | e | EN | e | 2 | 14-Oct-1920 |
| Perameles gunnii | eastern barred bandicoot | | VU | n | 37 | 09-Jul-2024 |
| Podiceps cristatus | great crested grebe | v | | n | 17 | 20-Dec-2021 |
| Poliocephalus cristatus subsp. australis | great crested grebe | pv | | | 1 | 07-Dec-1981 |
| Prototroctes maraena | australian grayling | v | VU | ae | 4 | 28-Oct-1987 |
| Pseudemoia pagenstecheri | tussock skink | v | | n | 1 | 01-Dec-2009 |
| Sarcophilus harrisii | tasmanian devil | e | EN | e | 26 | 07-Nov-2024 |
| Sternula albifrons subsp. sinensis | little tern | e | | n | 1 | 30-Apr-2022 |
| Thalassarche cauta | shy albatross | v | EN | ae | 1 | 23-Nov-1884 |
| Theclinesthes serpentatus | chequered blue | pr | | n | 1 | 22-Feb-2023 |
| Tyto novaehollandiae | masked owl | pe | PVU | n | 8 | 13-Feb-2019 |

## Unverified Records

No unverified records were found!

# Threatened fauna within 5000 metres

## (based on Range Boundaries)

| Species | Common Name | SS | NS | BO | Potential | Known | Core |
|---|---|---|---|---|---|---|---|
| Litoria raniformis | green and gold frog | v | VU | n | 1 | 0 | 1 |
| Lathamus discolor | swift parrot | e | CR | mbe | 1 | 0 | 1 |
| Prototroctes maraena | australian grayling | v | VU | ae | 1 | 0 | 0 |
| Discocharopa vigens | Ammonite Pinwheel Snail | e | CR | | 2 | 0 | 0 |
| Antipodia chaostola | chaostola skipper | e | EN | ae | 1 | 0 | 0 |
| Pseudemoia pagenstecheri | tussock skink | v | | n | 1 | 0 | 1 |
| Haliaeetus leucogaster | white-bellied sea-eagle | v | | n | 3 | 0 | 0 |
| Tyto novaehollandiae subsp. castanops | masked owl (Tasmanian) | e | VU | e | 1 | 0 | 1 |
| Dasyurus maculatus subsp. maculatus | spotted-tailed quoll | r | VU | n | 1 | 0 | 0 |
| Accipiter novaehollandiae | grey goshawk | e | | n | 1 | 0 | 0 |
| Sarcophilus harrisii | tasmanian devil | e | EN | e | 1 | 0 | 0 |
| Pardalotus quadragintus | forty-spotted pardalote | e | EN | e | 1 | 0 | 0 |
| Perameles gunnii | eastern barred bandicoot | | VU | n | 1 | 0 | 1 |
| Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | e | EN | e | 1 | 0 | 0 |
| Dasyurus viverrinus | eastern quoll | | EN | n | 0 | 0 | 1 |

For more information about threatened species, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

*** No Raptor nests or sightings found within 200 metres. ***

# Raptor nests and sightings within 5000 metres

523103, 5274585


515322, 5263999

Please note that some layers may not display at all requested map scales

# Raptor nests and sightings within 5000 metres

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

# Raptor nests and sightings within 5000 metres

## Verified Records

| Nest Id/Location Foreign Id | Species | Common Name | Obs Type | Observation Count | Last Recorded |
|---|---|---|---|---|---|
| 1778 | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Nest | 1 | 21-Feb-2024 |
| 1778 | Haliaeetus leucogaster | white-bellied sea-eagle | Nest | 4 | 07-May-2020 |
| 2927 | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Nest | 1 | 21-Feb-2024 |
| 2927 | Eagle sp. | Eagle | Nest | 1 | 07-May-2020 |
| 2928 | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Nest | 2 | 21-Feb-2024 |
| 2928 | Eagle sp. | Eagle | Nest | 1 | 07-May-2020 |
| 494 | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Nest | 1 | 21-Feb-2024 |
| 494 | Haliaeetus leucogaster | white-bellied sea-eagle | Nest | 2 | 07-May-2020 |
| | Accipiter novaehollandiae | grey goshawk | Not Recorded | 9 | 01-Apr-2017 |
| | Accipiter novaehollandiae | grey goshawk | Sighting | 6 | 23-Feb-2023 |
| | Aquila audax | wedge-tailed eagle | Not Recorded | 16 | 10-Mar-2018 |
| | Aquila audax | wedge-tailed eagle | Sighting | 13 | 12-Jun-2023 |
| | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Carcass | 2 | 19-May-2018 |
| | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Radio Tracker Signal | 1 | 25-Mar-2024 |
| | Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | Sighting | 4 | 20-Jan-2025 |
| | Falco cenchroides | nankeen kestrel | Not Recorded | 1 | 14-Jun-2014 |
| | Falco cenchroides | nankeen kestrel | Sighting | 1 | 16-Mar-1904 |
| | Falco longipennis | australian hobby | Sighting | 9 | 18-Mar-2023 |
| | Falco peregrinus | peregrine falcon | Not Recorded | 16 | 25-Jun-2018 |
| | Falco peregrinus | peregrine falcon | Sighting | 16 | 22-Jan-2023 |
| | Haliaeetus leucogaster | white-bellied sea-eagle | Not Recorded | 14 | 07-Nov-2017 |
| | Haliaeetus leucogaster | white-bellied sea-eagle | Sighting | 34 | 24-Jun-2023 |
| | Tyto novaehollandiae | masked owl | Carcass | 1 | 13-Feb-2019 |
| | Tyto novaehollandiae | masked owl | Not Recorded | 1 | 06-Sep-1979 |
| | Tyto novaehollandiae | masked owl | Sighting | 6 | 13-Jun-2007 |

## Unverified Records

No unverified records were found!

# Raptor nests and sightings within 5000 metres

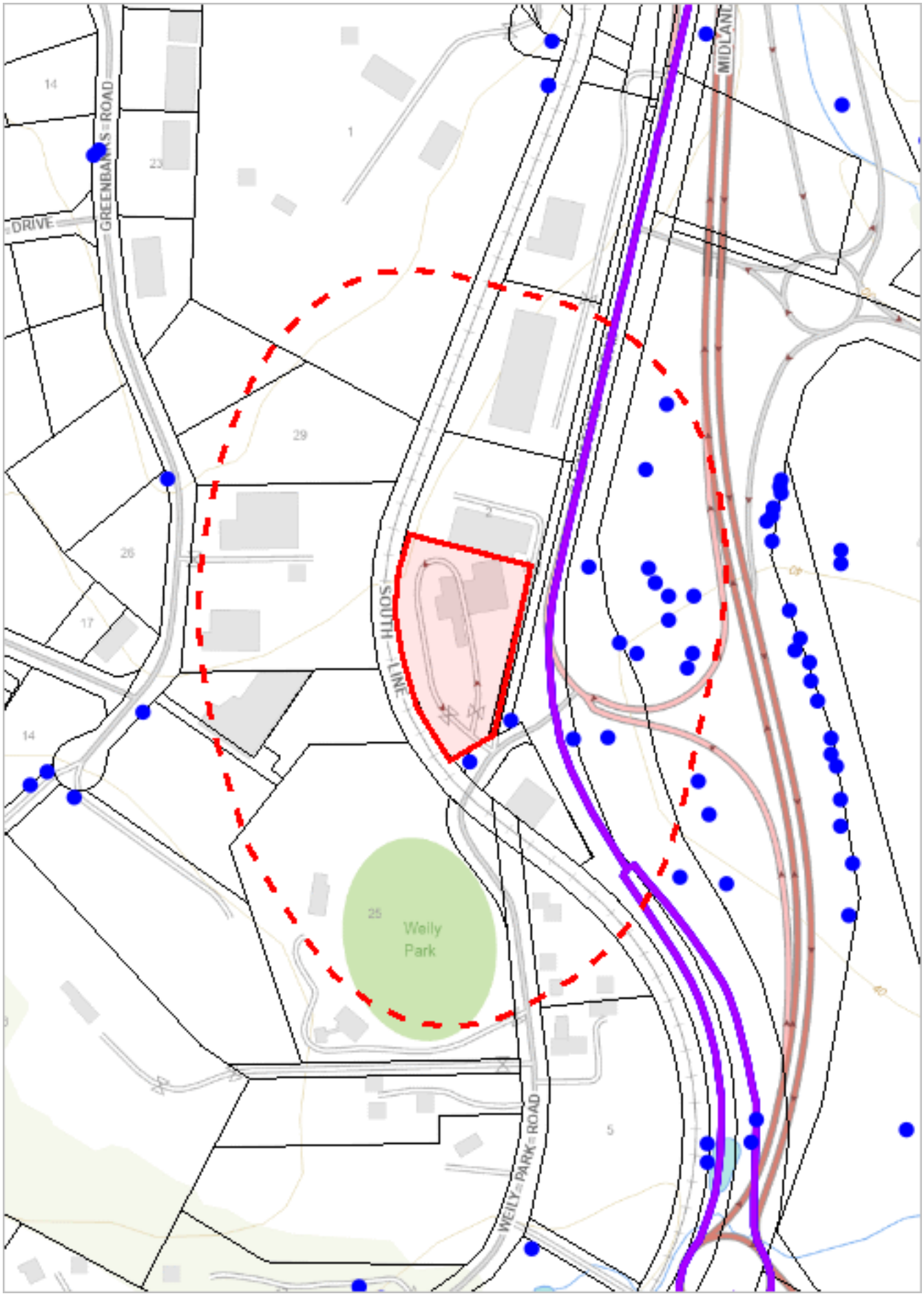
## (based on Range Boundaries)

| Species | Common Name | SS | NS | Potential | Known | Core |
|---|---|---|---|---|---|---|
| Aquila audax subsp. fleayi | tasmanian wedge-tailed eagle | e | EN | 1 | 0 | 0 |
| Accipiter novaehollandiae | grey goshawk | e | | 1 | 0 | 0 |
| Haliaeetus leucogaster | white-bellied sea-eagle | v | | 3 | 0 | 0 |

For more information about raptor nests, please contact Threatened Species Enquiries.
Telephone: 1300 368 550
Email: ThreatenedSpecies.Enquiries@nre.tas.gov.au
Address: GPO Box 44, Hobart, Tasmania, Australia, 7000

# Tas Management Act Weeds within 200 m

519560, 5269778




518866, 5268808

Please note that some layers may not display at all requested map scales

# Tas Management Act Weeds within 200 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

# Tas Management Act Weeds within 200 m

## Verified Records

| Species | Common Name | Observation Count | Last Recorded |
|---|---|---|---|
| Amelichloa caudata | espartillo | 2 | 03-Nov-2022 |
| Foeniculum vulgare | fennel | 9 | 18-Nov-2021 |
| Genista monspessulana | montpellier broom or canary broom | 1 | 11-Oct-2013 |
| Lepidium draba | hoary cress | 1 | 18-Nov-2021 |
| Lycium ferocissimum | african boxthorn | 11 | 11-Oct-2013 |
| Marrubium vulgare | white horehound | 2 | 11-Oct-2013 |
| Rubus fruticosus | blackberry | 6 | 11-Oct-2013 |

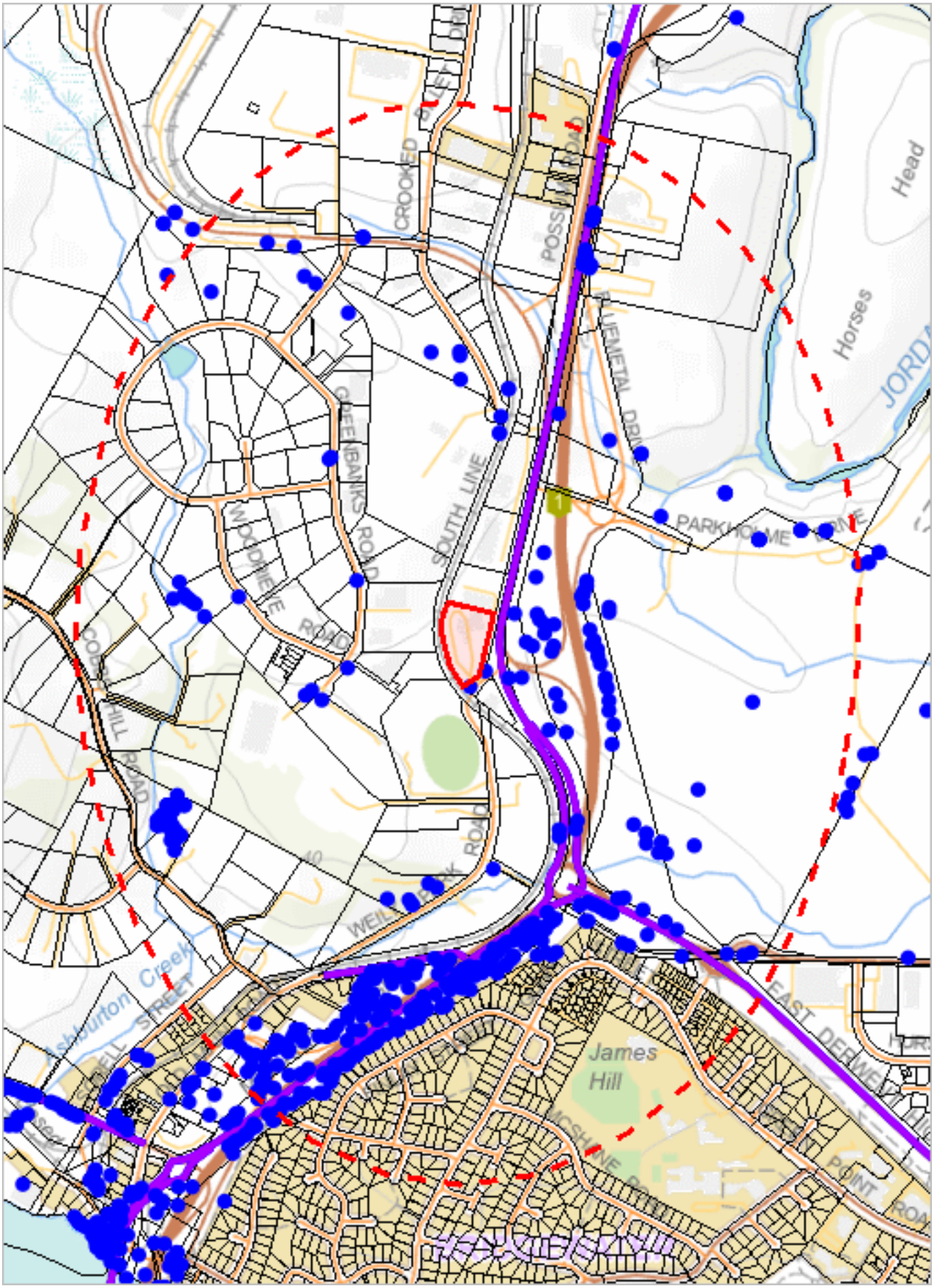
## Unverified Records

For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.nre.tas.gov.au/invasive-species/weeds

# Tas Management Act Weeds within 1000 m

520150, 5270579




518275, 5268006

Please note that some layers may not display at all requested map scales

# Tas Management Act Weeds within 1000 m

Legend: Verified and Unverified observations

- Point Verified
- Point Unverified
- Line Verified
- Line Unverified
- Polygon Verified
- Polygon Unverified

Legend: Cadastral Parcels

# Tas Management Act Weeds within 1000 m

## Verified Records

| Species | Common Name | Observation Count | Last Recorded |
|---|---|---|---|
| Amelichloa caudata | espartillo | 54 | 04-Oct-2023 |
| Asphodelus fistulosus | onion weed | 1 | 20-Sep-1942 |
| Carduus nutans | nodding thistle | 1 | 07-Jan-2004 |
| Carduus pycnocephalus | slender thistle | 5 | 16-May-2006 |
| Carduus tenuiflorus | winged thistle | 1 | 08-Nov-1995 |
| Chrysanthemoides monilifera subsp. monilifera | boneseed | 4 | 25-Mar-2024 |
| Cirsium arvense var. arvense | creeping thistle | 2 | 09-Feb-2023 |
| Echium plantagineum | patersons curse | 2 | 30-Sep-2024 |
| Eragrostis curvula | african lovegrass | 29 | 01-Jan-2021 |
| Foeniculum vulgare | fennel | 85 | 23-Aug-2024 |
| Genista monspessulana | montpellier broom or canary broom | 4 | 16-Aug-2014 |
| Lepidium draba | hoary cress | 53 | 25-Mar-2024 |
| Lycium ferocissimum | african boxthorn | 205 | 23-Aug-2024 |
| Marrubium vulgare | white horehound | 11 | 11-Oct-2013 |
| Nassella trichotoma | serrated tussock | 2 | 01-Jan-2022 |
| Rubus fruticosus | blackberry | 45 | 25-Mar-2024 |
| Ulex europaeus | gorse | 5 | 06-Jul-2022 |

## Unverified Records

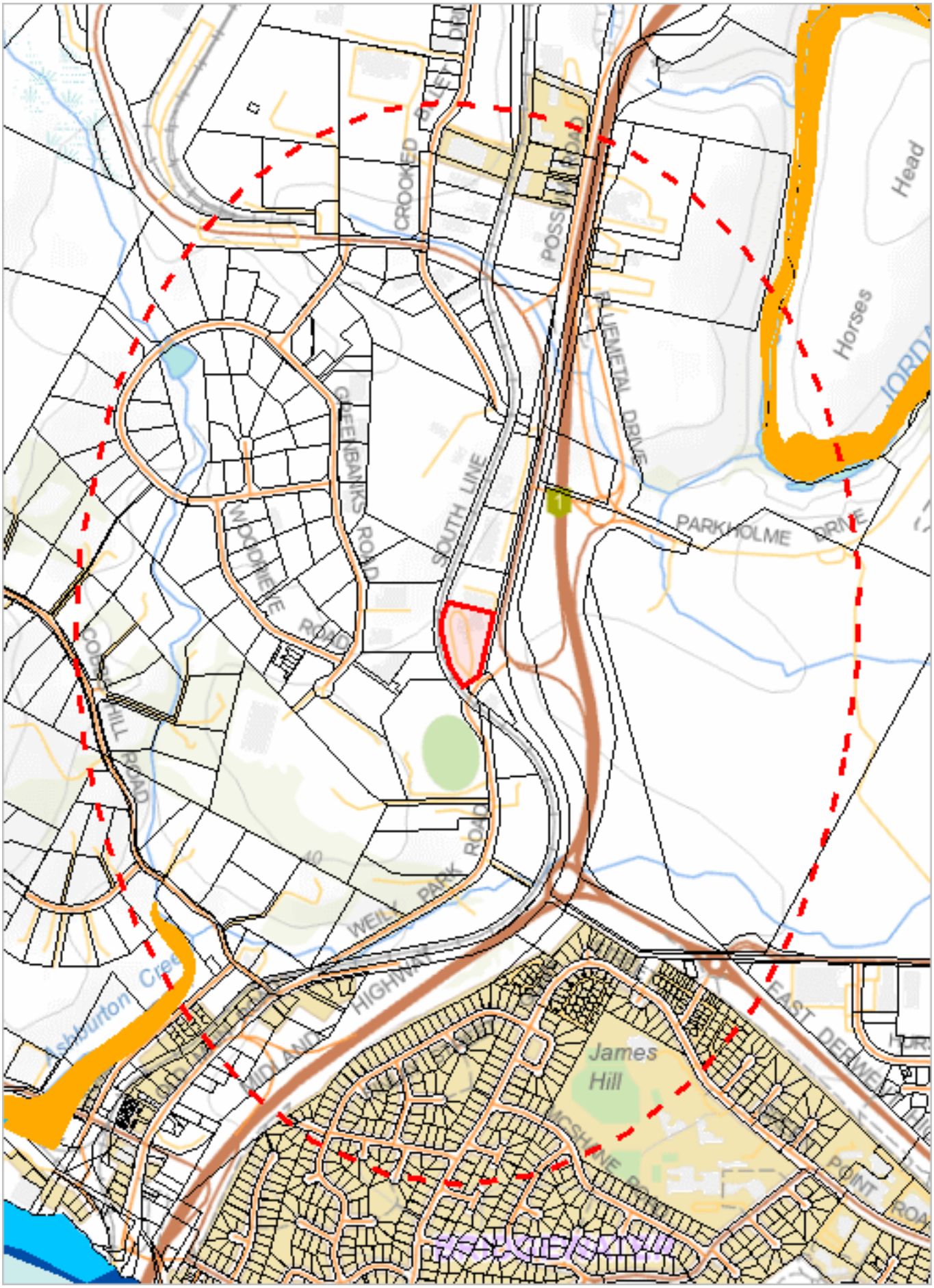
For more information about introduced weed species, please visit the following URL for contact details in your area:

https://www.nre.tas.gov.au/invasive-species/weeds

*** No Geoconservation sites found within 1000 metres. ***

# Acid Sulfate Soils within 1000 metres

520150, 5270579




518275, 5268006

Please note that some layers may not display at all requested map scales

# Acid Sulfate Soils within 1000 metres

Legend: Coastal Acid Sulfate Soils (0 - 20m AHD)

High | Low | Extremely Low

Legend: Inland Acid Sulfate Soils (>20m AHD)

High | Low | Extremely Low

Legend: Marine Subaqueous/Intertidal Acid Sulfate Soil

High (Intertidal) | High (Subtidal)

Legend: Cadastral Parcels

# Acid Sulfate Soils within 1000 metres

| Dataset Name | Acid Sulfate Soil Probability | Acid Sulfate Soil Atlas | Description |
|---|---|---|---|
| Coastal Acid Sulfate Soils | Low | Bg(p3) | Low probability of occurance (6-70% chance of occurrence in mapping unit). Floodplains >4m AHD, ASS generally below 3m from the surface.generally forests. Includes plains and levees. Potential acid sulfate soil (PASS) = sulfidic material (Isbell 1996 p.122). No necessary analytical data are available but confidence is fair, based on a knowledge of similar soils in similar environments. |

For more information about Acid Sulfate Soils, please contact Land Management Enquiries.

