habitat

Statement of Environmental Effects

Expansion of Hay Waste Management Centre

107-109 Thelangerin Road, Hay

3 MARCH 2022

Submitted to Hay Shire Council
Prepared on behalf of Hay Shire Council

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1. Introduction

1.1. Overview

This Statement of Environmental Effects (SEE) has been prepared by Habitat Planning on behalf of Hay Shire Council and is submitted to Hay Shire Council in support of a Concept Development Application (DA) for alterations and additions to the Hay Waste Management Centre at Lot 1, DP 517869 and Part Lot 113, DP 448476 and addressed as 107-109 Thelangerin Road, Hay.

The DA and this report have been prepared in accordance with the *Environmental Planning and Assessment Act 1979* ("EP&A Act") and the *Environmental Planning and Assessment Regulation 2000* ("EP&A Regs").

This report addresses the relevant heads of consideration listed under Section 4.15(1) of the EP&A Act and provides an assessment of the proposed development against the relevant Environmental Planning Instruments (EPIs) and other planning controls applicable to the site and to the proposal. It also describes the site, its environs, the proposed development, and provides an assessment of the environmental impacts and identifies the steps to be taken to protect or lessen the potential impacts on the environment.

1.2. Background

Hay Shire Council is part of the Riverina and Murray Joint Organisation (RAMJO) Riverina Waste Group, which consists of a regional group of Council's working together to develop cost-effective resource recovery and waste reduction programs.

The purpose of the group is to identify key projects and priorities for current and future services, developing infrastructure and delivering educational programs in waste reduction via funding primarily received from the NSW Environment Protection Authority (EPA). The aim of the group is to help residents in local communities reduce waste, improve sustainability and save money.

Hay Shire Council, like the other Council's in RAMJO is committed to diverting waste away from traditional landfill by establishing a resource recovery facility that will include a materials recycling facility, food organics and garden organics (FOGO) and construction and demolition waste facility.

In support of this goal, Hay Shire Council was recently awarded $1.35 million for the development of its expansive Hay Material Recovery Facility. Once completed, the infrastructure will allow Hay to expand its recycling capabilities in diverting a substantial amount of waste from the Hay landfill.

This has the primary objective of improving environmental sustainability and resource recovery, but also has the added cost savings benefit to council from transferring FOGO outside of the Council LGA.

At present, there are 1,632 households with existing residual kerbside services in Hay estimated to produce 5.05 kg/household/week of FOGO material or 428.56 tonnes per annum. Currently, this material is being landfilled, with the obvious implications on landfill space, excess greenhouse gas emissions, and an overall poor utilisation of what would otherwise be a valuable resource with potential for improved land management

The purpose of the subject development is therefore to support environmental sustainability and is a major stepping stone towards sustainable waste practices. With the project being a major development for the region, it will also give a boost to employment, with the creation of additional local jobs.

1.3. Concept Development Application

This application has been submitted as a Concept Development Application for the purposes of Division 4.4 of the EP&A Act.

Approval is being sought under this division to obtain 'in principle' support for the overall layout of the waste management facility with subsequent development applications to be submitted once the final design and individual plans have been prepared for each building.

It is confirmed however that as part of this Concept Development Application, approval is being sought for the initial first stage of the development, being the initial civil and preliminary works.

1.4. Land Use Permissibility

The subject land is part zoned RU1 Primary Production and SP2 Infrastructure ('Waste Disposal Facility') pursuant to the *Hay Local Environmental Plan 2011*.

Whilst it is acknowledged that development for the purposes of a 'waste or resource management facility is prohibited in the RU1 zone, the works are permitted with consent in accordance with Division 23 of *State Environmental Planning Policy (Infrastructure) 2007*.

1.5. Supporting Plans and Documentation

This application is accompanied by:

- Concept Master Plan, prepared by Hay Shire Council
- Aboriginal Heritage Information Managements Search (AHIMS) Results
- Noise and Odour Assessment Summary, prepared by Hay Shire Council
- Previous Statement of Environmental Effects, prepared by Just Waste

2. Site Analysis

2.1. Site Location and Context

The subject land to which this application relates is described as Lot 1, DP 517869 and Part Lot 113, DP 448476 and addressed as 107-109 Thelangerin Road, Hay. The site is more commonly known as the Hay Waste Management Centre. The subject land is located on the western side of Thelangerin Road approximately 2.5 kilometres of the main commercial centre of Hay.

The location of the site is shown at **Figure 1** below.