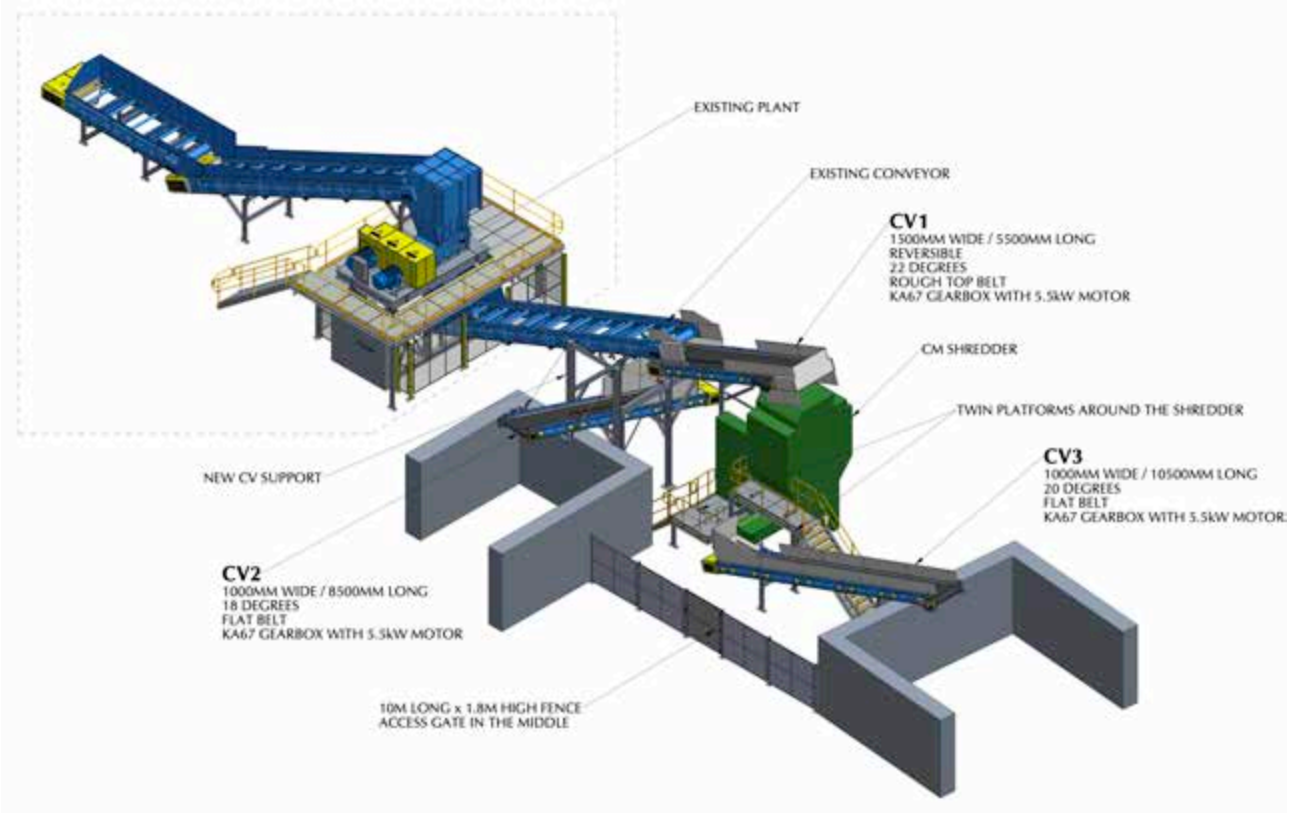
Telephone: (03) 6777 2227

Email: LandManagement.Enquiries@nre.tas.gov.au

Address: 171 Westbury Road, Prospect, Tasmania, Australia, 7250

# Tyrecycle Bridgewater Expansion

## Noise Impact Assessment




Ref: 25078 Tyrecycle Bridgewater NIA_03

15 December 2025

NVC

NOISE VIBRATION CONSULTING

# Executive Summary

Tyrecycle is proposing to expand operations at their existing tyre recycling facility, located at 3 Weily Park Road, Bridgewater. The proposed expansion comprises the addition of a new shredder and changes to truck movements accessing site, as well as an increase in the annual production limit from 5,000 tonnes to 10,000 tonnes. The EPA has provided guidelines for the preparation of an Environmental Effects Report (EER), which includes the requirement for a noise impact assessment to determine the suitability of the proposed expansion and determine appropriate noise control where required. This report provides such an assessment, originally completed by NVC in September 2025, with this version of the report revised in December 2025 to include additional details in response to feedback provided by the EPA, with the specific responses outlined within an accompanying document.

The existing Tyrecycle facility consists of a single tyre shredder, various tyre storage bays, a telehandler which unloads tyres from trucks, a bobcat which loads tyres onto the shredder's in-feed conveyor and loads shipping containers with shredded product, and a forklift which is used to position the shipping container ramp. Currently, up to four medium-rigid and six heavy-rigid vehicles access site per day to deliver tyres and remove product in shipping containers ready to be exported to the mainland for further processing.

The expansion consists of the addition of a new shredder which will act as a secondary shredder, further shredding the product from the existing shredder into smaller pieces. The change in product output results in a change in the product distribution once it leaves site, with the majority of the facility's output going to Tasmanian facilities. As such, product will be removed from site using heavy vehicles with closed and covered trays as opposed to trucks with shipping containers, and thus the substantial increase in annual production is accompanied by a marginal increased in truck movements. Additionally, the site's operating hours and staff capacity are not proposed to change.

Long-term unattended noise measurements were conducted over a nominal 1-week period near to site, with additional attended noise measurements conducted at multiple locations surrounding site to determine the existing acoustic environment in the area, and quantify existing noise levels due to current Tyrecycle operations. During measurements conducted to the south of site, general industrial noise not associated with Tyrecycle such as hammering, grinding, heavy vehicles, forklifts manoeuvring, and tonal reverse beacons from the broader industrial zone were dominant, as well as significant traffic noise from the Midland Highway. Measurements carried out to the west of site again found typical industrial noise not associated with Tyrecycle to be the dominant noise source, with distant traffic noise from the Midland Highway audible.

Attended noise measurements were conducted on site to quantify the existing noise emissions from equipment on site. Whilst on site, the dominant noise source from existing operations was identified as the current shredder, with noise from the bobcat and telehandler also contributing to noise levels at nearby receivers.

Using the on-site noise measurements and NVC's database of previously measured noise sources, a software noise model was constructed to represent existing and proposed noise emissions from Tyrecycle based on typical and worst-case operations. An assessment of an identical shredding plant conducted at a different Tyrecycle facility by a third party was used to quantify noise emissions from the proposed additional shredder.

The software noise model was used to determine the following key points:

- Noise levels at the worst-affected sensitive receivers are predicted to see an increase in noise levels of less than 1 dB following the proposed expansion. This is typically considered an imperceptible difference.
- Noise levels over the daytime period (6:00AM to 10:00PM) satisfy the Environmental Protection Policy (Noise) 2009.

- Noise levels over a worst-case 15-minute period are predicted to be less than the typically adopted criteria for noise from industry (RBL + 5) at the nearest noise sensitive premises, as outlined within the NSW EPA's Noise Policy for Industry.
    - Whilst the NSW EPA's Noise Policy for Industry is not Tasmanian legislation, it is considered to provide appropriate guidance for acceptable industrial noise emissions.
- Assessment for intrusive or dominant characteristics was carried out as per the Tasmanian Noise Measurement Procedures Manual, with no adjustment for intrusive or dominant characteristics required.
- The existing shredder was identified as potentially noisy fixed plant. As such, to achieve best-practice noise procedure, it is recommended to implement a barrier in front of the existing shredder on site. The details of this barrier are provided in Section 6 of this report.
    - Following the implementation of this barrier, noise levels at the identified sensitive receivers are predicted to decrease compared to the existing Tyrecycle operations.
    - Noise levels due to Tyrecycle's operations are predicted to be less than the measured existing background noise level at the nearest noise sensitive premises. As such, noise from Tyrecycle is expected to be largely inaudible at surrounding sensitive receivers.

The Tyrecycle expansion is therefore not expected to cause environmental nuisance or harm, and no screening or alterations to the proposed plans are required.

# Tyrecycle Bridgewater Expansion
# Noise Impact Assessment

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## Document Control

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| **25078 Tyrecycle Bridgewater NIA_03** | 15/12/2025 | J Lewis | J Parry | Updated the reference to the EPA RFI response. |

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# 1. BACKGROUND

Tyrecycle operates an existing tyre processing and recycling facility (the 'site'), located at 3 Weily Park Road, Bridgewater. The facility is proposing the addition of a new shredder to allow for the production of smaller product, as well as an increase to the allowable annual processing limit from 5,000 tonnes to 10,000 tonnes. The facility is regulated by the EPA, and thus a Notice of Intent (NOI) has been provided by the proponent with Environmental Effects Report (EER) Guidelines subsequently issued by the EPA, which includes the requirement for a Noise Impact Assessment of the proposed expansion. This report outlines such a Noise Impact Assessment, originally completed by NVC in September 2025.

This version of the report includes additional details in response to feedback provided by the EPA[1], with NVC's specific responses outlined within an accompanying document prepared by ERA Advisory.

## 1.1. Site and Surrounding Area

The site is located within a General Industrial zone under the Tasmanian Planning Scheme, with the extents of the General Industrial zone shown by the purple overlay in Figure 1.1, below. To the east of site is the Midland Highway, a major thoroughfare for light and heavy vehicles travelling between the north and south of the state. To the south and west of the industrial area is a Rural Living zone (tan overlay) which consists of residential dwellings on large blocks. The worst-affected sensitive receivers are located within this area, denoted locations A and B in Figure 1.1, below, with a summary of these sensitive receivers provided in Table 1.1.


**FIGURE 1.1: SITE AND SURROUNDING AREA**

**TABLE 1.1: WORST-AFFECTED SENSITIVE RECEIVERS**

[1] 'EER Version No.1, 8 October 2025 - Information Required, 3 November 2025', Tyrecycle Pty Ltd - Tyre Recycling Facility Upgrade - Information Required - s 27FA(4) First Notice, EPA Tasmania, 3 November 2025.

| Location | Address | Description |
|---|---|---|
| **A** | 4 Weily Park Road | This location is representative of the nearest sensitive receiver to Tyrecycle, and consists of a single-storey dwelling with weatherboard facade. It is located nominally 190 m from the Midland Highway, and thus is exposed to significant and continuous traffic noise.<br>The dwelling is located nominally 180 m from the Tyrecycle boundary and 280 m from the existing shredder. |
| **B** | 24 Cobbs Hill Road | This location is representative of the worst-affected sensitive receiver to the west of site and consists of a residential dwelling and large shed. It shares a boundary with an existing Utilities zone, comprising a TasNetworks substation and a substantial industrial warehouse and storage yard.<br>The boundary of this property is nominally 430 m from Tyrecycle and the existing shredder. |

## 1.2. Site Operations

### 1.2.1. Typical Existing Operations

Tyrecycle currently operates a tyre recycling facility in Bridgewater, Tasmania, under EPN 10195/1[2], which allows the processing of up to 5,000 tonnes of rubber per year. The facility accepts used passenger and truck tyres from around Tasmania, which are currently shredded on site and then exported to the mainland for recycling. Tyrecycle acquired the tyre recycling business from Barwick's in December 2024, and thus the lot is currently owned by Barwick's who continue to operate their landscaping business from the same lot in a shared facility arrangement.

Tyres are currently shredded on site to a size of 6 inches, referred to as 'pre-shred', which is then packed into shipping containers and exported to Tyrecycle's mainland facilities for further processing. The typical existing on-site process is as follows:

- A truck loaded with tyres enters site, manoeuvres into the offloading position, and turns off their engine.
    - Occasionally, trucks may idle for brief periods whilst they wait to get into the offloading position.
- A telehandler removes tyres from the back of the truck and offloads them into one of the tyre storage bays. Typically, the northern-most storage bay is used as this is closest to the existing shredder.
- Tyres are collected from the tyre bays and placed onto the existing shredder in-feed conveyor using either a Bobcat loader (referred to as a bobcat) or telehandler.
- Whole tyres are shredded into 6-inch product using the existing shredder, with the processed product collected on the out-feed conveyor, which deposits into a secondary storage bay.
- A shipping container is brought to site by a side-loader truck, with the forklift used to position the shipping container ramp. The processed 6-inch product is then loaded into the container using the bobcat, before it is placed back on to the truck and removed from site.

NVC has been informed of the following additional key information that is relevant to the site's operation:

- Tyres are delivered and removed from site on a daily basis with the following approximate truck movements:
    - 3 - 4 medium-rigid vehicles per day.

[2] '*Environmental Protection Notice No. 10195/1'*, EPA Tasmania, 2016.

  - 3 - 4 heavy-rigid vehicles per day.
  - 8 shipping container trucks per week, with a maximum of two per day.
- The time and duration that the key on-site equipment operates is dependent on the availability of raw tyres, as well as demand and truck schedules. As such, equipment does not operate continuously on-site, and at times may not operate at all. The typical duration that key on-site equipment operates for each day has been listed below:
  - Existing shredder - up to 6 hours per day,
  - Bobcat - up to 8 hours per day,
  - JCB telehandler - up to 8 hours per day,
  - Forklift - up to 15 minutes per day.

Table 1.2, below, summarises the site's formal operating hours. NVC has been informed that these operating hours are to remain unchanged following the proposed expansion.

**TABLE 1.2: EXISTING OPERATING HOURS**

| Day | Operating Hours |
|---|---|
| **Monday - Friday** | 7:30AM - 4:00PM |
| **Saturday** | No work |
| **Sunday** | No work |
| **Public Holidays** | No work |

Figure 1.2, below, shows the existing layout of site. Note that the large building on site is shared with the Barwick's landscaping business, with Tyrecycle using a part of the building for staff offices and occasionally utilising the shared maintenance portion of the building. Tyrecycle maintenance within the maintenance building is typically not a noisy process, and as such, this building is not considered to be a noise source, and its noise emissions are not considered further in this report.

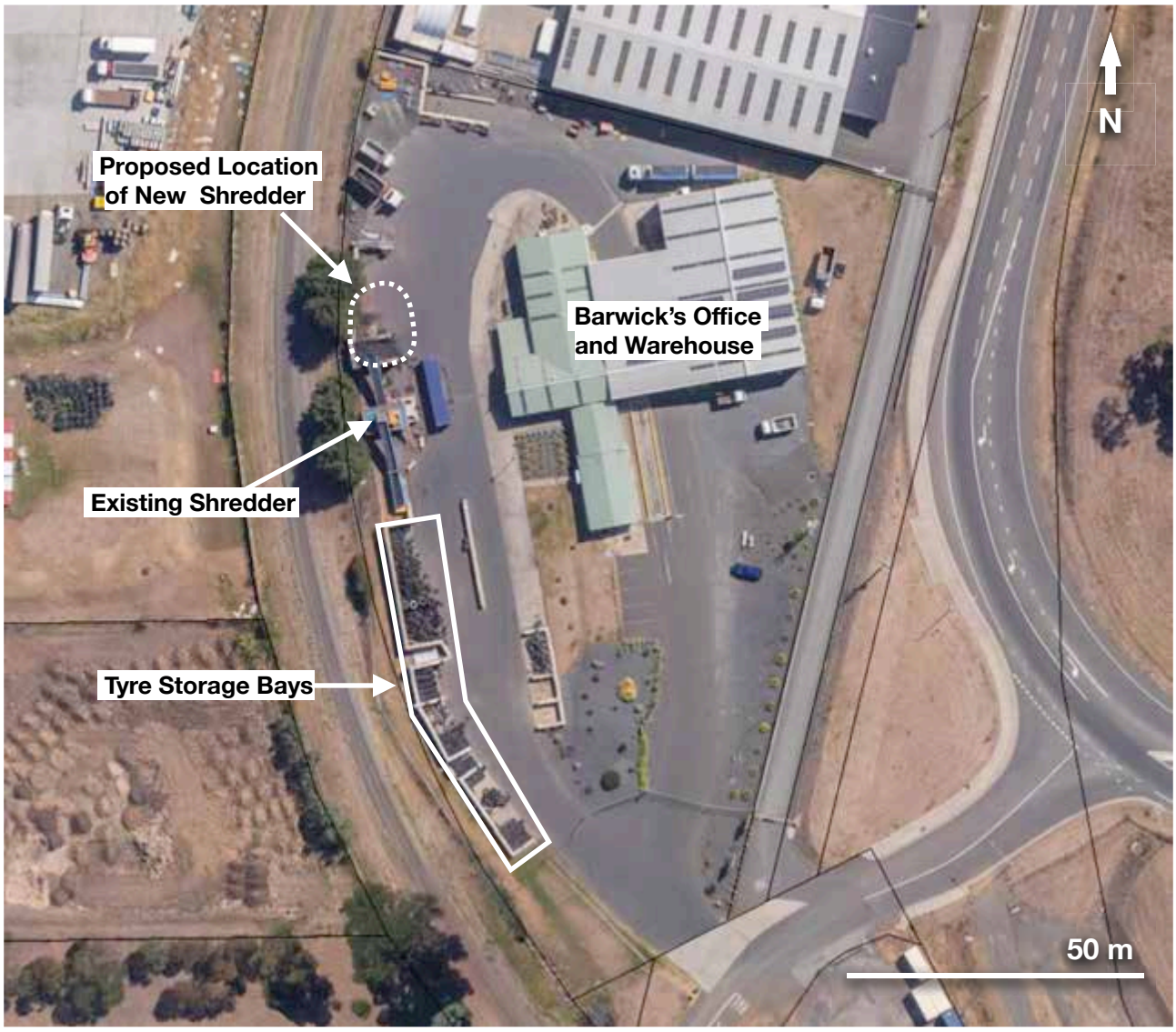



**FIGURE 1.2: EXISTING SITE LAYOUT**

### 1.2.2. Proposed Expansion

The proposed expansion involves the installation of a new shredder (the 'CM shredder'), that will be installed downstream of the existing shredder, to allow further processing of the pre-shred product down to a smaller 1.5-inch product. The new CM shredder is known as a 'secondary' shredder as it only accepts product that has already been shredded by the existing 'primary' shredder, and will only run in conjunction with the existing shredder. A diagram showing the proposed shredding process, comprising the existing shredder and the proposed CM shredder, is shown in Figure 1.3, below.

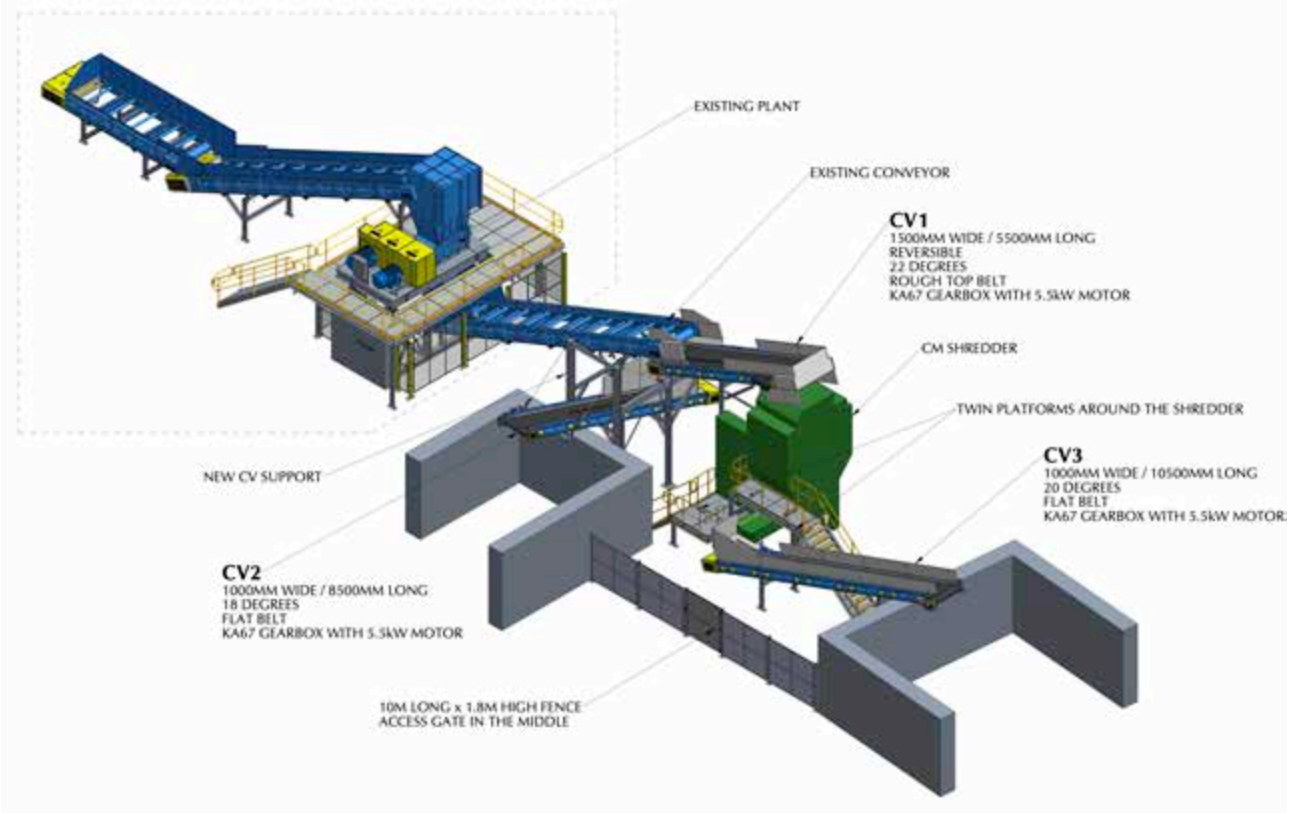



**FIGURE 1.3: EXISTING AND NEW SHREDDER DIAGRAM**

The changes to operations will result in the following difference in truck movements:

- 7 fewer shipping container trucks per week,
- 3 - 4 additional heavy-rigid trucks per week.

This report is based on information provided by Tyrecycle and the expected throughput of the site. It is noted that the site's operation relies on the supply of tyres, and thus the number of vehicles accessing site to deliver tyres and remove product may vary as the available supply of tyres varies. This is discussed further in Section 5 of this report.

Although a higher processing rate is proposed, the new shredder will create smaller product which will be moved to other locations in Tasmania rather than shipped to the mainland. As such, the product being removed from site will be primarily through heavy-rigid trucks with closed and covered trays rather than shipping containers. Therefore, the production capacity is able to significantly increase, but the number of vehicle movements does not differ substantially from existing operations.

Additionally, the below key points are relevant to the proposed operations on site following the expansion:

- No changes to the days or hours of operation are proposed (see Table 1.2, above).
- The new CM shredder is expected to operate up to 6 hours per day, the same as the existing shredder.

# 2. NOISE MEASUREMENTS

Long-term unattended and short-term attended community noise measurements, as well as on-site noise measurements have been carried out to quantify the existing acoustic environment in the area and the existing noise emissions from site. Community noise measurements were carried out at four locations, with long-term logging conducted at location 1, and short-term noise measurements conducted at locations 2 to 4, all of which are shown in Figure 2.1, below. Sections 2.1 to 2.3, below, summarise the long-term unattended, short-term attended, and on-site noise measurements respectively.


**FIGURE 2.1: MEASUREMENT LOCATIONS**

## 2.1. Long-Term Unattended Noise Measurements

Unattended noise measurements were made between the 22nd and 29th of August 2025, to quantify existing noise levels in the area surrounding site. Measurements used a Svan Type 1 sound level meter, logging in A-weighted decibels with a *Fast* response time. The data set comprised overall levels, one-third octave spectra and full statistical data. The unattended noise measurements were made at location 1 and are representative of the existing noise environment surrounding the two nearest residential dwellings to site. The position of this measurement location is shown in Figure 2.1, above, with a summary of the measured noise levels presented in Table 2.1, below.

**TABLE 2.1: SUMMARY OF UNATTENDED NOISE MEASUREMENTS**

| Location | Time Period | Sound Pressure Level, dBA | | | |
|---|---|---|---|---|---|
| | | $L_{10}$ | $L_{90}$ | $L_{EQ}$ | RBL |
| 1 | **Day (6:00AM - 10:00PM)** | 53.0 | 47.1 | 51.3 | 43.7 |
| | **Night (10:00PM - 6:00AM)** | 47.6 | 36.7 | 44.8 | 30.8 |
| | **Tyrecycle Operating Hours (7:30AM - 4:00PM)** | 53.5 | 48.0 | 51.9 | 45.1 |

Meteorological conditions from the nearest Bureau of Meteorology (BOM) weather station in Hobart[3] are provided for the noise monitoring period in Table 2.2, below. Periods where the wind speed exceeded 5 m/s, and therefore, according to the TAS Noise Measurement Procedures Manual[4] may have impacted noise levels, have been excluded from the dataset presented in Table 2.1, above.

**TABLE 2.2: METEOROLOGICAL CONDITIONS AT 9AM EACH DAY**

| Date | Temperature, °C | Relative Humidity, % | Atmospheric Pressure, hPa |
|---|---|---|---|
| **22/08/25** | 12 | 75 | 1021 |
| **23/08/25** | 11 | 65 | 1019 |
| **24/08/25** | 6 | 74 | 1030 |
| **25/08/25** | 6 | 78 | 1022 |
| **26/08/25** | 11 | 78 | 1004 |
| **27/08/25** | 11 | 59 | 984 |
| **28/08/25** | 9 | 62 | 989 |
| **29/08/25** | 9 | 69 | 994 |

Figure 2.2, below, presents the measured wind speed and direction at the aforementioned BOM weather station.

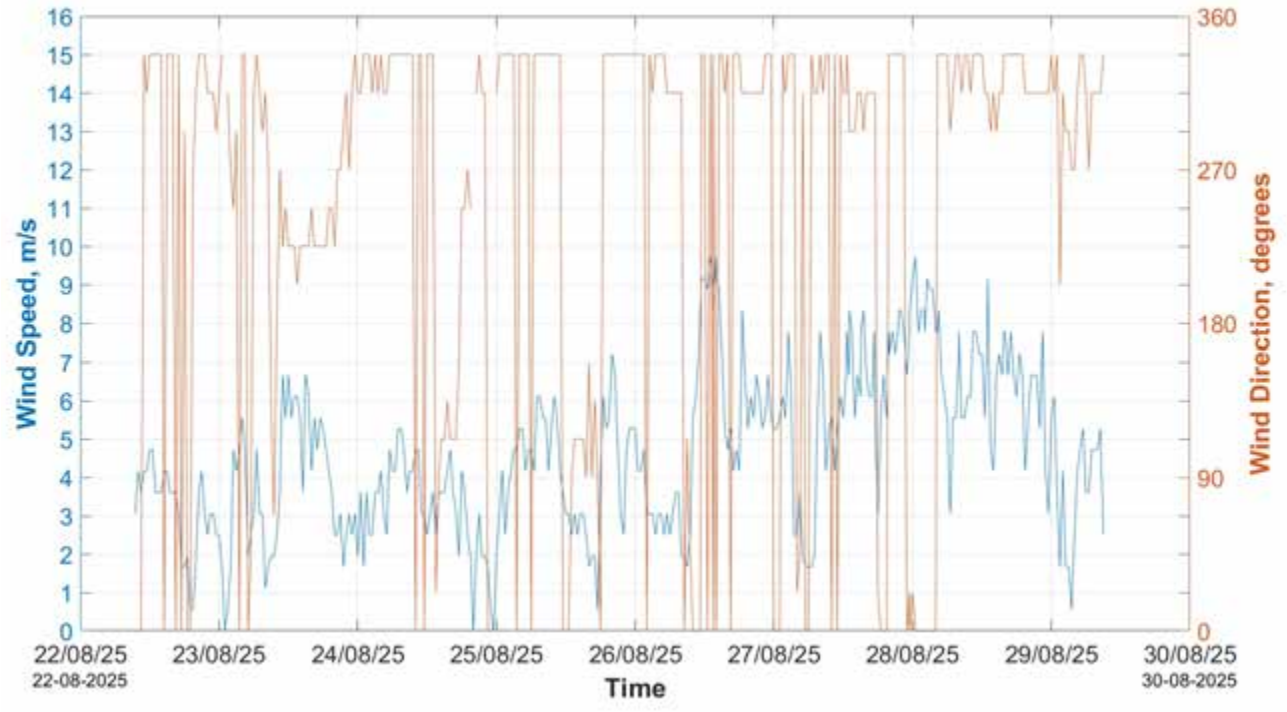



**FIGURE 2.2: MEASURED WIND SPEED AND DIRECTION**

[3] Hobart (Ellerslie Road), Station ID: 094029

[4] *'Noise Measurement Procedures Manual'*, 2nd Ed., Department of Environment, Parks, Heritage and Arts, 2008

The following observations and key findings during installation and collection of the noise logger at location 1 are relevant to the assessment:

**Location 1 - Observations and Comments:**

- Noise from nearby industrial businesses not associated with Tyrecycle was intermittently audible and dominant when occurring.
    - An excavator was audible and operating on the site directly to the west of this location.
    - Hammering and grinding noise from the north-west of location 1 was often audible.
    - Low-frequency engine noise from heavy vehicles accessing Tasfreight and other businesses to the north-west of the measurement location was frequently audible.
- Noise from vehicles passing by on the Midland Highway was the dominant noise source when industrial noise was not present.
    - Broadband tyre noise was almost continuously audible while at location 1.
    - Engine noise from heavy vehicles was completely dominant when passing by and occurred frequently.
    - The roundabout to the south of location 1 was visible from the measurement location, with consistent traffic passing through the roundabout.
- High-frequency bird noise was consistently audible amongst traffic noise.
- Site noise was intermittently audible at location 1 when the existing shredder was in use, with noise perceived to be primarily broadband, with some mid to high-frequency 'crunching' audible. The boundary fence and dwelling immediately to the north of this location provided significant screening from Tyrecycle, with noise from Tyrecycle at location 1 perceived to be significantly lower than at location 3.
    - When the existing shredder was not in use, site noise was largely inaudible, with truck noise only audible over traffic noise whilst trucks were entering or exiting site.
    - Tyrecycle has provided NVC with overall uptimes for the existing shredder for each day over the unattended noise logging period, as shown in Table 2.3, below.
        - On a day in which no shredding occurred (26/8/25), the measured daytime RBL exceeded the overall RBL across all Tyrecycle operating days. This suggests that the measured background noise level at location 1 is controlled by external noise sources, unrelated to Tyrecycle. This aligns with perception, with noise from the Midland Highway and other industrial sites unrelated to Tyrecycle being key noise sources.
        - Additionally, further analysis of the measured data shows no clear contribution from the existing shredder to the measured noise levels. This further suggests that the measured background noise level at location 1 is controlled by external noise sources, unrelated to Tyrecycle.
- Clangs and thuds from the telehandler and bobcat were briefly audible when unloading trucks.
- Noise from trucks idling on site was entirely inaudible at this location.

**TABLE 2.3: TYRECYCLE EXISTING SHREDDER UPTIME DURING MEASUREMENT PERIOD**

| Date | Day | Shredder Uptime (Hours) |
|---|---|---|
| 22/08/2025 | Friday | 4.01 |
| 23/08/2025 | Saturday | 0 |
| 24/08/2025 | Sunday | 0 |
| 25/08/2025 | Monday | 6.15 |
| 26/08/2025 | Tuesday | 0 |
| 27/08/2025 | Wednesday | 4.19 |
| 28/08/2025 | Thursday | 3.51 |
| 29/08/2025 | Friday | 5.3 |

## 2.2. Short-Term Attended Noise Measurements

Additional short-term attended noise measurements were conducted at three locations surrounding site, to quantify noise levels at the residential dwellings to the west of site, as well as to provide measured noise levels from existing operations, against which the accuracy of the software noise modelling is able to be verified. The locations of these short-term attended noise measurements are denoted locations 2, 3 and 4 in Figure 2.1, above.

### 2.2.1. Location 2

This measurement location is broadly representative of the existing noise levels experienced by sensitive receivers within the Rural Living zone to the west of site. The noise measurement was conducted at approximately 10:30AM on the 29th of August 2025 for a duration of nominally 5 minutes. A summary of the measured noise levels is provided in Table 2.4, below. It is noted that whilst a noise measurement conducted over a duration of nominally 5 minutes is not representative of a full 16-hour daytime period, it does provide an indication of typical noise levels during a period outside of typical peak-hour periods.

It is noted that location 2 is significantly further and is largely screened from the Midland Highway compared to the worst-affected receiver in this area (location B). Additionally, location B shares a boundary with an existing warehouse and external storage yard, and thus is likely to be exposed to substantial existing industrial noise. As such, the measured noise levels at location 2 are a conservative representation of the existing acoustic environment at location B.

**TABLE 2.4: SUMMARY OF ATTENDED NOISE MEASUREMENTS - LOCATION 2**

| Location | Time Period | Sound Pressure Level, dBA | | |
|---|---|---|---|---|
| | | $L_{10}$ | $L_{90}$ | $L_{EQ}$ |
| **2** | **Day - 10:30AM** | 44.5 | 34.9 | 42.0 |

The following key observations are relevant to the assessment:

- Location 2 is nominally 500 m further from the Midland Highway than location 1, and thus noise levels due to vehicles on the highway are comparatively lower at location 2.
- The general ambient noise environment at this location was quiet, particularly given its proximity to the industrial zone and the Midland Highway.
- High-frequency bird song was consistently audible at this location.
- Distant broadband tyre noise and low-frequency engine noise was frequently audible from the Midland Highway and nearby roads and controlled the background noise level.
    - Trucks not associated with Tyrecycle accessing the nearby industrial zone were frequently within line of sight of the measurement location, and thus low-frequency engine noise from heavy vehicles was frequently audible.
    - The measurement was conducted outside of peak traffic hours and thus is likely conservative. Over a full day period, the $L_{90}$ is likely to be high due to increased traffic on surrounding roads.
- Various forms of industrial noise unrelated to Tyrecycle, such as hammering, grinding, and tonal reverse beacons occurred occasionally, but were typically of short duration.
- No noise from Tyrecycle could be distinguished during attended noise measurements at this location.

### 2.2.2. Locations 3 and 4

Attended noise measurements were conducted at locations 3 and 4 in the areas adjacent the Tyrecycle site to determine the existing noise levels due to on-site activities in various directions. These measurements were then used to verify the accuracy of the software noise model (discussed further in Section 4.1.3, below).

It is noted that the noise measurements conducted at locations 3 and 4 are solely used to define the accuracy of the software noise model, and are otherwise not utilised within the assessment of Tyrecycle noise emissions. Therefore, they are intended to be representative of the noise levels at these identified locations during periods in which site noise emissions are the greatest, to allow for comparison against the predicted noise emissions from site.

**TABLE 2.5: SUMMARY OF ATTENDED NOISE MEASUREMENTS - LOCATIONS 3 AND 4**

| Location | Sound Pressure Level, dBA |
|---|---|
| | $L_{EQ}$ |
| **3** | 50 |
| **4** | 40 |

The following key observations made at locations 3 and 4 are relevant to the assessment:

- Location 3 had uninterrupted line of sight to all equipment, whereas location 4 had view of the top of the existing shredder and in-feed conveyor, but was screened from all other noise sources.
- Noise levels reached nominally 50 dBA at location 3 during a period where the existing shredder, bobcat, and telehandler were all operational and site was perceived to be the dominant noise source.
    - It is noted that a heavy-rigid vehicle was also idling on site but was not audible at location 3.
    - Similar noise sources to location 1 (see Section 2.1, above) were audible at location 3, with noise from the Midland Highway a key noise source.
- Noise levels reached nominally 40 dBA at location 4 during a period where the existing shredder, bobcat, and telehandler were all operational. The existing shredder was perceived to be the dominant noise source at this location.
    - Similar to above, a heavy-rigid vehicle was observed to be idling on site but was not audible at location 4.
- Based on operational information provided to NVC, noise measurements conducted at locations 3 and 4 are representative of worst-case.
- Multiple noise measurements of varying durations have been carried out at locations 3 and 4 to determine the noise levels at these locations due to site noise emissions during a worst-case period. As such, the measured noise levels presented in Table 2.5, above, are representative of brief periods in which all key site equipment was operational and audible.
    - The noise measurements carried out at locations 3 and 4 are for the sole purpose of comparing measured noise levels and predicted noise levels to verify the accuracy of the noise model. It is not appropriate to use the noise levels reported in Table 2.5 for directly assessing Tyrecycle noise emissions.

## 2.3. Sound Power Level Measurements

Attended noise measurements were conducted on the 22nd and 29th of August 2025 to measure the sound power levels of existing site noise sources to allow for comprehensive software noise modelling (see Section 4, below). The measurements were conducted at various distances and directions, sufficient to determine the indicative sound power levels of all major noise sources on site, the results of which are summarised in Table 2.6, below.

**TABLE 2.6: MEASURED SOUND POWER LEVELS**

| Source | Sound Power Level (dBA) |
|---|---|
| **Telehandler** | 98 |
| **Bobcat** | 102 |
| **Existing shredder** | 107 |

Additional comments relating to the measurement procedure and location of measured noise sources are as follows:

- Primary noise sources on site were identified as the existing shredder, bobcat loading the shredder, and telehandler unloading trucks and placing tyres in the concrete tyre storage bays. No forklifts were used while on site.
- The measured sound power level of the existing shredder includes noise from the shredder's motors and conveyors due to all components operating simultaneously.
- Over a period of nominally 6 hours on site, the existing shredder was observed to be only in use for nominally 2 hours.
    - Note that during these 2 hours the existing shredder was operational, it was only audibly shredding tyres for nominally 50% of this period. As the tyres are manually loaded on to the in-feed conveyor using the bobcat, the tyre placement was inconsistent, and thus there are periods where no tyres were being shredded due to gaps between tyres on the in-feed conveyor.
    - Note that observations on site suggested that noise from the existing shredder was only a consideration whilst actively shredding tyres. As such, the sound power level of the existing shredder is representative of a period in which the shredder was continuously shredding tyres.

# 3. CRITERIA

The EPA have provided noise guidelines for the Tyrecycle expansion within Environmental Effects Report (EER) Guidelines[5] with the following guideline:

> "*In order to protect the existing acoustic amenity of the NSPs, consider appropriate noise attenuation measures to ensure that cumulative noise emissions ($L_{Aeq}$) from the operation do not cause nuisance and do not increase the existing background noise levels at the noise sensitive premises.*"

As the EER Guidelines do not provide numerical criteria, various standards and guidelines are referenced to determine suitable numerical criteria that will result in protection of the existing acoustic amenity of surrounding Noise Sensitive Premises (NSPs).

### Environmental Protection Policy (Noise) 2009

In *Table 1* of the Environment Protection Policy (Noise) 2009 (the TAS Noise EPP)[6], a list of Acoustic Environmental Indicator levels is given for which the environmental values specified in the Noise EPP "*…will be protected for the majority of the human population where the acoustic environment indicator levels are not exceeded…"* A section of that table is reproduced here in Table 3.1.

**TABLE 3.1: ACOUSTIC ENVIRONMENTAL INDICATOR LEVELS - TAS NOISE EPP**

| Specific Environment | Critical Health Effect | LAeq dBA | Time hrs | LAmax dBA |
|---|---|---|---|---|
| Outdoor living area | Serious annoyance, daytime and evening | 55 | 16 | - |
| | Moderate annoyance, daytime and evening | 50 | 16 | - |
| Outside bedrooms | Sleep disturbance, window open (outdoor values) | 45 | 8 | 60 |

The noise levels presented in Table 3.1, above, are deemed appropriate for the protection of amenity over a full daytime (6:00AM to 10:00PM) and nighttime (10:00PM to 6:00AM) period, respectively.

### Noise Policy for Industry

The NSW EPA's Noise Policy for Industry[7] specifies the following acceptable noise level when considering the amenity of residents near industrial noise:

> "*The intrusiveness of an industrial noise source may generally be considered acceptable if the level of noise from the source (represented by the $L_{Aeq}$ descriptor), measured over a 15-minute period, does not exceed the background noise level by more than 5 dB when beyond a minimum threshold. This intrusiveness noise level seeks to limit the degree of change a new noise source introduces to an existing environment.*"

Thus, the RBL + 5 is deemed appropriate over a 15-minute period.

[5] *'Environmental Effects Report Guidelines Tyrecycle Pty Ltd Tyre Recycling Facility Upgrade, Bridgewater'*, EPA Tasmania, 2025

[6] *'Environmental Protection Policy (Noise) 2009'*, Department of Environment, Parks, Heritage and Arts, 2009

[7] *'Noise Policy for Industry'*, EPA NSW, 2017

## 3.1. Criteria Discussion

It is noted that the EER Guidelines specify the requirement to assess normal and worst-case operating conditions on site.

For a typical 16-hour daytime period (6:00AM to 10:00PM), the TAS Noise EPP is deemed relevant in assessing normal operating conditions on site, as this is representative of the everyday noise experienced by nearby residential receivers.

For worst-case operating conditions, a 15-minute period where all operations are occurring simultaneously is deemed appropriate. The most relevant noise legislation for Tasmania is the TAS Noise EPP, however, it does not specify noise emission limits applicable over a 15-minute period. As such, the NSW EPA's Noise Policy for Industry has been adopted as best-practice criteria. A criterion of RBL + 5 is therefore considered appropriate, as noted by the NSW EPA's Noise Policy for Industry.

The background noise measurements conducted at location 1 and location 2 have been used to determine appropriate noise level criteria for the southern and western rural living zones, respectively. Although the measurement at location 2 is of short duration, it is deemed appropriate to use to define criteria based on the following:

- The background noise level at location 2 was entirely controlled by distant traffic noise from the Midland Highway. The measurement was conducted at approximately 10:30AM which is notably outside of peak hour traffic periods. Long-term noise monitoring shows that noise levels at location 1, which is adjacent the Midland Highway, were typically lowest around 10:30AM for each daytime period. Figure 3.1 denotes the timeframe of the measurement at location 2 and shows that it was during one of the quietest daytime periods during the unattended measurement.
    - Note that only the previous two days prior to the measurement at location 2 are shown in Figure 3.1 for clarity in the figure, however, this trend continues across the entire week-long measurement period.
    - Note that the blue line in Figure 3.1 is the **L90** at 10-minute intervals.

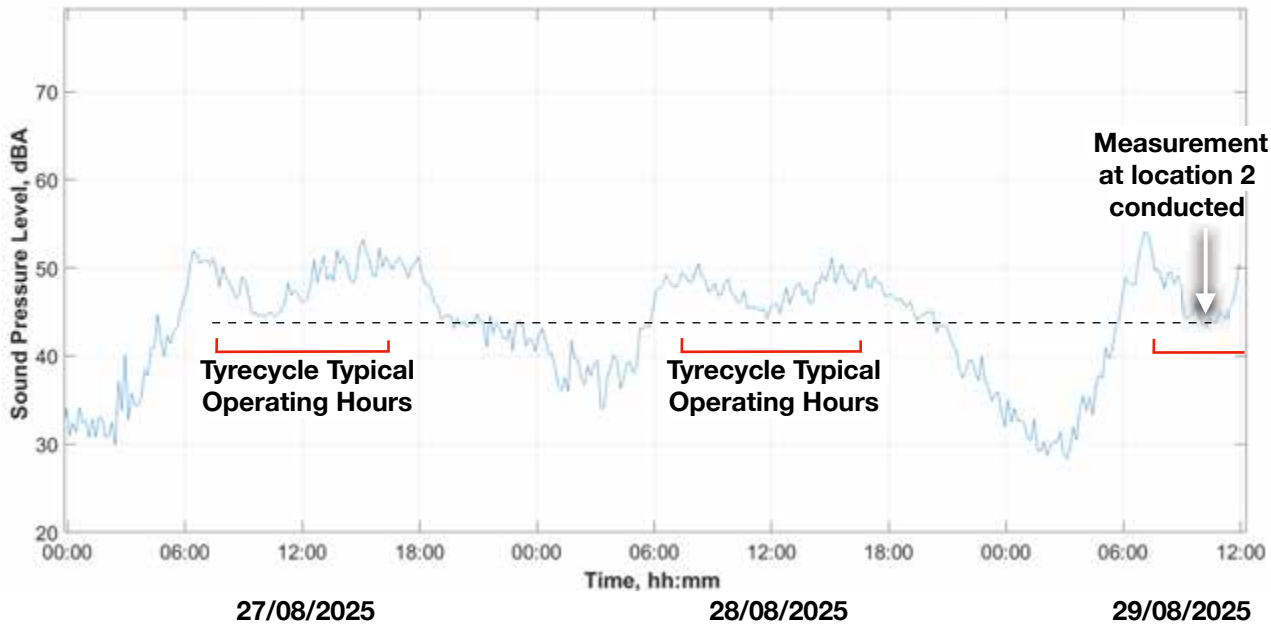



**FIGURE 3.1: LOCATION 1 UNATTENDED NOISE MEASUREMENT - $L90_{10\text{-}MIN}$**

- Additionally, adopting a criterion of RBL + 5 as per the NSW EPA's Noise Policy for Industry results in a numerical criterion of 40 dBA. This is generally considered a very conservative criterion for the assessment of worst-case industrial noise for dwellings adjacent a General Industrial zone adjacent a major highway.

- Assuming an adopted criterion of 40 dBA for the western residential receivers, this is 5 dB lower than what the TAS Noise EPP determines appropriate for noise outside of a bedroom window during nighttime to avoid sleep disturbance. Therefore, adopting daytime criteria that satisfies typical nighttime criteria is extremely conservative.
- AS2107 specifies a recommended *internal* noise level of 30 - 40 dBA within living areas during the daytime. Noise levels that satisfy this externally, will result in noise from Tyrecycle being entirely inaudible internally.

- Note that Tyrecycle only operates during the daytime and therefore no assessment within the night time period is required.

Therefore, based on the above points, taking the RBL of 35 dBA at location 2 is highly conservative, and thus a criterion of 40 dBA $L_{eq(15\text{-minute})}$ for NSPs to the west of site is appropriate.

## 3.2. Adopted Project Criteria

Given the discussion in Section 3.1, above, the adopted project criteria are summarised in Table 3.2, below.

**TABLE 3.2: PROJECT CRITERIA**

| Location | Time Period | Criteria |
|---|---|---|
| **Southern Rural Living Zone (Location A)** | Daytime (6AM - 10PM) | 50 dBA, $L_{eq(16\text{-Hour})}$ |
| | Worst-case 15-minutes | 50 dBA, $L_{eq(15\text{-Minute})}$ |
| **Western Rural Living Zone (Location B)** | Daytime (6AM - 10PM) | 50 dBA, $L_{eq(16\text{-Hour})}$ |
| | Worst-case 15-minutes | 40 dBA, $L_{eq(15\text{-Minute})}$ |

As shown above, the worst-case criteria are tighter than the full daytime criteria. As such, satisfying the worst-case 15-minute criteria of 50 dBA and 40 dBA at locations A and B respectively will result in compliance with the full daytime criteria.

Note that the full daytime criteria are based on legislation applicable specifically to Tasmania, whereas the worst-case 15-minute criteria are based on NSW policy (NSW EPA's Noise Policy for Industry), and so is not specifically relevant to Tasmania. However, it is typically considered best-practice, and thus is referred to for criteria appropriate to worst-case noise emissions

# 4. SOFTWARE NOISE MODELLING

A software noise model of the site and surrounding area has been constructed using *iNoise*[8] software, which implements the ISO 9613[9] algorithms for environmental noise. The predictions account for geometric divergence, barrier attenuation, atmospheric absorption, reflections / screening from buildings, and ground absorption. It is noted that ISO 9613 assumes atmospheric conditions favourable to noise propagation, i.e. the receiver being downwind of the source, or a mild temperature inversion. The details specific to the modelling methodology and results of the existing and proposed operating scenarios are provided in sections 4.1 and 4.2, below.

The following comments and assumptions are relevant to both models:

- For each operating scenario, the following two 'conditions' have been modelled for the existing site operations and operations following the site expansion:
    - 'Normal conditions' which predicts the noise levels expected across a full 16-hour day, based on the typical number of hours that each piece of Tyrecycle equipment is operational each day (see Section 1, above).
    - 'Worst-case conditions' which models a 15-minute period where all equipment on site is operating simultaneously.
- All noise sources have been modelled to be omni-directional sources, and thus their noise emissions propagate equally in all directions. This is conservative, and in particular over-estimates the noise emissions to the west from the existing shredder.
- 1 m topographical contours (from LiDAR data) have been used to define the ground level across the site and nearby topography, including the area containing locations A and B.
- 5 m topographical contours (from LiDAR data) have been used to define the ground level at distances over 800 m away from site.
- The existing dwellings surrounding the site have been included in the model, with their extents based on aerial imagery from TheList. The heights of all industrial buildings have been modelled based on observation while on site, with heights ranging from 3.5 m to 10 m.
    - All other buildings have been modelled with a height of 3.5 m, typical of a single-storey residential dwelling. This results in less acoustic screening, and thus is conservative.
- The existing and proposed concrete barriers around the tyre storage bays have been included within the model at their existing and proposed heights within each model respectively. Locations have been taken from TheList and proposed drawings[10].
- No fences or other acoustic screening has been modelled unless stated, with small fencing and foliage ignored as this will only reduce the propagation of noise from the site. The model therefore assesses a worst-case scenario.
- The model only considers noise sources on the Tyrecycle site. Noise from nearby traffic, other industrial sites, or residential noise is not included.
- Noise sources measured on site included within the models are shown in tables 4.1 and 4.3, below. All noise sources have been included within the software model as 1/3 octave data sets and assessed for intrusive or dominant characteristics within the results.
    - The typical operating durations and use of each piece of equipment is based on discussion with Tyrecycle staff and observations on site (see Section 1, above).
- All noise sources not measured on site have been modelled based on NVC's database of previously measured noise sources.

---

[8] iNoise V2024.2.1 Pro, DGMR Software

[9] '*ISO 9613 - Attenuation of sound during propagation outdoors'*, International Organization for Standardization, 1996

[10] *'Occupational Noise Assessment Tyrecycle - 776 - 800 Redbank Plains Road, Redbank - Queensland'*, JTA, 2024

  - Note that the trucks transporting shipping containers have been modelled as heavy-rigid vehicles.
- All roads and paved areas (including the entirety of the Tyrecycle site) have been assumed to have a ground factor of 0 (100% reflective), with the remainder of the model assumed to have a ground factor of 0.5 (50% reflective). This is considered conservative.
- All buildings have been modelled with a reflection factor of 0.8 (80% reflective).
- As per the Tasmanian Noise Measurement Procedures Manual, noise levels have been predicted at 1.2 m above ground level.

## 4.1. Existing Operations

### 4.1.1. Modelling Methodology - Existing Operations

The existing operations scenario includes all noise sources that are currently operating on site. The modelled location of each of these noise sources is shown in Figure 4.1, below.

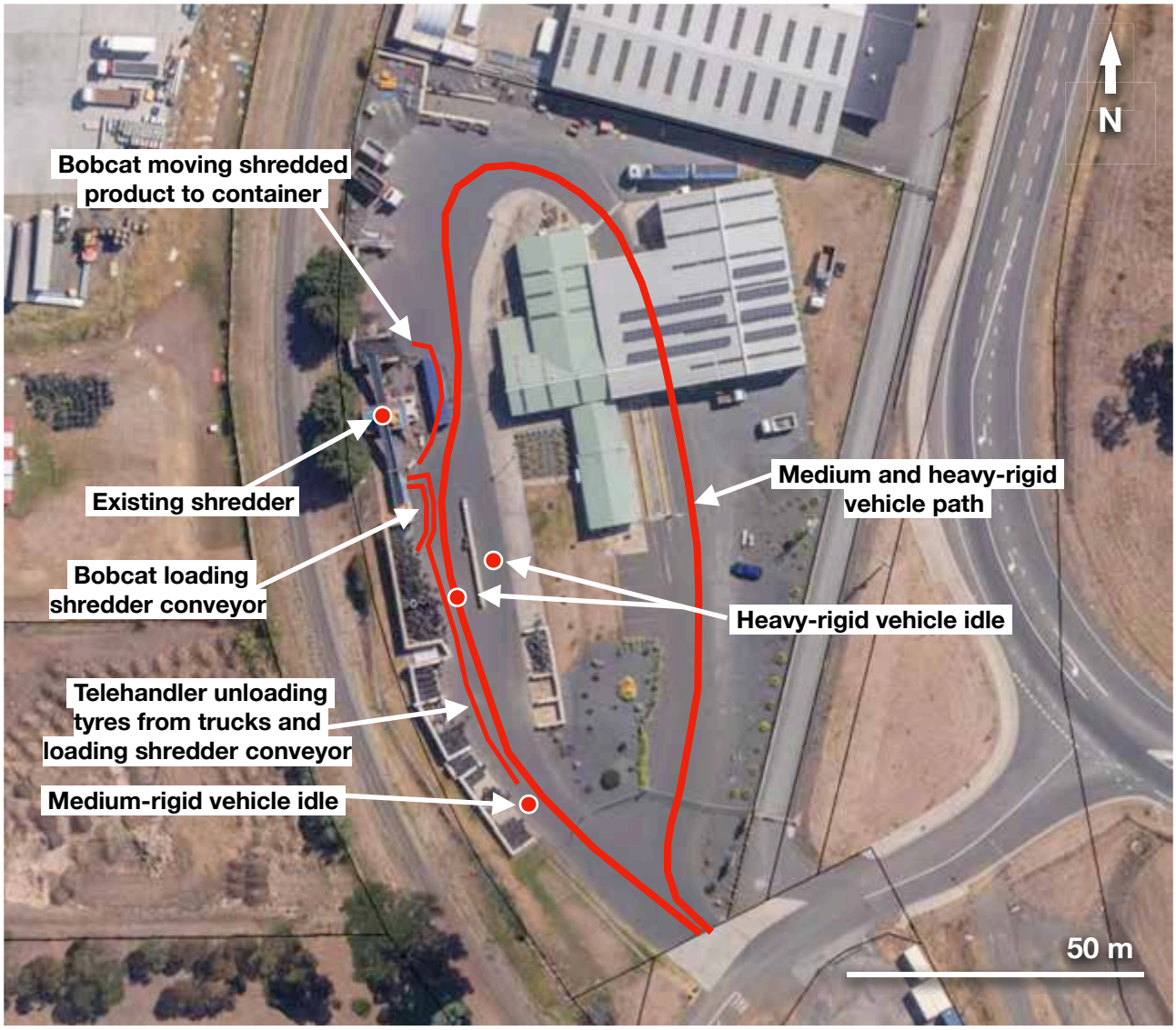



**FIGURE 4.1: MODELLED LOCATION OF NOISE SOURCES - EXISTING**

Comments deemed relevant to this model are as follows:

- Sound power levels and the duration of which each noise source is operational within the model are provided in Table 4.1, below.
- The Tyrecycle site only has one bobcat, however, the use of the bobcat is spread across two typical processes; loading the existing shredder conveyor with tyres, and loading shipping containers with shredded product. The noise model therefore includes two paths for the bobcat across a full daytime period, with its overall uptime distributed between both paths. For the 15-minute worst-case scenario, only a single bobcat noise source is active within the model, with the southern-most bobcat path (closest to residential receivers as shown in Figure 4.1, above) modelled during this worst-case period.
- NVC has been informed that the forklift is only used to assist in dismounting containers from trucks and is generally only used for a maximum of 15 minutes per day. To ensure a conservative approach, the forklift has been modelled to be operating for a total of 1 hour.

- The maximum number of medium-rigid vehicles (four per day) are modelled to be entering and leaving site each day.
- The maximum number of heavy-rigid vehicles (four tyre deliveries and two container deliveries) are modelled to be entering and leaving site each day.
- Two heavy-rigid vehicles are modelled to be idling for a total of one hour each at the tyre and container offloading positions, representative of trucks 'waiting in line' to begin offloading. This is highly conservative as typically, truck arrivals are staggered to minimise trucks waiting.
    - Note that NVC has been informed that all trucks are required to turn off their engine while offloading.
- A single medium-rigid vehicle is modelled to be idling at the south tyre storage bay for one hour each day. This is conservative.
- For the modelling of the worst-case operations, all noise sources noted in Table 4.1 have been modelled to be operational during a single 15-minute period. This is absolute worst-case and is unlikely to occur in practice due to operational constraints.

A summary of the above modelled noise sources is shown in Table 4.1, below.

The results are presented via coloured predictive noise contours in figures 4.2 and 4.3, below, with contours shown in 5 dB increments from 30 dBA to 55 dBA. A 'wide view' of the predictive noise contours is provided in Appendix C.

**TABLE 4.1: SUMMARY OF MODELLED NOISE SOURCES - EXISTING (TYPICAL OPERATIONS)**

| Modelled Noise Source | Modelled Height Above Ground (m) | Sound Power Level (dBA) | Hours Operating Each Day | Qty. |
|---|---|---|---|---|
| **Telehandler** | 0.75 | 98 | 8 | 1 |
| **Bobcat** | 0.75 | 102 ea. | 4 ea. | 2 * |
| **Forklift** | 0.75 | 93 | 1 | 1 |
| **Existing Shredder** | 4 | 107 | 6 | 1 |
| **Medium-rigid Truck (Moving)** | 0.5 | 99 ea. | - | 4 |
| **Medium-rigid Truck (Idle)** | 0.5 | 97 | 1 | 1 |
| **Heavy-rigid Truck (Moving)** | 0.5 | 101 ea. | - | 6 |
| **Heavy-rigid Truck (Idle)** | 0.5 | 97 ea. | 1 ea. | 2 |

* As noted above, during the worst-case noise emissions scenario, only a single bobcat is operational as there is only one bobcat on site. The southern-most bobcat path (closest to residential receivers) shown in Figure 4.1, above, is modelled during this worst-case period.

### 4.1.2. Results - Existing Operations

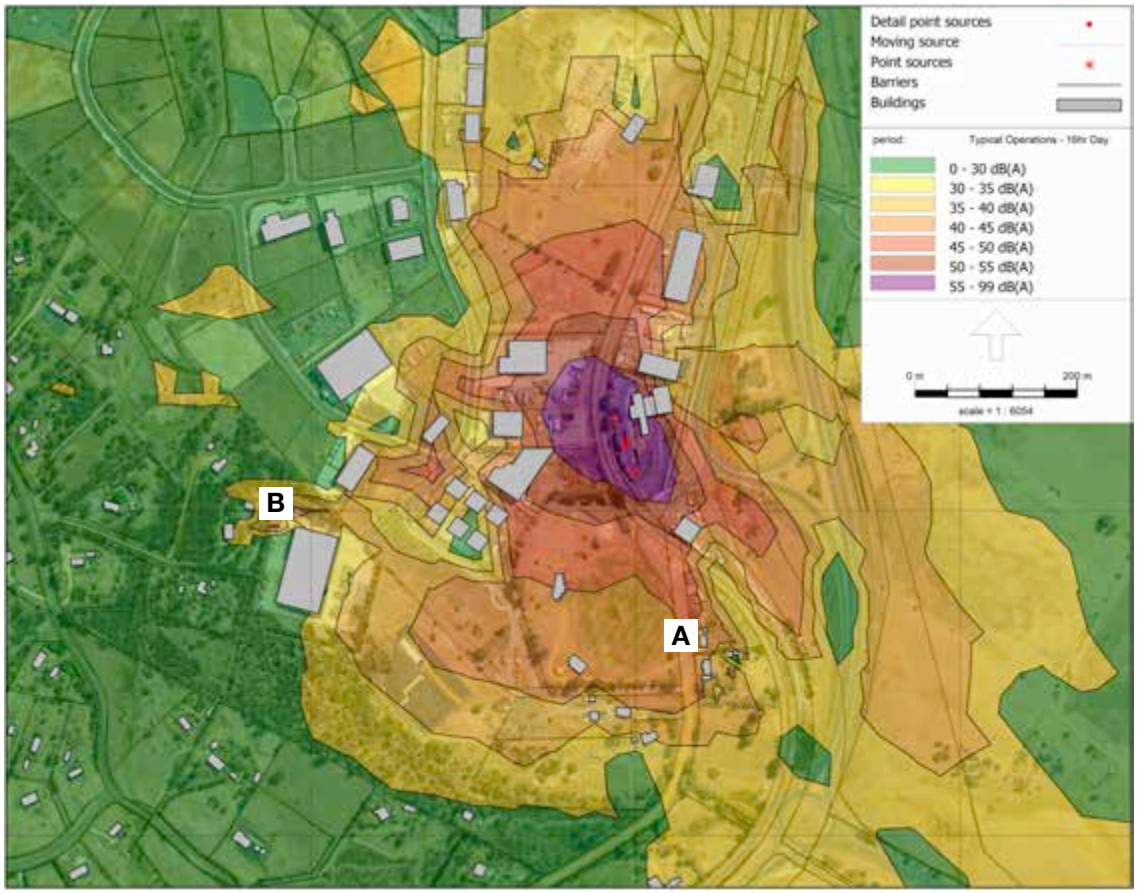



**FIGURE 4.2: PREDICTIVE NOISE CONTOURS - EXISTING (TYPICAL OPERATIONS)**

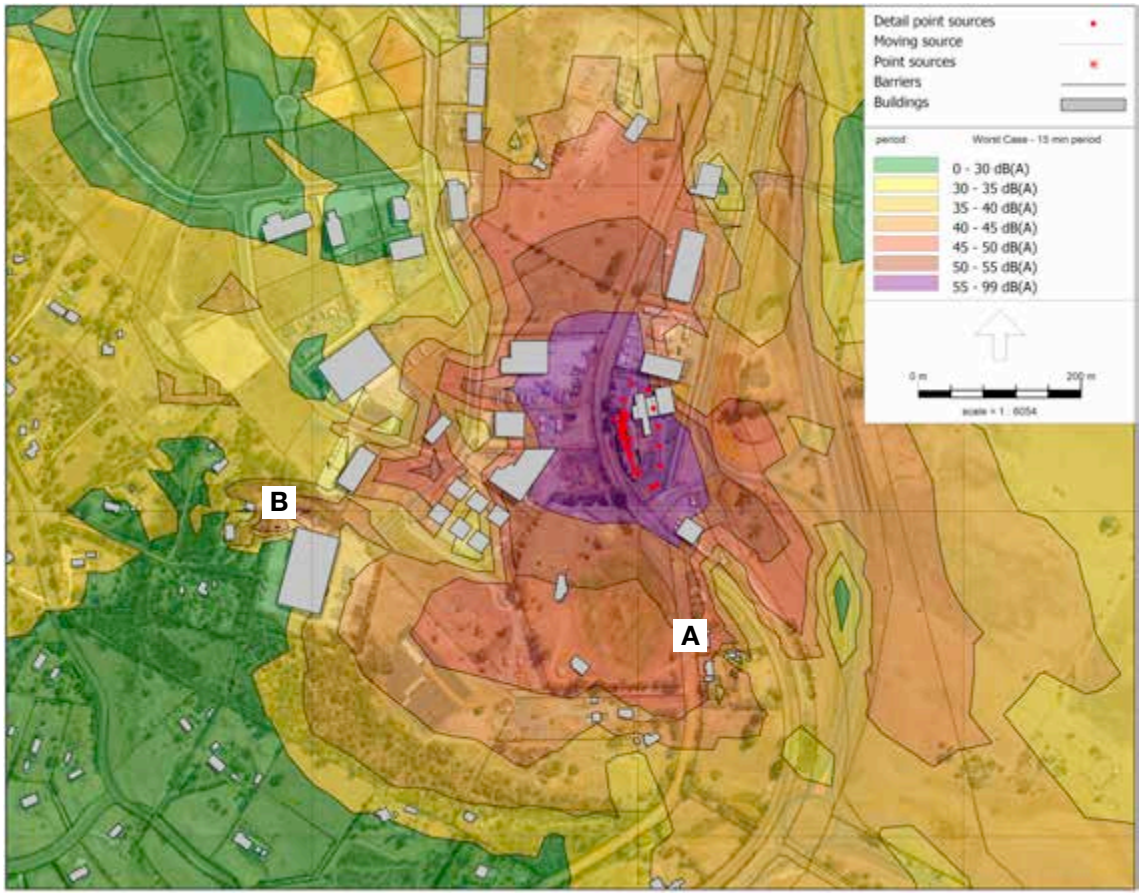



**FIGURE 4.3: PREDICTIVE NOISE CONTOURS - EXISTING (WORST-CASE OPERATIONS)**

To examine the noise level expected across a typical workday for Tyrecycle, a comparison of a predicted $Leq_{(8.5\text{-hour})}$ is also shown in Table 4.2.

**TABLE 4.2: PREDICTED NOISE LEVELS - EXISTING**

| Location | Sound Pressure Level (dBA) | | |
|---|---|---|---|
| | Tyrecycle Operating Hours (7:30AM - 4:00PM) $Leq_{(8.5\text{-hour})}$ | Full Day (6:00AM - 10:00PM) $Leq_{(16\text{-hour})}$ | Worst-case $Leq_{(15\text{-minute})}$ |
| **A** | 48 | 45 | 50 |
| **B** | 37 | 35 | 39 |

### 4.1.3. Discussion - Existing Operations

- As shown in Table 4.2 above, during a worst-case 15-minute period, noise levels are predicted to be nominally 50 dBA at location A, which directly aligns with the measured sound pressure level at this location when the existing shredder, loader, and telehandler were operational and dominant, as discussed in Section 2.2. Therefore, the model is deemed to be predicting accurately to the south.
- During a worst-case 15-minute period, noise levels are predicted to be nominally 53 dBA at location 4, which is 13 dB greater than a measurement taken at this location when all major noise sources were dominant.
    - Predictions show that the existing shredder is the dominant noise source at location 4, which correlates with the perception of the noise at this location. No correction for directivity has been applied to the existing shredder, and thus it is likely that the existing shredder has significant directivity that has not been accounted for in the noise modelling.
    - Due to access, all noise measurements used to determine the existing shredder's sound power level were conducted on the eastern side of the shredder with line of sight to the shredder's motors. The shredder's motors are screened to the west.
        - Since the sound power level is inclusive of noise from the conveyors, motors, and tyres impacting the existing shredder's in-feed, modelling all of these noise sources as a single point source at the height of the top of the existing shredder is conservative, and under-represents the screening afforded by the intervening buildings and topography.
    - Whilst on site, various shipping containers, trucks, and other mobile industrial equipment were observed to be located within the businesses to the west of site. At the request of the EPA, all 'mobile infrastructure' has been excluded from the software noise model, and thus there is significant additional screening to the west of site that has not been considered in the software noise model.
        - The industrial sites to the west of Tyrecycle include a freight and logistics company (Tasfreight) and removal company (Grace), both of which rely on the use of heavy vehicles and shipping containers. As such, the exclusion of all heavy vehicles and shipping containers on these sites within the software noise modelling is extremely conservative.
            - From review of historical aerial satellite imagery between 2018-2024, heavy vehicles and shipping containers are shown to occupy these sites in the same locations consistently.
        - The predicted noise levels to the west of site are therefore substantially over-predicting the noise levels within the western residential zone (location B).

## 4.2. Proposed Expansion

### 4.2.1. Modelling Methodology - Proposed Expansion

The proposed expansion scenario includes all noise sources that are currently operating on site, as well as the new CM shredder. The location of each of these noise sources is shown in Figure 4.4.

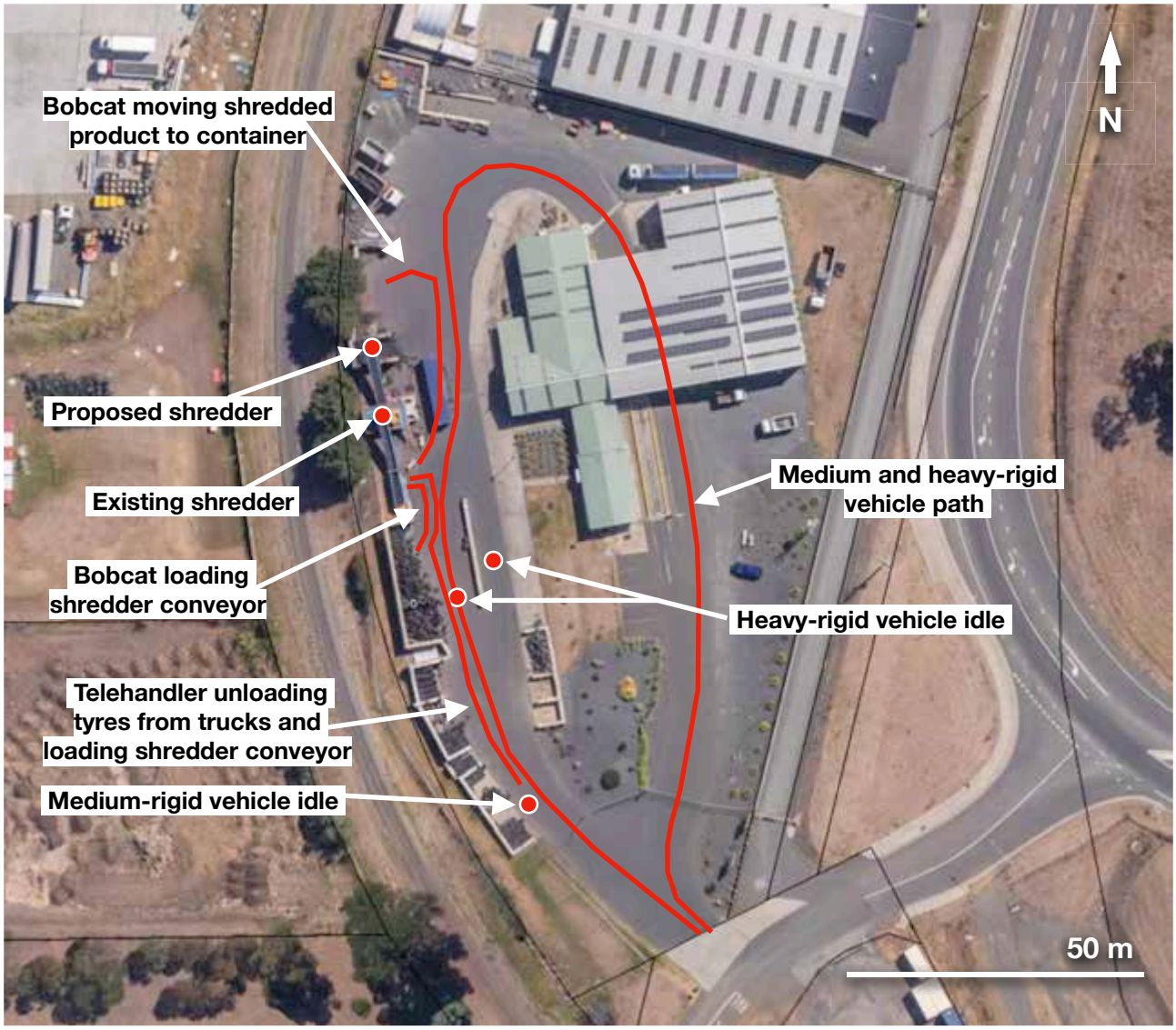



**FIGURE 4.4: MODELLED LOCATION OF NOISE SOURCES - PROPOSED**

Comments deemed relevant to this model are as follows:

- The modelled sound power levels and duration for which each noise source is operational for are provided in Table 4.3, below.
- The modelled noise sources and associated details discussed in Section 4.1.1 are relevant here unless discussed below.
- The purpose of the heavy vehicles accessing site has changed, however, their operation while on site and the frequency at which they access site is likely to remain unchanged. The worst-case model includes the following truck noise sources:
  - 4 medium-rigid vehicles accessing site per day.
  - 6 heavy-rigid vehicles accessing site per day (4 tyre deliveries, 1-2 product removals, and 0-1 container deliveries/removals).

- The proposed CM shredder noise level has been modelled based on the worst-cast noise levels measured during an occupational noise assessment conducted by JTA[11] at the Tyrecycle located at 776-800 Redbank Plains Road, Redbank, Queensland.
  - NVC has been informed that the CM shredder measured by JTA is identical to the unit proposed to be installed on site.
  - Notably, the secondary CM shredder is significantly quieter than the primary existing shredder. Tyrecycle staff have noted that this is consistent with perception and is due to the smaller sized product input, and increased number of teeth on the shredding shafts.
  - It is noted the data for the CM shredder has been obtained from an occupational noise assessment, and not a formal noise impact assessment. However, the equipment is custom-manufactured, and thus typical manufacturer information is unavailable.
  - Noise from motors and conveyors associated with the CM shredder have been included within the modelled point source, with the source modelled at the height of the CM shredder. Since the shredder itself is located higher than all other components, this is conservative.
  - The CM shredder is assumed to operate for the same duration as the existing shredder on site (6 hours per day).
- The bobcat has now been modelled to also move product from the 1.5-inch product pile into containers and thus its movement path extends further to the north than the model of existing operations.

The results are presented via coloured predictive noise contours in figures 4.5 and 4.6, with contours shown in 5 dB increments from 30 dBA to 55 dBA. One-third octave data for the predicted sound pressure level at the sensitive receiver locations (locations A and B) has been provided in Appendix B. A wide view of the contour results is provided in Appendix C.

**TABLE 4.3: EXISTING AND PROPOSED TYPICAL OPERATIONS**

| Source | | Modelled Height Above Ground (m) | Sound Power Level (dBA) | Hours Operating Each Day | Qty. |
|---|---|---|---|---|---|
| Existing Noise Sources | Telehandler | 0.75 | 98 | 8 | 1 |
| | Bobcat | 0.75 | 102 ea. | 4 ea. | 2 * |
| | Forklift | 0.75 | 93 | 1 | 1 |
| | ERS Shredder | 4 | 107 | 6 | 1 |
| | Medium-rigid Truck (Moving) | 0.5 | 99 ea. | - | 4 |
| | Medium-rigid Truck (Idle) | 0.5 | 97 | 1 | 1 |
| | Heavy-rigid Truck (Moving) | 0.5 | 101 ea. | - | 6 |
| | Heavy-rigid Truck (Idle) | 0.5 | 97 ea. | 1 ea. | 2 |
| New Proposed Noise Sources | CM Shredder | 4 | 91 | 6 | 1 |

* As noted in Section 4.1.1, above, during the worst-case noise emissions scenario, only a single bobcat is operational as there is only one bobcat on site. The southern-most bobcat path shown in Figure 4.4, above, is modelled during this worst-case period as noise levels at the residential receivers are highest during this process.

[11] *'Tyrecycle Tasmania GA Drawing'*, J1125 Plant, OGTEC, 2025

### 4.2.2. Results - Proposed Expansion

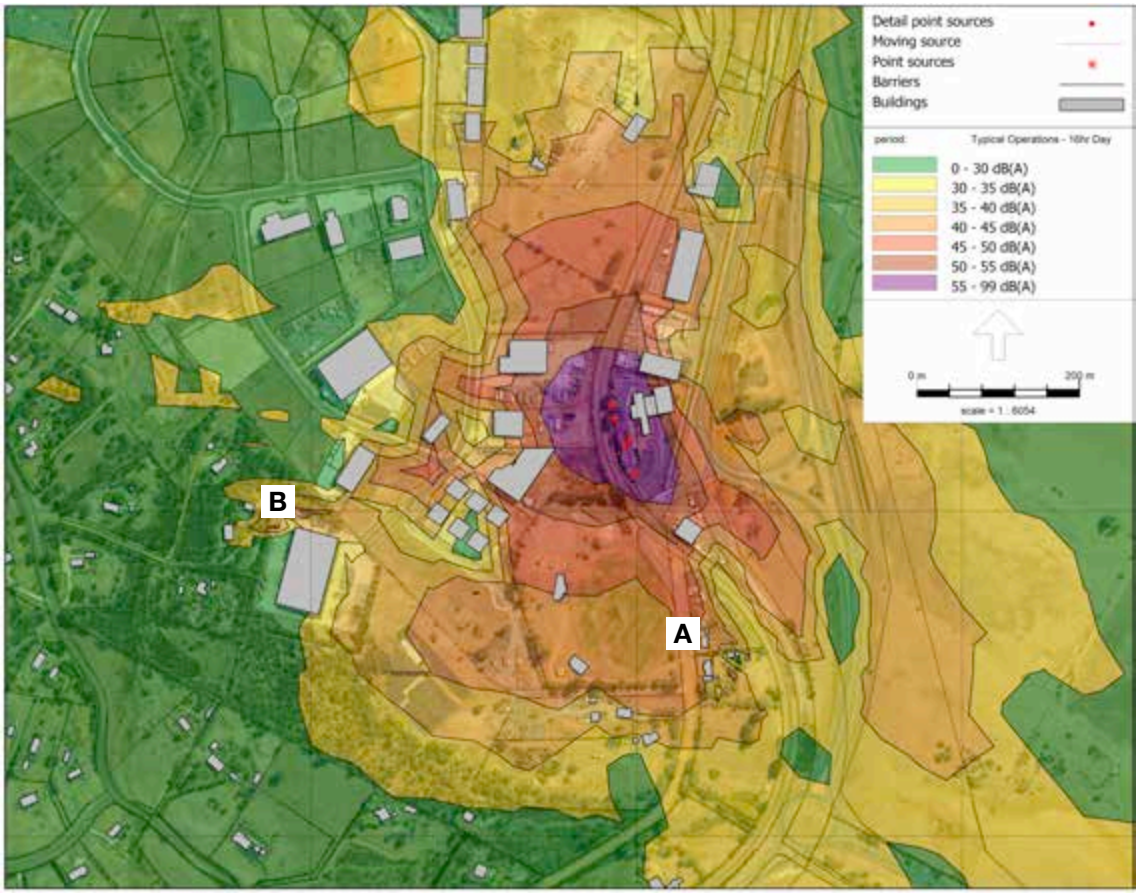



**FIGURE 4.5: PREDICTIVE NOISE CONTOURS - PROPOSED (TYPICAL OPERATIONS)**

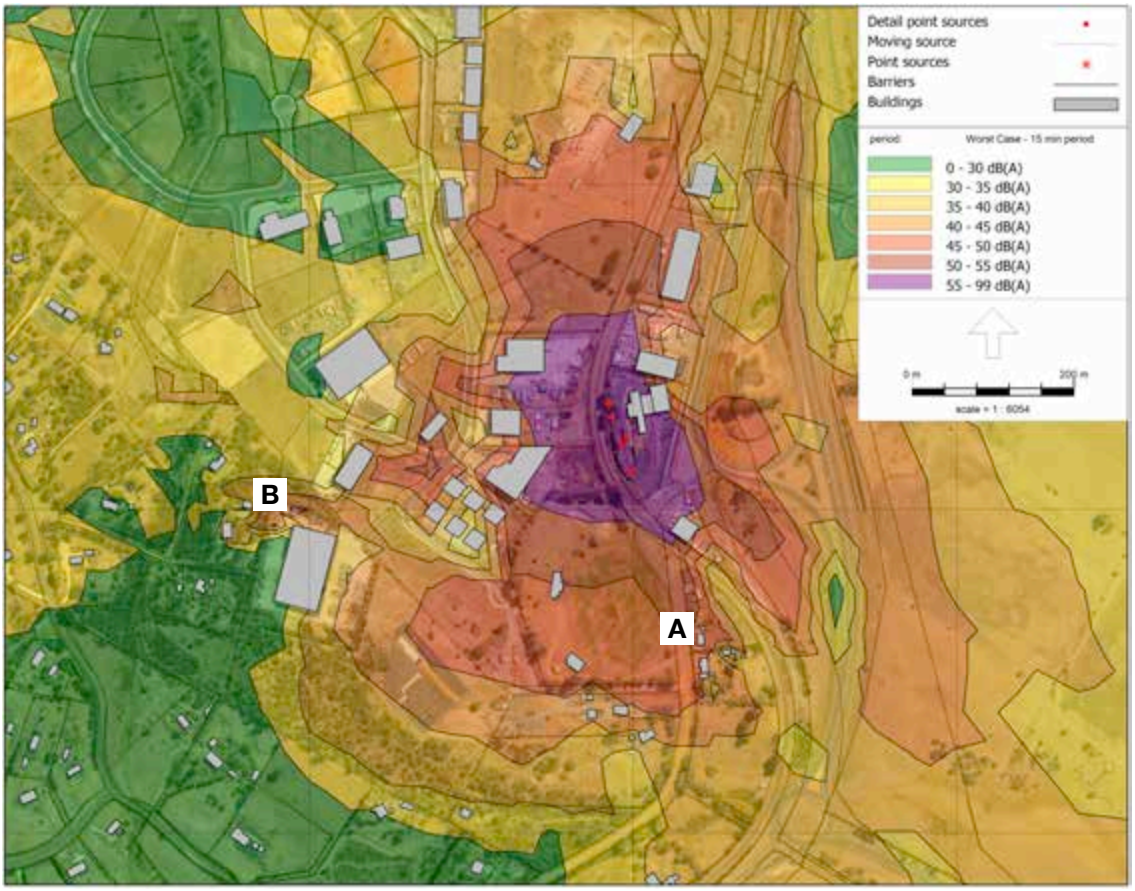



**FIGURE 4.6: PREDICTIVE NOISE CONTOURS - PROPOSED (WORST-CASE OPERATIONS)**

**TABLE 4.4: PREDICTED EXPANSION NOISE LEVELS**

| Location | Sound Pressure Level (dBA) | | | |
|---|---|---|---|---|
| | Tyrecycle Operating Hours (7:30AM - 4:00PM) $Leq_{(8.5\text{-hour})}$ | Full Day (6:00AM - 10:00PM) $Leq_{(16\text{-hour})}$ | Worst-case $Leq_{(15\text{-minute})}$ | Difference to Existing Noise Levels |
| **A** | 48 | 46 | 50 | **≤ 1** |
| **B** | 37 | 35 | 39 | **≤ 1** |

### 4.2.3. Discussion - Proposed Expansion

A summary of predicted noise levels and appropriate criteria is shown in Table 4.5, below.

**TABLE 4.5: SUMMARY OF ASSESSMENT - PROPOSED EXPANSION**

| Location | Sound Pressure Level (dBA) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tyrecycle Operating Hours (7:30AM - 4:00PM) $Leq_{(8.5\text{-hour})}$ | | | Full Day (6:00AM - 10:00PM) $Leq_{(16\text{-hour})}$ | | | Worst-case $Leq_{(15\text{-minute})}$ | | |
| | Predicted | Criteria | Pass? | Predicted | Criteria | Pass? | Predicted | Criteria | Pass? |
| **A** | 48 | 50 | Yes | 46 | 50 | Yes | 50 | 50 | Yes |
| **B** | 37 | 50 | Yes | 35 | 50 | Yes | 39 | 40 | Yes |

# 5. DISCUSSION

The following is relevant in determining the acceptability of the Tyrecycle expansion:

- The difference in noise levels between the existing operations and proposed operations at each location are predicted to be less than 1 dB, and thus the difference in noise level is expected to be imperceptible following the expansion of site to include the CM shredder.
    - As discussed in Section 2.1, above, the background noise levels at the surrounding nearest sensitive premises are not controlled by Tyrecycle. Thus, based on a noise level increase of less than 1 dB, the proposed Tyrecycle operations are not predicted to increase the existing background noise levels at the noise sensitive premises.
- All predicted noise levels across the full daytime period satisfy the 50 dBA criterion for 'moderate annoyance' outlined by the TAS Noise EPP. It is noted that the TAS Noise EPP's 50 dBA criterion assumes an $L_{eq}$ over a 16-hour period, and thus when assessing the predicted 16-hour $L_{eq}$ from Tyrecycle, noise emissions from site comfortably satisfy this criterion. Therefore, 'moderate annoyance' due to noise from Tyrecycle is not expected to occur.
    - Predicted noise levels at location B are a conservative representation of the expected noise levels, with noise levels likely to be substantially lower in practice due to the noise model over-predicting noise levels to the west of site by nominally 13 dB.
        - As discussed in Section 4.1.3, there is significant screening to the west of site in the form of shipping containers and heavy vehicles that are not included in the model at the request of the EPA. The modelled noise source of the shredder also includes shredder motor noise as well as conveyor noise despite them being screened to the west of site. Additionally, the noise source in the software noise model for the existing shredder does not have any directivity applied to it and is assumed to be omnidirectional.
    - For comparison, the TAS Noise EPP notes a noise level of 45 dBA outdoors is typically appropriate to avoid sleep disturbance during the night time. A noise level of 46 dBA is predicted at location A during the daytime, which nearly achieves the TAS Noise EPP's nighttime criterion for sleep disturbance. Additionally, predicted noise levels at location B are below this nighttime criterion during worst-cast Tyrecycle operations and thus are extremely unlikely to result in a disturbance of acoustic amenity.
- All locations are predicted to see noise levels below the respective worst-case 15-minute criteria.
- All results have been assessed for intrusive or dominant characteristics as per the Tasmanian Noise Measurement Procedure Manual at the worst-affected sensitive premises, with no adjustments required.
- The existing shredder is noted as being the dominant noise source on site during both existing and proposed operational scenarios due to its raised position and high sound power level. However, the noise generated by the existing shredder was observed to be primarily broadband, reducing its intrusiveness in the presence of other external noise sources such as traffic noise.
- It is predicted that if double the number of proposed heavy vehicles were to access site, the overall change in noise levels between the existing and proposed operations at the nearest sensitive receiver is < 1 dB. As such, an increase in the amount of heavy vehicles accessing Tyrecycle each day due to an increase in tyre supply, would not result in a significantly change to noise levels.
    - The software noise modelling assumes the site is operating at maximum capacity. The overall capacity of the site is constrained by staff availability, on-site storage, and equipment throughput, and thus cannot increase beyond what has been modelled.

- Additionally, the worst-case proposed model already assumes maximum uptime and capacity of all equipment and vehicles over a 15-minute period.

- As shown above, noise emissions from site are predicted to be acceptable at all nearby sensitive premises. The EER Guidelines note that it is best-practice to screen all noisy fixed plant equipment that has line of sight to any sensitive premises. As such, whilst not specifically required to achieve compliance with the noise criteria, best-practice noise control recommendations are provided in Section 6, below.

# 6. RECOMMENDATIONS

It is noted within the EER Guideline that it is considered best-practice to screen any noisy fixed plant equipment that has a line of sight to any sensitive premises.

The new CM shredder will have significant screening to the south of site due to the existing shredder platform and equipment. The new shredder alone is predicted to result in a noise level of 28 dBA over a 15-minute worst-case period, and thus is not deemed noisy in the context of the existing background noise levels.

Software noise modelling and on-site observations suggest that noise emissions from the existing shredder are the dominant noise source on site due to their magnitude, location, and up-time. As such, screening the existing shredder is deemed appropriate to achieve best-practice, as outlined within the EER Guidelines.

The following is recommended to screen the existing shredder from the southern sensitive premises:

- Construct an acoustic barrier to the south of the existing shredder to screen line of sight between the existing shredder and associated motors, and residential dwellings to the south (location A). The barrier should comprise the following details:
    - A minimum surface mass of 10 kg/m$^2$. Examples of appropriate construction includes 10 kg/m$^2$ mass-loaded vinyl products such as Pyrotek Wavebar[12], 9 mm fibre cement sheet, 9 mm thick polycarbonate (Lexan), or commercial noise barrier products.
    - The extents of the barrier should achieve the nominal extents shown in the conceptual diagram in Figure 6.1, below.
        - It is recommended that mass-loaded vinyl or rubber flaps are installed above the existing shredder conveyor to allow for safe passing of tyres while minimising line of sight between the existing shredder and the southern residences.
        - It is recommended that the barrier extends nominally 0.5 m above the top of the shredder bin.

[12] '*Wavebar*', Pyrotek, https://www.pyroteknc.com/products/wavebar/wavebar


**FIGURE 6.1: RECOMMENDED EXISTING SHREDDER BARRIER**

The resultant noise levels after implementing the barrier shown in Figure 6.1 are shown in Table 6.1, below.

**TABLE 6.1: SUMMARY OF ASSESSMENT - PROPOSED EXPANSION WITH SCREENING**

| Location | Sound Pressure Level (dBA) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tyrecycle Operating Hours (7:30AM - 4:00PM) $L_{eq(8.5\text{-hour})}$ | | | Full Day (6:00AM - 10:00PM) $L_{eq(16\text{-hour})}$ | | | Worst-case $L_{eq(15\text{-minute})}$ | | |
| | Proposed | Proposed + Screen | Change | Proposed | Proposed + Screen | Change | Proposed | Proposed + Screen | Change |
| **A** | 48 | 45 | - 3 dB | 46 | 42 | - 4 dB | 50 | 48 | - 2 dB |
| **B** | 37 | 37 | 0 dB | 35 | 35 | 0 dB | 39 | 39 | 0 dB |

As shown by Table 6.1, above, across a full daytime period noise levels are comfortably below the TAS Noise EPP criteria of 50 dBA (42 dBA at location A and 35 dBA at location B) and below the NSW EPA's Noise Policy for Industry.

Note that the implementation of the barrier described above is best-practice but not a strict requirement to achieve the numerical criteria.

Additionally, Figure 6.2 demonstrates the predicted change in noise levels between the existing operations at Tyrecycle and the proposed operations after the implementation of the best-practice barrier detailed in Section 6, above. It is noted that, following the implementation of the above barrier, noise emissions from site, including the proposed operations, are predicted to be *lower* than currently.

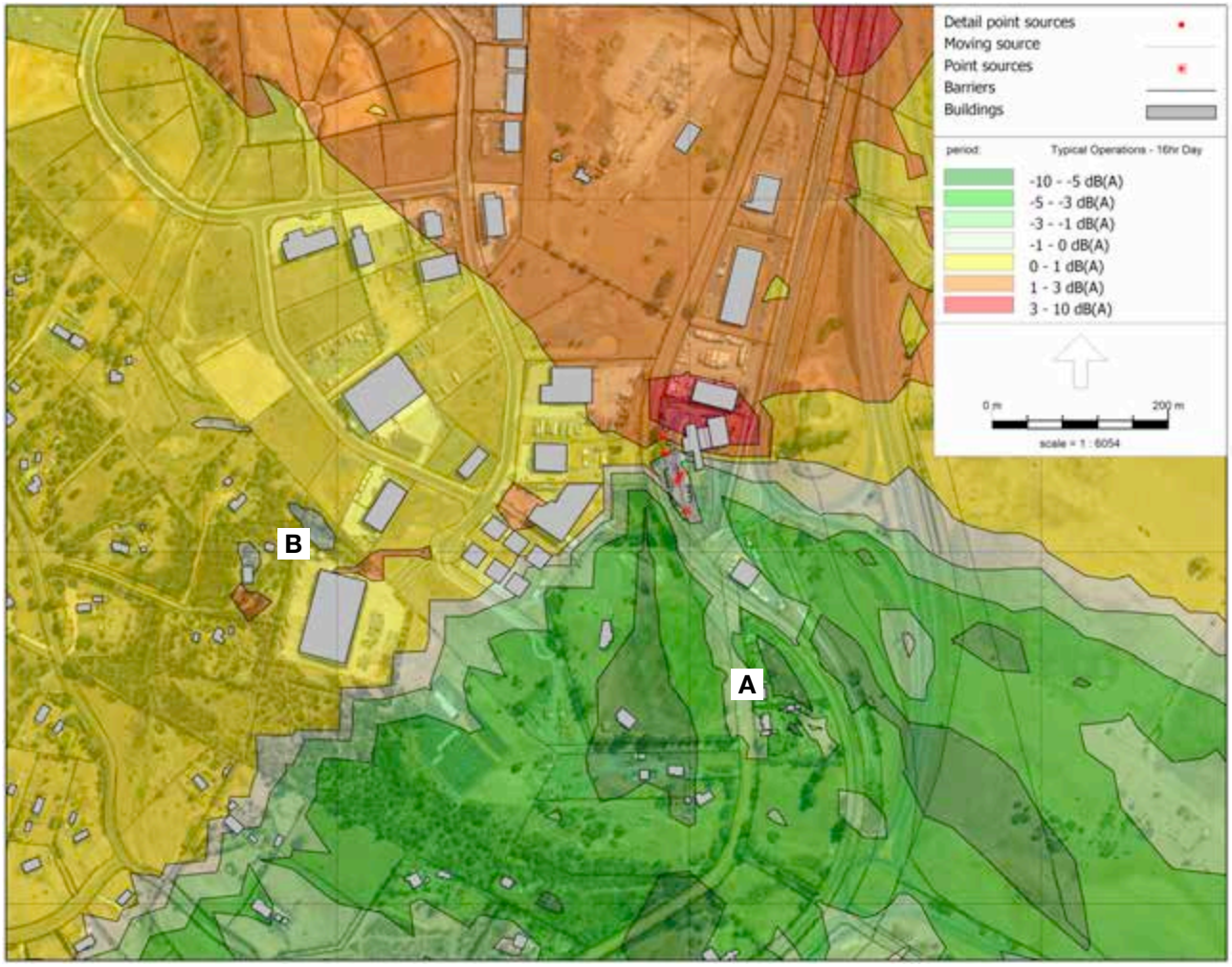



**FIGURE 6.2: CHANGE IN NOISE LEVEL - EXISTING VS PROPOSED (WITH RECOMMENDATIONS)**

Note that in that the small orange overlay at the property associated with location B is a change in 2 dB due to reflections from the introduction of the barrier. The noise level within this orange area is 24 dBA and thus inaudible when compared to the background noise level in the western residential zone.

# 7. ASSESSMENT

As shown in Table 4.5 and discussed in Section 5, above, predicted noise levels comply with the adopted criteria across both a typical daytime period and during worst-case operations, such that protection of the existing acoustic amenity of surrounding noise sensitive premises is achieved.

Additionally, a comparison of the predicted noise levels against the existing background noise levels are shown in Table 7.1, below.

**TABLE 7.1: COMPARISON OF PROPOSED EXPANSION (W/ BARRIER) AND EXISTING BACKGROUND**

| Location | Sound Pressure Level (dBA) | | | | | |
|---|---|---|---|---|---|---|
| | Tyrecycle Operating Hours (7:30AM - 4:00PM) $L_{eq(8.5\text{-hour})}$ | | | Full Day (6:00AM - 10:00PM) $L_{eq(16\text{-hour})}$ | | |
| | Predicted | Existing Background^ | Increases Background? | Predicted | Existing Background^ | Increases Background? |
| **A** | 45 | 45 | No | 42 | 44 | No |
| **B** | 37 | 35 | No* | 35 | 35 | No |

^ As discussed in sections 2.1 and 2.2.1, the existing background noise level does not include existing noise emissions from Tyrecycle.

* See the discussion below as to why the proposed expansion is unlikely to increase existing background noise levels.

After the implementation of the proposed acoustic barrier, noise levels across a full 16-hour day and during a worst-case 15-minute period do not exceed the existing background noise level. Over the typical Tyrecycle operating period, noise levels to the west are predicted to be nominally 2 dB above the existing background. The following is provided as justification as to why the proposed Tyrecycle operations are unlikely to increase existing background noise levels at location B:

- The software noise modelling shows that the difference in noise levels between the existing and proposed operations are less than 1 dB at locations A and B. This is typically considered to be an imperceptible difference, and thus suggests that there is no perceptible difference in noise levels due to Tyrecycle at the existing sensitive receivers following the proposed expansion.
- As previously mentioned, the noise model has been shown to over-predict noise levels to the west of site by nominally 13 dB. As such, predicted noise levels at location B are a conservative representation of the expected noise levels, with noise levels likely to be substantially lower in practice.
- The noise levels at location B are significantly below what is typically acceptable during the night time, when the recommended noise level should not exceed 45 dBA according to the TAS Noise EPP. This noise level limit is recommended to avoid sleep disturbance and thus is highly conservative for a daytime requirement, particularly for dwellings adjacent an existing industrial zone.
- Typical operations across a full day are predicted to be under the adopted TAS Noise EPP noise criterion.

Thus, following the implementation of the recommendations in Section 6, the proposed Tyrecycle expansion is predicted to have no increase to the existing background noise levels at nearby sensitive premises.

## 7.1. Assessment Summary

Noise levels from the proposed expansion at Tyrecycle's Bridgewater site are predicted to satisfy both the TAS Noise EEP for typical daytime operations and the NSW EPA's Noise Policy for Industry during a worst-case 15-minute period. Following the proposed expansion, assuming no new noise control is implemented, noise levels are predicted to increase by an imperceptible amount (≤ 1 dB) at the nearest sensitive receivers, and therefore are unlikely to result in environmental nuisance or harm.

As best-practice, it is recommended to implement an acoustic barrier to the south of the existing shredder, screening line of sight between the existing shredder and the nearest sensitive receivers to the south. After implementing the acoustic barrier shown in Section 6, above, noise levels from Tyrecycle following the proposed expansions are predicted to decrease compared to existing operations, and be below the existing background noise level at the surrounding noise sensitive premises. Furthermore, the proposal is deemed to be consistent with Part 5 of the TAS Noise EPP.

Therefore, the proposed expansion of operations at Tyrecycle, located at 3 Weily Park Road, Bridgewater, is acceptable regarding noise.

# Appendix A - 3D Image of iNoise Model

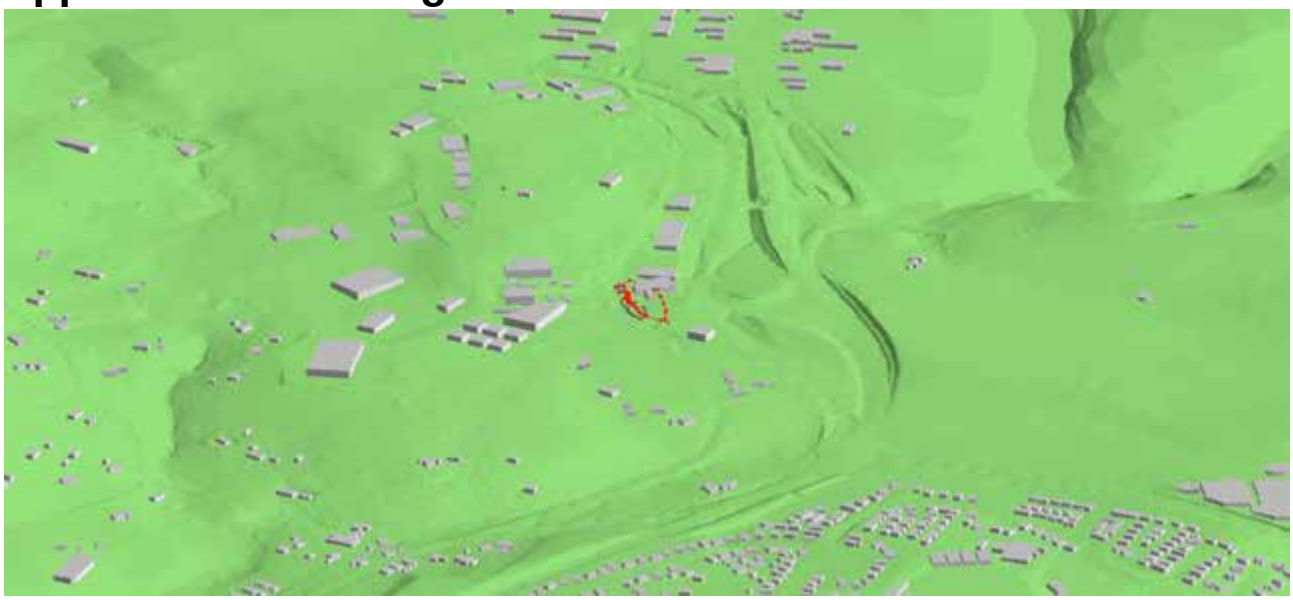


**FIGURE A.1: 3D WIDE VIEW OF INOISE MODEL (FROM SOUTH) - PROPOSED OPERATIONS**

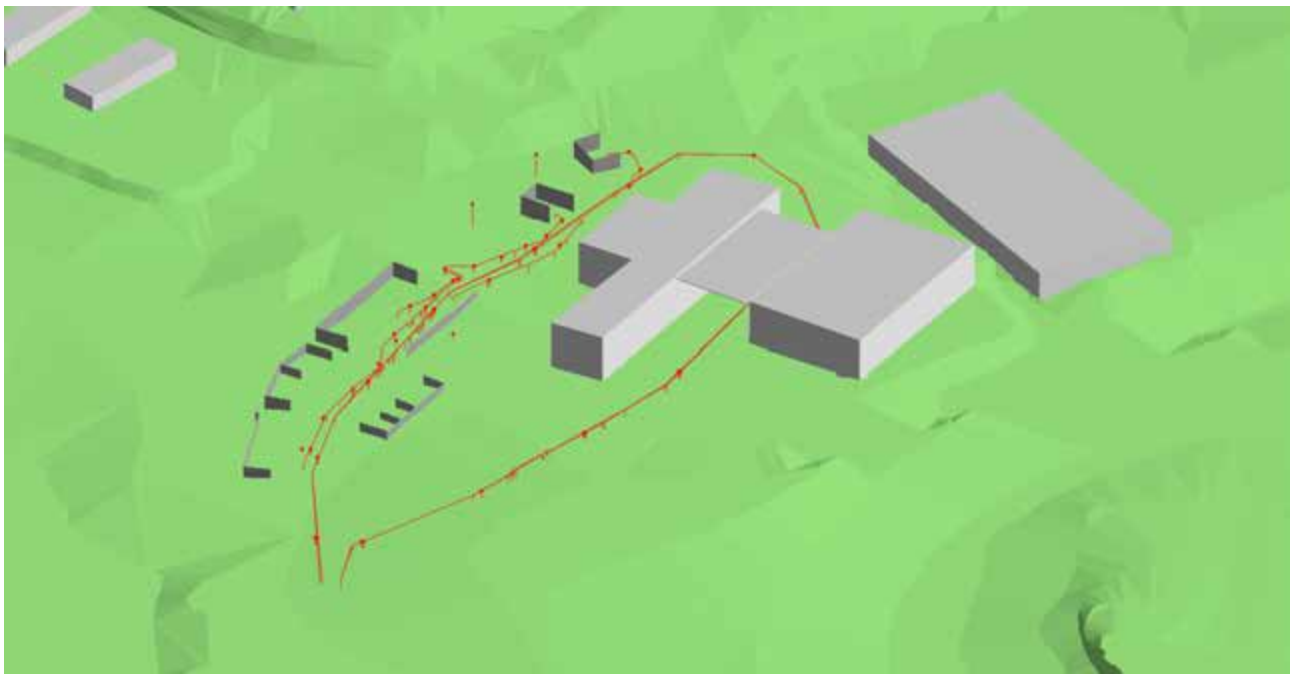


**FIGURE A.2: 3D CLOSE VIEW OF INOISE MODEL (FROM SOUTH-EAST) - PROPOSED OPERATIONS**

# Appendix B - Predicted Proposed Operations One-Third Octave Data

**TABLE B.1: PREDICTED PROPOSED OPERATIONS ONE-THIRD OCTAVE DATA**

| One-third octave band, Hz | Predicted Sound Pressure Levels, dB | | | |
|---|---|---|---|---|
| | Typical Operations | | Worst-case Operations | |
| | Location A | Location B | Location A | Location B |
| **31.5** | < 20 | < 20 | < 20 | < 20 |
| **40** | < 20 | < 20 | < 20 | < 20 |
| **50** | < 20 | < 20 | 24 | < 20 |
| **63** | 20 | < 20 | 25 | < 20 |
| **80** | 26 | < 20 | 31 | < 20 |
| **100** | 29 | < 20 | 32 | < 20 |
| **125** | 26 | < 20 | 30 | < 20 |
| **160** | 30 | < 20 | 35 | 23 |
| **200** | 25 | < 20 | 30 | 21 |
| **250** | 28 | < 20 | 32 | 23 |
| **315** | 29 | 22 | 34 | 26 |
| **400** | 33 | 25 | 38 | 30 |
| **500** | 32 | 24 | 37 | 29 |
| **630** | 34 | 26 | 38 | 30 |
| **800** | 36 | 26 | 41 | 30 |
| **1000** | 36 | 25 | 41 | 30 |
| **1250** | 35 | 24 | 40 | 28 |
| **1600** | 35 | 23 | 41 | 28 |
| **2000** | 37 | 24 | 42 | 29 |
| **2500** | 34 | 20 | 39 | 25 |
| **3150** | 33 | < 20 | 37 | 22 |
| **4000** | 28 | < 20 | 32 | < 20 |
| **5000** | 22 | < 20 | 26 | < 20 |
| **6300** | < 20 | < 20 | < 20 | < 20 |
| **8000** | < 20 | < 20 | < 20 | < 20 |
| **10000** | < 20 | < 20 | < 20 | < 20 |
| **Overall** | **45** | **35** | **50** | **39** |

# Appendix C - Wide View Software Model Contours

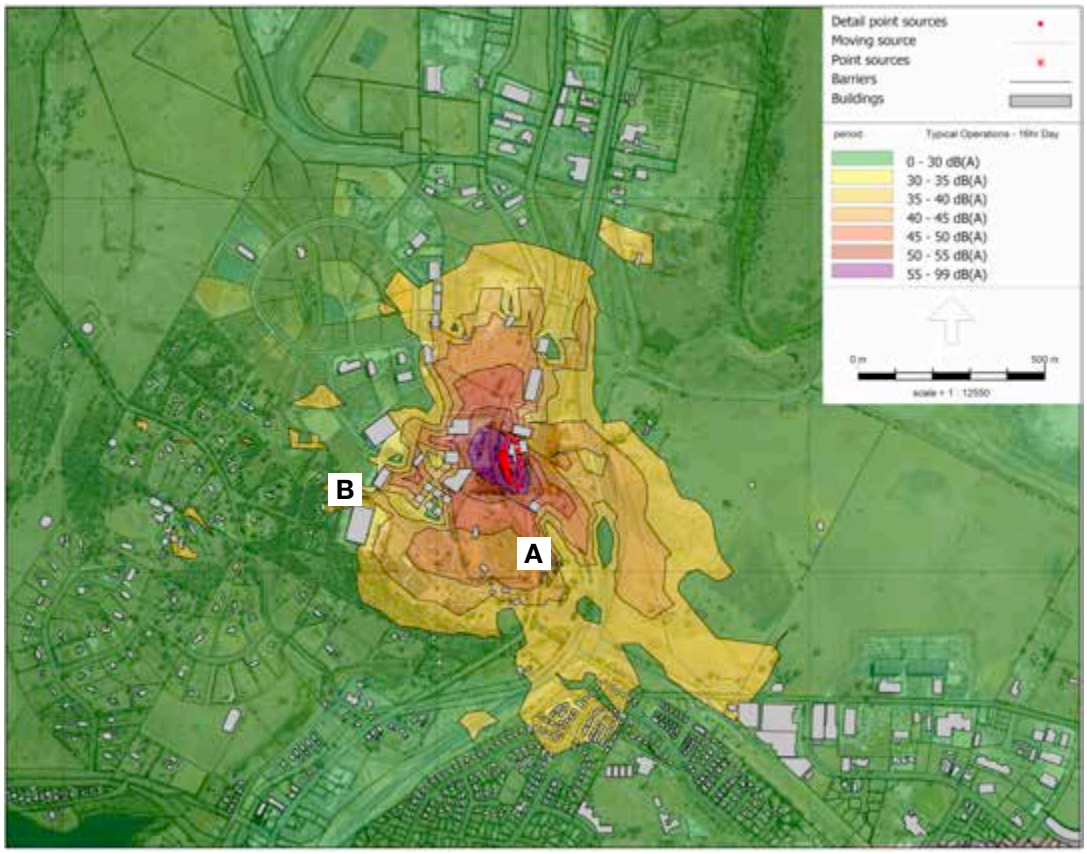



**FIGURE C.1: EXISTING NOISE LEVELS - TYPICAL OPERATIONS**

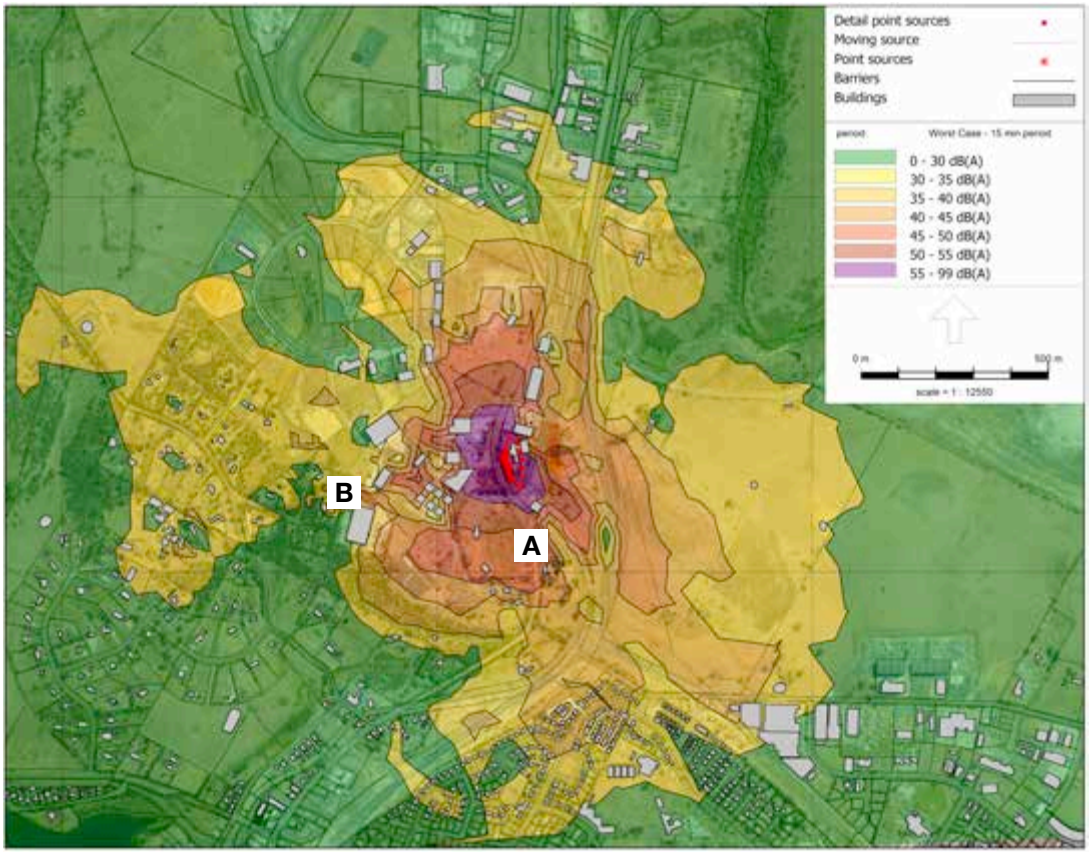



**FIGURE C.2: EXISTING NOISE LEVELS - WORST-CASE OPERATIONS**

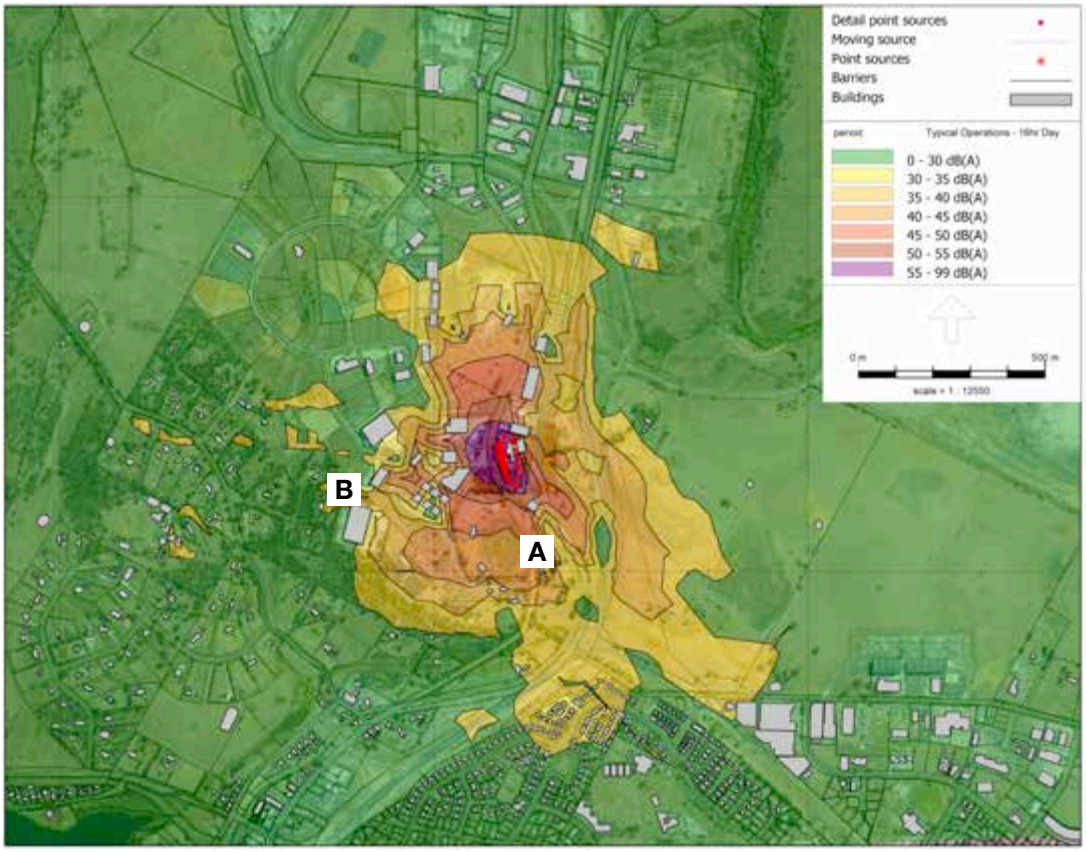



**FIGURE C.3: EXPANSION NOISE LEVELS - TYPICAL OPERATIONS**

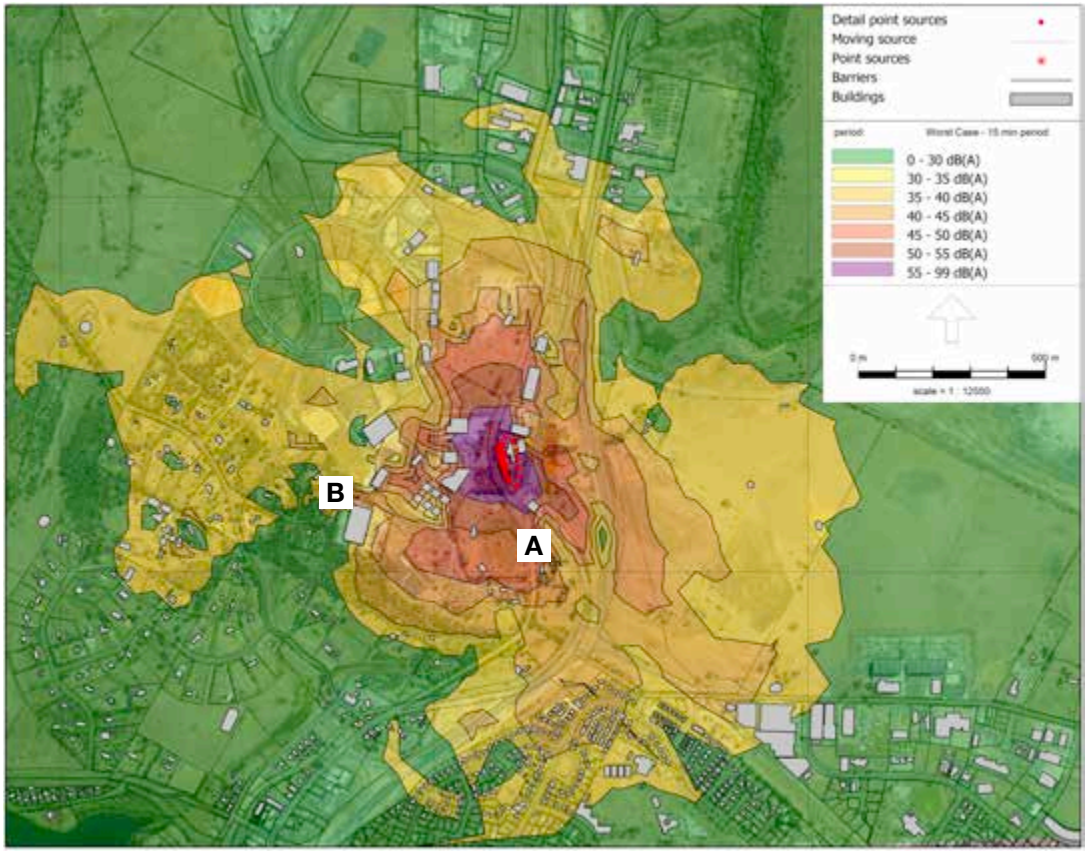



**FIGURE C.4: EXPANSION NOISE LEVELS - WORST-CASE OPERATIONS**

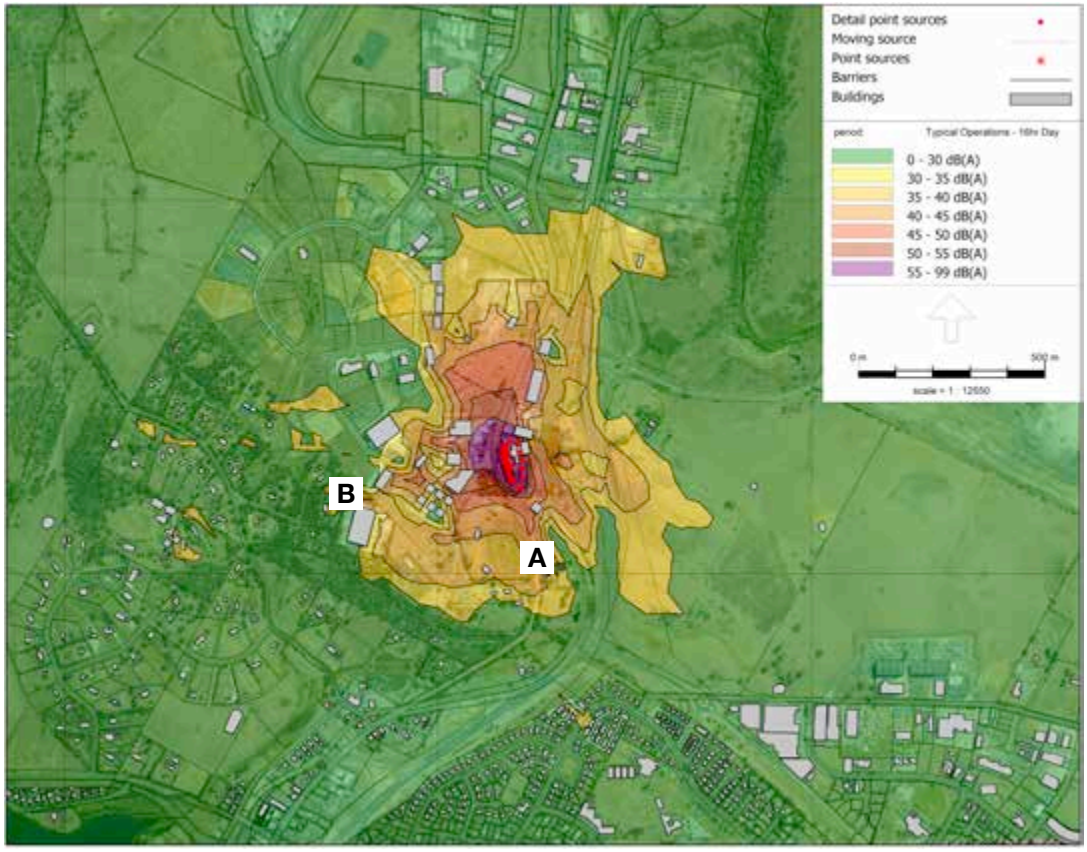



**FIGURE C.5: EXPANSION NOISE LEVELS (WITH RECOMMENDATIONS) - TYPICAL OPERATIONS**

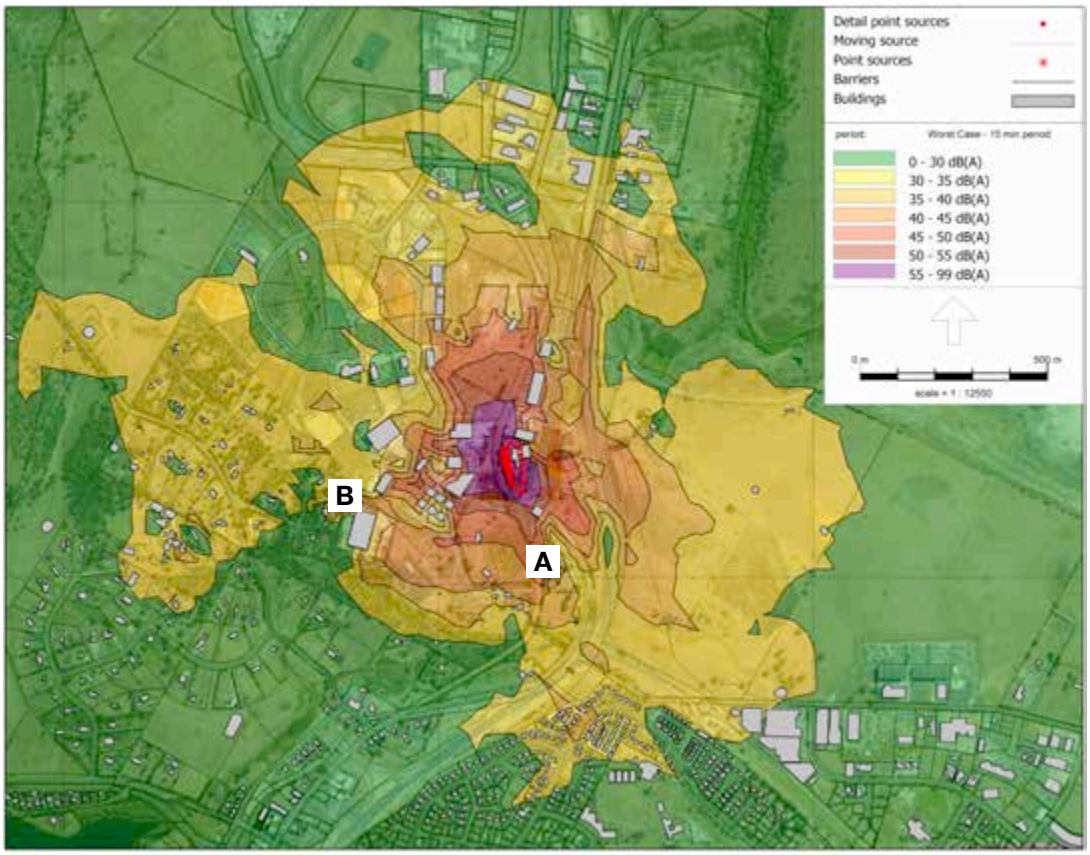



**FIGURE C.6: EXPANSION NOISE LEVELS (WITH RECOMMENDATIONS) - WORST-CASE OPERATIONS**

# Appendix D - Acoustic Glossary

| | |
|---|---|
| *Ambient Noise* | All noise associated with a measurement, and typically ignoring the particular noise under investigation. Typically measured as Leq and will usually comprise noise from many sources. |
| *Background Noise* | Background noise describes the underlying level of noise present in the ambient noise. It may be described as the average of the minimum noise levels measured, and is typically measured by the statistical L90 level. |
| *Decibel [dB]* | The scale used for describing sound. It is a logarithmic scale that uses a reference sound pressure of 20 µPa, or reference sound power of $10^{-12}$ Watts. |
| d*BA* | A-weighted decibel. The human ear does not perform linearly and is better at hearing high frequency rather than low frequency sounds, ie. low frequency sound at the same dB level as a high frequency sound will be perceived as quieter. To replicate the human ear response a frequency weighting, denoted as an A-weighting, is applied to the sound. A sound measured in this way is then an A-weighted sound pressure level with units dBA. Practically all noise is measured using the A-weighting. |
| *Leq* | Energy averaged sound pressure level over a period of time, usually 10 to 15 minutes. Units of decibels, typically A weighted (LAeq). Because the decibel scale is a logarithmic ratio, the higher noise levels have far more sound energy, and therefore the Leq level tends to indicate an average which is strongly influenced by short-term, high level noise events. Many studies show that human reaction to level-varying sounds tends to relate closer to the LAeq noise level than any other descriptor. |
| *Frequency* | Frequency is synonymous with pitch and has the units of Hertz (Hz) or cycles per second. A bass drum produces a low frequency sound, and a small bell a high frequency sound. The frequency range for human hearing is approximately 30Hz to 16kHz. |
| *L10, L90…* | Ln is the sound pressure level that is exceeded for n% of the time. Hence the L10 describes the noisier events during the interval, and L90 the quieter events. The L90 is often used to describe the background level. A significant variation between the L10 and L90 would indicate an environment where there is a strong variation in noise levels, and the background is not the dominant source. As the variation between the L10 and L90 decreases, the background becomes more dominant. |
| *Lmax* | The instantaneous maximum level using the time response and frequency weighting set for the meter (typically Fast response, A weighted). |
| *Inversion* | A condition typically occurring on clear, still nights which is characterised by the air near the ground being colder than air at higher altitudes. The increasing speed of sound with altitude bends the sound back towards the ground causing a focussing of the sound in a small area. The inversion effect can cause increases in noise levels of 5 to 10 dB with greater increases in exceptional circumstances. |

# PROC 533

# Fire Management and Response Plan

# Tyrecycle Tasmania

## 1. Introduction

### 1.1 Purpose

The purpose of this Fire Management and Response Plan (FMRP) is to provide Tyrecycle with guidance in the event of a fire emergency arising at the tyre recycling and disposal facility at 3 Weily Park Road, Bridgewater. The aim of this FMRP is to ensure actions are taken on site to eliminate / minimise environmental harm in a fire emergency. The FMRP is also a compliance requirement of Tyrecycle's Environment Protection Notice No. 10195/1 Condition OP2.

### 1.2 Scope

This FMRP applies to the tyre recycling and disposal facility, land and operations at Tyrecycle Bridgewater and ALL workers and/or contractors and site occupants (including visitors) when a fire emergency occurs.

### 1.3 Applicability

This Procedure applies to Tyrecycle Pty Ltd ACN 085 545 053 (**Tyrecycle**) and its respective workers.

### 1.4 Objectives

There are four main objectives of the FSMP:

1. To ensure a comprehensive fire risk management process is applied across the business to ensure a high level of safety for persons and property.
2. To ensure that fire safety problems that arise are quickly and effectively contained and resolved.
3. To ensure that Tyrecycle complies fully with its legal obligations in relation to fire safety.
4. To ensure that appropriate training and information is provided on fire safety to Tyrecycle's management and operational teams.

### 1.5 Site Details

| Element | Details |
|---|---|
| **Permit Conditions** | Environmental No. 10195/1 |
| **Activity** | The operation of a tyre recycling and disposal facility |
| **Activity Type** | Crushing, Grinding or Milling (Chemicals) |
| **Site Address** | 3 Weily Park Road<br>Bridgewater Tasmania 7030 |
| **Regulatory Limits** | 5,000 tonnes per year of chemicals or rubber processed. |
| **Operating Hours** | 0700 hours to 1800 hours Monday to Friday |
| **Security** | Land area is fenced to prevent entry by unauthorised persons and fences must be maintained for this purpose. |

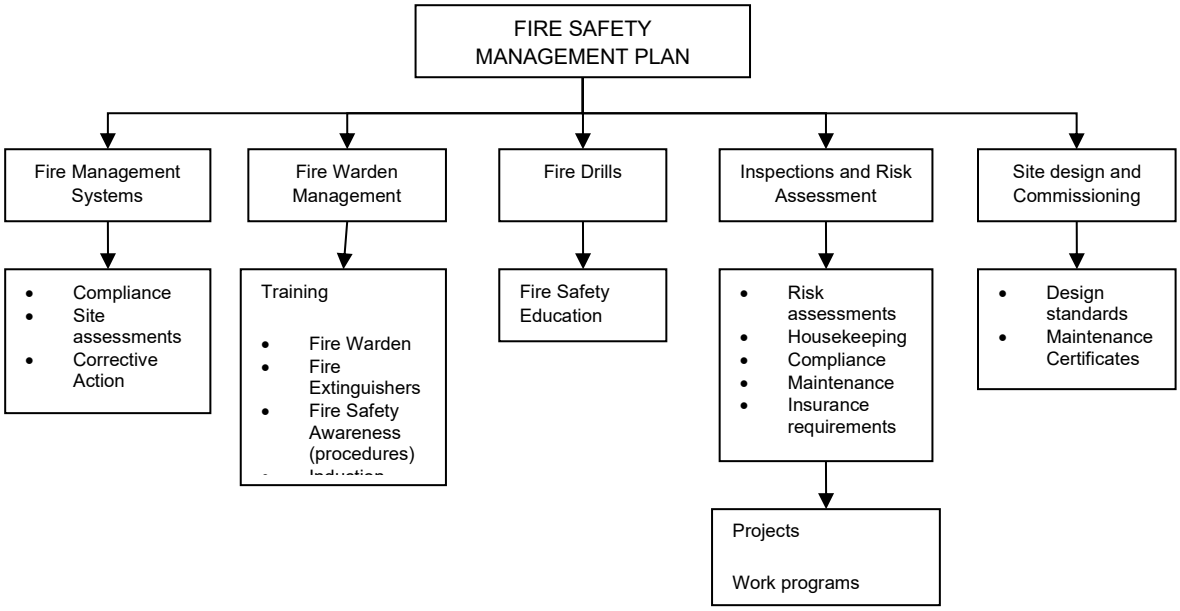
## 2. Roles and Responsibilities

The following are responsible for the implementation and management of the control measures discussed in this document:

| Role | Responsibility |
|---|---|
| Site Manager(s) | • Responsible for approving resources for the implementation of the FMRP.<br>• Allocate funding for fire safety.<br>• Ensure fire wardens are aware and trained in the FMRP.<br>• Ensure fire wardens are competent to minimise fire risks in accordance with the FMRP.<br>• Ensure the infrastructure design, installation and maintenance of fire systems are consistent with the requirements of the FMRP. |
| Fire Wardens | • Ensure effective maintenance practices are established and maintained in compliance with the FMRP and legislation.<br>• Ensure procedures are maintained and complied with.<br>• Ensure that all relevant training is attended when required. |

| | |
|---|---|
| | • Participate in fire drills. |
| Site Staff<br><br>Site Occupants Contractors<br><br>Site Visitors | • Ensure individual activities do not contribute to fire risk and are in accordance with the requirements of this FMRP.<br><br>• Participate in fire drills.<br><br>• Ensure all internal and external areas of building(s) are kept free and safe from fire hazards. |

# 3. Framework for managing fire safety




## 3.1 Fire Management Systems

Fire safety systems and equipment are included on a preventive maintenance schedule. It is the role of the Site Manager(s) to ensure adequate resources are allocated for equipment to be maintained in operational condition at all times. Regular site inspections are conducted to identify and correct any issues identified.

## 3.2 Fire Warden Management

It is the responsibility of the Site Manager(s) to appoint fire wardens for respective areas and to ensure appropriate coverage for operations. A training register is maintained to provide details of trained fire wardens and to ensure training is kept up to date.

It is the responsibility of the Site Manager(s) to coordinate accredited training to meet operations. All fire wardens will be trained in the use of the evacuation procedures. Fire wardens are to report any faults or problems to the Site Manager.

## 3.3 Emergency Dills and Emergency Procedures

Emergency Response documents are displayed to provide workers and site occupants with the actions required to evacuate the site in the event of an emergency.

Emergency drills will be conducted in accordance with the Evacuation Drills procedure. The purpose of evacuation drills is to educate workers and site occupants in the correct manner of evacuating the site in the event of an emergency and to meet legal obligations.

All evacuations will be conducted by the Fire Warden. Post-debriefing sessions will accompany each evacuation drill to foster continuous improvement. Areas identified as a high fire safety risk may be required to undertake additional emergency evacuation drills.

## 3.4 Fire Fighting Equipment

Fire hydrants (100ml line) have been installed on site in accordance with license and Tasmanian Fire Service requirements. Fire hydrants are identified on the site map held by Tasmanian Fire Service. Fire extinguishers are installed and maintained by TasFire Equipment. A register is maintained by TasFire Equipment identifying the type, number and location of extinguishers. Spill kits are located in a portable container which can be quickly moved for use where required.

The event of a fire, the main site drain is to be plugged and absorbent socks are to be used if using CAFS to fight the fire. Plugging equipment (drain plug) is located in a box next to the main switchboard (see site map). Absorbent socks are located in the spill kit.

## 3.5 Inspections and Risk Assessments

Regular site inspections are undertaken monthly to identify areas for corrective action. On at least an annual basis a risk assessment is undertaken to identify areas of potential significant impact and to implement control measures to mitigate risk at the site.

This assessment will be reviewed to ensure that the FMRP matches the risks and that they are effective as variables in the business and its surrounds change. Reviews will also be conducted based on changes or incidents.

## 3.6 Site Design and Commissioning of New Systems

All building design work comply with relevant codes and standards. Existing buildings are constructed on steel frames with steel linings. Concrete bunds are installed for tyre storage. An Annual Maintenance inspection is conducted to ensure the existing buildings and facilities meet requirements.

Any new building works and equipment projects that include fire safety equipment and systems will be reviewed by the Tasmanian Fire Service and/or a Building Inspector prior to entering service to ensure regulatory compliance.

## 3.7 Internal Storage

| Element | Description |
|---|---|
| Stockpile arrangements | Tyres are stored in concrete storage bins in accordance with operational requirements. Random stacking is used inside the controlled storage area. No obstruction of fire equipment and storage occurs |
| Storage bin requirements | 4 concrete bays in total<br><br>Size: 18m long x 6 m wide x 2.5 m high |
| Stockpile size | 4.7m x 5m x 3m = 70m³ |
| Shredding | On site shredder processes at the same rate as receival (approx. 21 tonnes per day) |
| Maximum ELT storage capacity | 4 days average processing (i.e. 80 tonnes) |

## 3.8 External areas

The rear boundary to the facility is approximately 3 metres from the storage areas. Site entry points should have at least 4 metres of clearance with enough access to allow large emergency vehicles to enter the site. The site is maintained in accordance with the Environmental Assessment Report and as required by EPA license requirements. Site operators are to conduct daily inspections of work areas prior to commencement of work activities. Monthly site inspections occur to mitigate the risk of any potential ignition sources. It is recommended that pine trees located outside the boundary and close to the storage bins be removed to mitigate the risk of any potential ignition sources.

## 3.9 Site security and access

Many fires that occur at tyre recycling facilities are started by vandals or intruders. Improvements to site security are a necessary part of providing ongoing site and fire protection. Protection for the highest hazard commodities will be a major priority. Currently a security perimeter fence is maintained to prevent entry by unauthorised persons and fences must be maintained for this purpose.

Drivers have access to the site to use the weighbridge from 5:30am to 4:30pm daily. Outside normal working hours the main gate is locked and able to be accessed using as security key. A key register is maintained.

Improvements for consideration include additional appropriate external lighting to discourage and prevent unauthorised access. Sensor lights are fixed at the main gate. Secure doors and windows are maintained on all buildings and the buildings are locked outside of regular working hours with an external security firm providing monitoring services. Clearly visible signs with operating hours and site regulations are displayed near the entrance. Site operators are rostered on site when the facility is open.

# 4. Risk Assessment

## 4.1 Tyres – Risk Factors

Tyres are not hazardous in their natural state but when on fire they emit smoke, oil, toxic gases and heavy metals. To ensure the safety of Tyrecycle's workers, site occupiers and the surrounding public; and to ensure that the local environment is not affected by the consequences of a tyre fire, significant focus is placed on the prevention of fires occurring at Tyrecycle's facility. In addition to this, an Emergency Response Sheet is in place to ensure that in the event of a fire, control measures are planned for, rehearsed regularly and reviewed for suitability and adequacy.

The table below shows factors that could affect fire safety at the facility and control options for consideration:

| Factors | Effects | Control Options |
|---|---|---|

| | | |
|---|---|---|
| Fire hazards and faults | Heightens the risk of fire and loss of life and property. | A risk assessment that identifies problems and generates remedial action. |
| Inappropriate storage of materials. | Heightens the risk of fire and loss of life and property. | Effective site management practices ensuring materials are stored per procedures and rubbish/foreign materials are removed; safety mechanisms are put into place. |
| Staff are not fully aware of fire issues. | Incorrect action in the event of an emergency and unidentified fire hazards become a practical threat. | Training for all staff in fire safety awareness and practices. New staff induction training. |
| Lack of fire wardens. | Lack of fire supervision in designated areas, particularly in emergency situations. | Identification and training of appropriate fire wardens for required site operations. |
| Inappropriate storage of flammable and potentially flammable materials. | Exposure to a high risk of fire. | Implement a programme of proper storage and handling procedures for identified materials. |

| | | |
|---|---|---|
| Lack of safety procedures in high-risk areas. | Inability to reduce the risk of fire hazards and response to emergency situations. | Develop policies and procedures for high-risk areas. |
| Buildings and/or facilities are in poor condition and non-compliant with regulatory requirements. | Increase risk of loss of life and property in the event of fire. Increased exposure to prosecution and litigation. | • Building design<br>• Maintenance planning<br>• Inspections<br>• Work programmes |

## 4.2 Risk Assessment – Fire

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Whole tyres & tyre shred | D4<br><br>Critical | • Maintain a 3-metre separation distance from tyre piles to the perimeter of the building & the boundary.<br>• Separate tyre piles by concrete bund and minimise fuel loads & provide access paths<br>• Limit stockpile sizes to 18 x 6 x 2.5 m<br>• Enforce Unloading Truck Procedure to ensure tyres are placed within these piles<br>• Store tyres in accordance with EPA licence EPN 10195/1<br>• Signed Evacuation Assembly Area(s). Report on fire incidents with the EPA & the Tas Fire Service<br>• Conduct regular site inspection and plant inspections. Use TasFire Equipment to check firefighting equipment | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A4<br><br>Medium |

| | | | | |
|---|---|---|---|---|
| | | • Conduct yearly evacuation drills<br>• Display Emergency Evacuation Diagrams across the site. Display Emergency Response Sheet and Warden photo posters on Safety Notice Board<br>• Maintain a strong incident reporting culture & assessment of data to ascertain & deal with trends<br>• Maintain adequate numbers of trained wardens<br>• Limit maximum number of whole tyres on site at any one time to 125T | | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Vandalism at site / fire in whole tyres & tyre shred | D4<br><br>Critical | • Maintain a 3-metre separation distance from tyre piles to the perimeter of the building & the boundary.<br><br>• Request neighbors to remove pine trees behind storage area.<br><br>• Maintain perimeter fence. Consider security patrols.<br><br>• Separate tyre piles by concrete bund and minimise fuel loads & provide access paths<br><br>• Limit stockpile sizes to 18 x 6 x 2.5 m<br><br>• Store tyres in accordance with EPA licence EPN 10195/1<br><br>• Signed Evacuation Assembly Area(s). Report fire incidents to the EPA & the Tas Fire Service<br><br>• Conduct regular site inspection and plant inspections. Use TasFire Equipment to check firefighting equipment | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br><br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br><br>• Hose reels and fire hydrants<br><br>• Fire extinguishers<br><br>• Access in between piles for emergency services & trained operators<br><br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br><br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A4<br><br>Medium |

| | | | | |
|---|---|---|---|---|
| | | • Conduct 6 monthly evacuation drills<br>• Display Emergency Evacuation Diagrams across the site. Display Emergency Response Sheet and Warden photo posters on Safety Notice Board<br>• Maintain a strong incident reporting culture & assessment of data to ascertain & deal with trends<br>• Maintain adequate numbers of trained wardens<br>• Limit maximum number of whole tyres on site at any one time to 125T | | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Finished Rubber Product | C2<br><br>MEDIUM | • Contained and stored outside on hard stand away from ignition sources<br>• Area maintained in a condition fit for purpose<br>• Regular inspections to occur | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | B2<br><br>LOW |
| Heat generated from the shredding plant | B1<br><br>LOW | • Water is sprayed on the rubber during operation of the shredding plant to cool the temperature | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property | A1<br><br>LOW |

| | | | | |
|---|---|---|---|---|
| | | • Competent operators only to use equipment | • Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Operation of forklifts / loaders (can generate sparks from exhaust, brakes, tyres striking concrete) | B4<br><br>HIGH | • Only properly maintained plant and equipment to be used in or near tyre storage areas (flameproof if possible)<br><br>• Competent operators only to use plant and equipment<br><br>• Preventative maintenance and servicing of all plant and equipment<br><br>• Daily pre-start checks of all plant and equipment | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br><br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br><br>• Hose reels and fire hydrants<br><br>• Fire extinguishers<br><br>• Access in between piles for emergency services & trained operators<br><br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br><br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A4<br><br>MEDIUM |
| Grass fire or bush fire | B4<br><br>HIGH | • Property & boundary maintenance | • Communication with neighbouring property owners | A4<br><br>MEDIUM |

| | | | | |
|---|---|---|---|---|
| (site is located in a regional area alongside an operational railway track) | | • Clearance zone along the boundary where tyres are not to be stored<br>• Early bushfire warning system Tasmanian Fire Service alerts<br>• Maintenance of grass on owned land<br>• Extreme weather alerts and responses are included in toolbox talks / education of workforce<br>• Text alerts<br>• Evacuation drills and procedures practiced | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Gas cylinders | B2<br><br>LOW | • Gas cylinders are to be always constrained<br><br>• Oxygen & acetylene bottles are stored at least 3 metres apart Minimise volume of bottles kept on site and order as needed | • In the event of a fire, move the gas forklifts to a safe distance away from the affected area<br><br>• Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br><br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br><br>• Hose reels and fire hydrants<br><br>• Fire extinguishers<br><br>• Access in between piles for emergency services & trained operators<br><br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br><br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A2<br><br>LOW |

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|---|---|---|---|---|
| Timber pallets / general storage of combustibles (such as landscape materials) | B1<br><br>LOW | • Limit excess pallets on site<br>• Limit storage of landscape materials on site<br>• Minimise accumulation of unnecessary combustibles<br>• Regular site inspections | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A2<br><br>LOW |
| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
| Flammables (such as fuels / chemicals) | B2<br><br>LOW | • Chemical bunding and/or required storage | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property | A2<br><br>LOW |

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|---|---|---|---|---|
| | | • Clear and correct chemical labelling, handling & PPE Current Safety Data Sheets & chemical register<br>• Hazardous substance & dangerous goods risk assessments / chemical Information & Reference Sheets<br>• Chemical spill kits are in place<br>• Eye shower / wash station is inspected routinely | • Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | |
| Hot work (welding, grinding, cutting) | B2<br>LOW | • Designated welding area<br>• Designated maintenance building for the purpose of hot work (where possible)<br>• Hot work permit that is enforced<br>• Separation of flammable liquids, combustibles & hot work<br>• Fire watch spotter when welding | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators | A2<br>LOW |

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| | | • Risk assessment & safe operating procedures developed Contractor and labour hire inductions<br>• Regular evacuation drills are conducted<br>• Daily cleaning schedule to prevent build-up of rubber dust | • Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Persons smoking at site | B1<br><br>LOW | • Smoke free policy inside buildings and vehicles<br>• Designated smoking area that is separated from ignition sources<br>• Mandatory induction for all workers, contractors & visitors which includes the Smoking Policy<br>• Disposal bins are provided & regularly emptied | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A1<br><br>LOW |
| Electrical faults (office or plant) | B3<br><br>MEDIUM | • Routine testing & tagging of electrical equipment and RCDs | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property | A3<br><br>LOW |

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|---|---|---|---|---|
| | | • Qualified electrical contractors to work on office and/or plant where required<br>• Routine site inspections<br>• Daily pre-start checks | • Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Truck repairs & mobile plant maintenance | B3<br><br>MEDIUM | • Plant and equipment repairs occur off-site or in a designated area away from storage areas<br>• All repair & maintenance contractors comprehensively inducted<br>• Preventative maintenance & servicing of all plant and equipment<br>• Daily pre-start checks of all plant and equipment | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A3<br><br>LOW |
| Rubber dust | B2<br><br>LOW | • Regular inspection schedule is enforced to prevent build up in any facility buildings and on the ground outside | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property | A2<br><br>LOW |

| | | | | |
|---|---|---|---|---|
| | | | • Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | |

| IDENTIFIED FIRE HAZARDS<br><br>Fuel & Hazard Sources | INITIAL RISK | PREVENTIVE MEASURES | CONTROL MEASURES | RESIDUAL<br><br>RISK |
|---|---|---|---|---|
| Office / building fire | B3<br><br>MEDIUM | • Preventive maintenance and servicing of all office equipment (including kitchen areas)<br>• Testing and tagging of equipment<br>• Regular site inspections<br>• Emergency drills | • Drain plugs and absorbent socks are available to retain contaminated fire water run-off on the property<br>• Front end loader onsite to separate tyres on fire from the rest of the pile & to create additional bund walls<br>• Hose reels and fire hydrants<br>• Fire extinguishers<br>• Access in between piles for emergency services & trained operators<br>• Tyre pit will assist to douse the flames that can't be accessed by hose spray (due to a tyre's hollow toroidal shape)<br>• Exit signs, assembly point, egress routes, emergency lighting, communication equipment, emergency warning system | A3<br><br>LOW |

## 4.3 Risk Calculator

| RISK CALCULATOR | | Likelihood | | | | |
|---|---|---|---|---|---|---|
| | | (A) Very Unlikely | (B) Unlikely | (C) Possible | (D) Likely | (E) Very Likely |
| | (5) Extreme | High | Critical | Critical | Critical | Critical |
| | (4) Severe | Medium | High | High | Critical | Critical |
| | (3) Major | Low | Medium | High | High | Critical |
| | (2) Moderate | Low | Low | Medium | High | High |
| | (1) Minor | Low | Low | Low | Medium | Medium |

| LIKELIHOOD DEFINITIONS | |
|---|---|
| (E) Very Likely | • It is expected to occur in most circumstances |
| (D) Likely | • Similar hazards have been recorded on a regular basis |
| (C) Possible | • Incidents or hazards have occurred infrequently in the past |
| (B) Unlikely | • Very few known incidents of occurrence |
| (A) Very Unlikely | • No known or recorded incidents of occurrence |

| CONSEQUENCE DEFINITIONS | | | | | | |
|---|---|---|---|---|---|---|
| IMPACT | ENVIRONMENTAL IMPACT<br><br>(ground water, waterways and water bodies, air, land) | PEOPLE<br><br>(injury or death) | PROPERTY | BUSINESS REPUTATION / STAKEHOLDER INTEREST | COSTS<br><br>(e.g. delays, legal, remediation) | LEGAL & REGULATORY |
| (5) Extreme | Impact extends beyond the site boundary; and/or long-term residual impacts >5yrs | Multiple or single death | Site closure for 12 months | National Media outrage | Costs to Event of up to<br><br>$5 million | Resulting in high level litigation and/or penalties |
| (4) Severe | Impact covers most of the site); and/or longer-term residual impact (2-5yrs) | Serious health impacts on multiple or single persons or permanent disability. | Major damage and site closure for 3 months | National media attention | Costs to Event between<br><br>$2.5 – $5 million | Resulting in low level litigation and/or penalties |
| (3) Major | Impacts are within a smaller percentage of the site; and /or medium-term residual impact (1-2yrs) | More than 10 days' rehabilitation required for injured persons | Some damage and disruption to part of the operations | Local media and community concern | Costs to Event between<br><br>$200,000 and $2.5 | Notification and minor on the spot fine by regulator |
| (2) Moderate | Impacts within the immediate vicinity of the impact; and short-term residual impact <1 year | Injury to a person resulting in lost time and claims | Minor damage and minimal delays to operations | Minor isolated concerns raised by stakeholders, customers | Costs to Event between<br><br>$50,000 and $200,000 | Notification and/or negotiations with regulator |
| (1) Minor | Impacts within immediate vicinity of the impact; and no residual impact | Persons requiring first aid | Minor damage and no delays to operations | Minimum impact to reputation | Costs to Event up to<br><br>$50,000 | No impact |

| HIERARCHY OF CONTROLS | |
|---|---|
| ELIMINATION | Remove or stop the hazard, if possible, remove the cause or source of the hazard, by eliminating the machine, task or work process. If this is not practical, then substitute. |
| SUBSTITUTION | Use a less hazardous process or chemical that will achieve the same results. If this is not practical, then engineer. |
| ENGINEERING | Introduce enclosures and barriers around or between the hazards. Improve maintenance procedures. If this is not practical, then isolate. |
| ISOLATION | Separate or isolate the hazard or equipment from people by relocation or by changing the operation. If this is not practical, then use administrative controls. |
| ADMINISTRATION | Design and communicate written or verbal procedures that prevent the hazard from occurring, train staff or use signage. If this is not practical, then use PPE. |
| PERSONAL PROTECTIVE EQUIPMENT (PPE) | Provide protective equipment appropriate to the risk. Provide training information and supervision to ensure that personal hearing protection is fitted, used and maintained appropriately. This can be used in combination with all other control measures. |

## 4.4 Risk Treatment Plan (Control Priorities)

| RISK LEVEL | CONTROL PRIORITIES |
|---|---|
| Critical | • Do Not Commence Activity<br>• Controls to complete the activity are to eliminate the risk or to avoid performing the activity where possible.<br>• Where it is not reasonably practicable to either eliminate the risk or avoid performing the activity, senior management shall be involved in the development of controls that reduce the level of risk to an acceptable level and provide authorisation for the activity to commence (where not already identified in the risk profile/pre-existing risk assessment).<br>• Further, controls for critical risks are to be reviewed by the management team prior to task commencement.<br>• Controls should include as a minimum:<br>  ○ Engineering or isolation controls (where the risk can't be eliminated).<br>  ○ Increased levels of supervision, inspection or monitoring; and/or<br>  ○ Implementation of a permit to work process |
| High | • Controls to complete the activity are to eliminate the risk or to avoid performing the activity where possible.<br>• Where it is not reasonably practicable to eliminate the risk or to avoid performing the activity, senior management shall be involved in the development of controls that reduce the level of risk to an acceptable level and provide authorisation for the activity to commence (where not already identified in the risk profile/pre-existing risk assessment).<br>• Controls may include:<br>  ○ Engineering or isolation controls (where the risk can't be eliminated).<br>  ○ Increased levels of supervision, inspection or monitoring; and/or<br>  ○ Implementation of a permit to work processes |
| Medium | • Controls to complete the activity are to be consistent with Standards, Procedures and other relevant documents within the company operation manual. Controls for medium risks are to be reviewed by people managers or members of the management team.<br>• Controls are to meet the requirements of relevant legislation and relevant Standards |
| Low | • Controls for identified Low Risks will be managed by onsite instruction and through routine operating procedures. |

# 5. Stockpile Management

Temperature monitoring and stockpile management are two of the most important aspects of fire prevention.

Cigarettes and ignition sources via vandals and sparks from welding activities are the most common causes of fire.

# 6. Emergency Response

## Evacuation and Emergency Assembly Points

The site has an emergency assembly point where employees, contractors and visitors are required to assemble when an evacuation alarm is sounded.

**EMERGENCY ASSEMBLY POINT**:

(see site map)

A list of workers and contractors on the site is kept in the sign-in book. This is held in the front office and can be accessed by the fire warden to allow for a head count to be conducted at the emergency assembly point.

*Responsibility*

It is the responsibility of the fire warden to conduct the head count to ensure that all workers, contractors and visitors on the site are assembled at the emergency point and to provide direction as to exiting the site as per the Emergency Response Sheet.

**VEHICLE MOVEMENT**

At all times during an emergency every attempt must be made to keep ALL access points and driveways clear of traffic and obstructions that may impair the access and egress of the Emergency Services.

If it is safe to do so, vehicles should be removed from potential danger areas due to the risk of explosion. If forklifts are on site, they are to be turned off and remain where they are and operators are to evacuate on foot.

Vehicles, including mobile plant, must only be moved if safe to do so. If an evacuation is underway, vehicles must remain where they are unless otherwise instructed by emergency services.

**POWER AND EMERGENCY LIGHTING**

In the event of an emergency, the power to the site may be turned off. This will only be done if there is a risk to people from the power supplied to the danger area. Emergency lighting (including exit signs) will activate if the power is switched off or in the event of a power failure.

# Assessment

The responsibility of the Site Operator(s) regarding an incident is a fundamental element of emergency response.

The fire warden first arriving on site will need to assess the scale of the incident and communicate the extent of emergency to the fire brigade and/or emergency services.

The fire warden will direct the initial operations of the incident until the fire brigade arrives on site. The fire warden will also provide ongoing ground support as directed by the fire brigade and/or emergency services. The success of initial communications, safety, water supply, suppression and property conservation efforts will depend on accurate assessment and early coordinated actions by the first arriving fire and/or emergency services. Assessment is an important on-going function and does not end until the incident is resolved, and fire and/or emergency service activities are terminated.

## Dangers to Life Safety

The fire warden should determine whether any threats to their own safety exist. Personnel should keep a safe distance from any scene thought to be unsafe because of criminal trespasses and/or activity. First responders also need to assess the dangers of live wires, any hazardous materials or environmental exposures and other possible complications.

The fire warden should tour the area perimeter (if possible) to view all angles of the fire, determine the location and rate of fire spread, amount of available fuel and the location of exposures. During the initial survey, a determination should be made whether any persons have been injured or if anyone at the site is in danger.

Any area on site likely to be contacted by direct smoke should be evacuated as a precaution. Consider closing roads or transportation routes affected by thick smoke.

## Immediate Environmental Concerns

Should a fire take hold then limited water should be applied to stockpiles. The Site Manager should assess the potential environmental consequences of the fire (such as large smoke plumes) and respond appropriately (i.e. notify emergency services and/or key stakeholders).

## Health and safety

All workers operating on the site should be accounted for always by the fire warden. All personnel should be monitored by the Site Manager and/or fire warden for exposure times, time on task and last period of rest. Safety stations should be established as soon as possible.

Prolonged fires in stockpiles will require a deal of exertion on behalf of those fighting the fire. As a fire grows in intensity, it generates higher temperatures and voluminous amounts of thick smoke (tyres – black acrid smoke).

Workers should be regularly rotated with only limited work time in a hot zone. Workers should protect themselves against radiant heat and smoke. Dress in fire personal protective equipment and/or a long-sleeved cotton shirt, cotton trousers (jeans), boots and a cotton cap. Have a face mask and/or large cloth handy for face protection against smoke. The emergency shower on site is and should be used to remove residual substances from the clothing and person.

**OTHER HAZARDS**:

Working in the proximity of moving equipment, tripping hazards; unstable footing on the scene always dictate caution and awareness.

Snakes, rodents and insects – stockpiles are breeding grounds for snakes, rodents and insects. Workers will need to be aware and take caution from fleeing snakes, rodents and insects.

# 7. Establishing Control

**The fire brigade will manage the fire emergency whilst on site**. The fire warden must secure (but not limited to) the following:

- Communications to fire brigade and/or emergency services.
- Health and safety of all people (including the public). Evacuation is the highest priority.
- Water and/or fire suppressant supply.
- Materials and resources (including on-site labour); and
- Environmental conservation.

The fire warden must establish a command area with appropriate communications. A site map (depicting all locations of apparatus, access and exit points etc) must be made available. The command area must be out of harms way, but close enough to allow those responsible (or delegate in absence) to view the incident.

The fire warden must be prepared to move the command area if wind direction shifts if a direct high risk to health and safety is evident.

No person should be allowed to return to the vicinity until monitoring has been performed and the area is deemed safe and habitable by the fire brigade and/or emergency services or person delegated by them.

*Private contractors*

Private contractors required to participate in the fire emergency should supply their own personal protective equipment. In the absence of the PPE, the fire warden must ensure that appropriate PPE is provided. Private contractors must report to the command area to obtain a briefing and receive directions regarding the response.

The fire warden should obtain the following information:

- The individual in charge of the private contractor(s).
- Types of apparatus or equipment.
- The number of personnel.
- Levels of training.
- How long they will be able to commit to the incident.
- Any special needs.

**Suppression**

As directed by emergency services and/or by the fire warden:

- Separate the unburned fuel from the burned fuel; let that which is burning burn as freely as possible while continuing efforts to separate fuel from the fire.
- The use of heavy equipment such as front-end loaders, excavators and mid-size dozers are necessary in gaining access and removing unburned materials from the pile.
- It may be necessary to create additional fire breaks and alternative access points into the storage area and through the pile.
- Equipment operating in the proximity of the fire should be protected as far as reasonably practicable.

**Public relations and information**

Refer to the contact list in the Emergency Response Sheet.

# 8. Response Cards

**WHAT TO DO WHEN AN EXTERNAL FIRE THREATENS**

**Reducing the Risks**

The main hazards of firefighting are smoke inhalation and radiant heat. Associated hazards relate to training and safe firefighting practices, communication between fire fighters, other people involved, wind and weather conditions, terrain and vegetation, threatened buildings and their contents, availability of water and firefighting machinery.

**Protecting Assets**

- Never work alone if at all possible – particularly in days of Total Fire Ban.
- Anticipate fire changes due to wind, topography and fuel type. Obtain the latest forecast with particular attention to wind changes. If not sure contact:

**FIRE INFORMATION / SAFETY 1800 000 699**

- Watch for erratic fire behaviour.
- Beware of burning limbs and trees in previously burnt country – **LOOK UP AND LIVE.**

- Keep clear of all vehicles or machinery – the operator may not see you.
- Observe and keep in mind local topography – the position of tracks, clearings, creeks and other relevant spots or landmarks.
- Avoid danger areas like steep slopes, dense vegetation and deep, narrow gullies.
- Know where the emergency assembly point is.
- **REMEMBER** – a general forecast may not apply in your area due to fire effects, terrain or local factors; and
- Relate local weather to possible fire behaviour.

**Personal Effort**

- Maintain your self-control under threatening situations.
- Panic is infectious and drains energy.
- Avoid exhaustion from over-exertion or prolonged periods of effort; and
- Avoid unnecessary shouting or whistling – it may confuse others.

**Protective Clothing**

- Guard against falling objects – wear an approved safety helmet.
- Wear safety glasses' goggles or a face shield to prevent injury from windblown dust / smoke irritation.
- Working boots must be in good condition. Wear approved safety boots; and
- Drink plenty of fluids.

# DAYS OF FIRE DANGER PERIOD

**Preparation of site for defence against a fire –**

- ☐ Actively engage workers in the preparations for fire readiness and ensure they are alert to the potential indicators of fire.
- ☐ Site operators to instruct all customers to extinguish cigarette prior to site entry and not to smoke on site.
- ☐ Prepare firefighting equipment for active operation to extinguish fires.

**Welding, grinding or gas cutting may be done outdoors, but you must –**

- ☐ Put up a shield to block sparks and hot metal.
- ☐ Keep an area of 1.5 metres around the work clear of flammable material or wetted down.
- ☐ Have close at hand a fire extinguisher.

**Site equipment may be used if –**

- ☐ The equipment is free of mechanical defects that could start a fire.
- ☐ You have a relevant fire extinguisher at hand in case of fire.

**Petrol, diesel fuel and hazardous chemicals should be stored in single purpose buildings in cleared areas isolated from other buildings.**

## DAYS OF TOTAL FIRE BAN

**WELDING, GRINDING AND GAS CUTTING OUTDOORS ARE PROHIBITED - although a special permit may be issued for an emergency.**

**Any operational issues should be directed to the Site Manager.**

**References**:

Tasmania Fire Service (TFS): Code of Practice – Fire Protection Systems (Dec 2017)

Tasmania Fire Service: Fire Evacuation Plan Guidelines

Tasmania Fire Service: Building Regulations 2016 and Fire Safety Guidelines

State Fire Management Council: Bushfire Risk Management Planning Guidelines 2020

| | |
|---|---|
| **Procedure Owner** | **Environment Manager** |
| **Procedure Approver** | Operations Manager |
| **Approved Date** | 10/11/2025 |
| **Last Review Date** | 10/11/2025 |
| **Next Review Date** | 10/11/2028 |

| **Related Documents** (*Forms, Policies or SOP*) | **Ownership** |
|---|---|
| | |
| | |

## VERSIONS

| **Variation** | **Updates** |
|---|---|
| Version 1 – 10/3/2025 | Initial plan |
| Version 2 – 10/11/2025 | Updated regulatory guidelines |