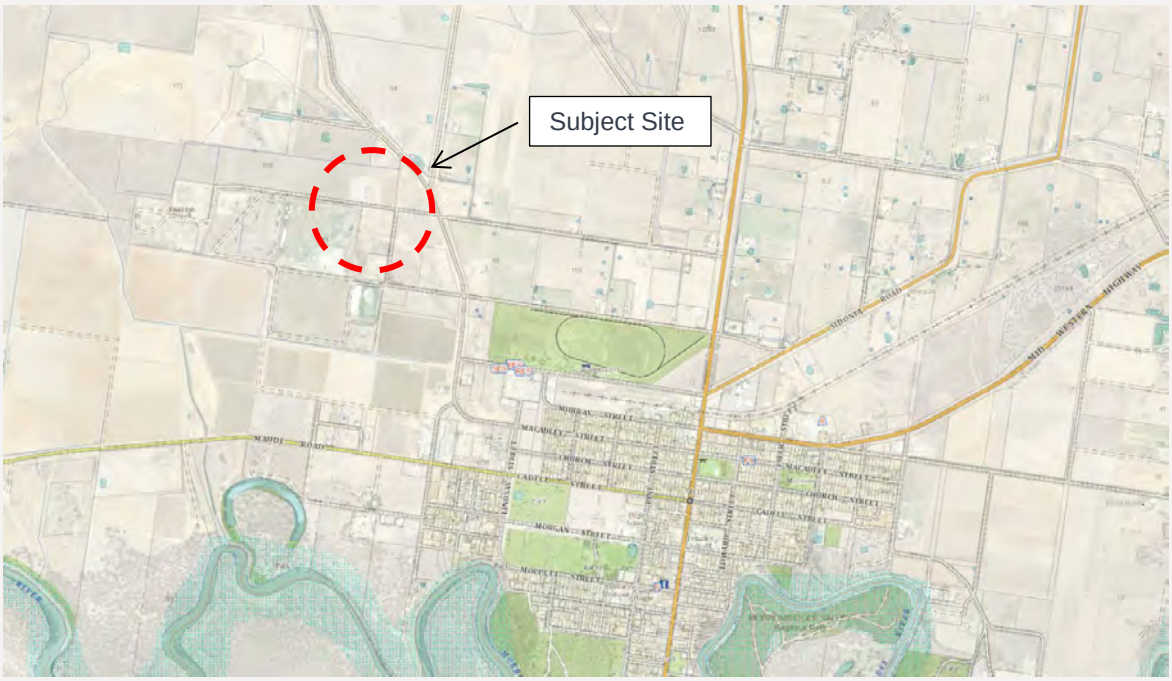

Figure 1 – Context Map

2.2. Site Description

The subject land consists of two separate parcels of land located either side of an existing sealed private roadway that services the existing Hay Waste Management Centre located to the west. The total area of the proposed works site is approximately 90 hectares.

The parcels are generally rectangular in shape and are both improved. More specifically, Part Lot 113 located on the northern side of the access roadway is improved and developed for the purposes of the Hay Waste Transfer Station. The land contains two existing waste management buildings (sheds) with an approximate floor area of 200m^2 and 250m^2 respectively. Access to these buildings is via a sealed concrete driveway and apron located to the east. An approximate 700m^2 dam is also located on the western side of these buildings.

Similarly, Lot 1 is also improved and contains a well-established rural dwelling and associated outbuildings and structures, which have previously been approved for demolition. This site was also previously used as a piggery.

The topography of the land of both parcels is generally flat, whilst vegetation is primarily limited to non-native and exotic pasture grasses. Whilst it is acknowledged that Lot 1 does contain a number of trees, namely around the existing dwelling, these mainly consist of planted vegetation.

The site is located on the fringe of the main urban area and is already partially developed as Council's waste management and transfer centre and therefore has access to reticulated water and sewerage. Road access and electricity are also available to the site but will need to be upgraded as part of the proposed works.

An aerial image and photographs of the existing condition of the site are provided in the figures below.

Figure 2 – Aerial Image (red outline)

Figure 3 – Aerial view of the subject land looking north

Figure 4 – Aerial view of Lot 1 looking south. Note: existing dwelling approved to be demolished

Figure 5 – Aerial view of Lot 1 looking north with dwelling demolished

Figure 6 – Aerial view of Lot 113 looking north of Council's existing waste transfer station

Figure 7 – Aerial view of Lot 113 looking south of Council's existing waste transfer station

2.3. Surrounding Development

The subject land is located on the urban fringe of the main township of Hay in a mixed use area consisting of both rural and Council infrastructure (landfill and sewerage treatment plant) land uses.

More specifically, land to the north is zoned RU1 Primary Production, which has been developed for agricultural purposes and consists of large agricultural holdings and associated rural dwellings. The closest rural dwelling to the area of works is located approximately 700 metres to the north west at 172 Thelangerin Road.

Land to the east has also been developed for rural purposes, whilst Thelangerin Road is also located to the east and provides the primary road access to site. Land located further east on the opposite site of this roadway has been developed for small-scale (irrigation) agricultural uses, as well as residential 'hobby farms'.

Land to the south and south west comprises Council's newly constructed Sewerage Treatment Plant, which consists of an Intermittent Decanted Extended Aeration (IDEA) tank, which discharged effluent to evaporation ponds. This facility currently operates under Environment Protection Licence (EPL) No. 3520.

Land to the west comprises Council's existing landfill, which operates as a traditional push pit landfill with designated areas depending on the type of waste. Land further west is rurally zoned and used for agricultural activities.

3. Description of Proposal

3.1. Overview

The subject application seeks approval to expand the existing Hay Waste Management Centre.

The purpose of the works is to support Council's ongoing commitment to divert wastes out of traditional landfill, which will not only extend the life of this facility, but more importantly will promote sustainability and recycling.

A copy of the proposed site plan is included in Appendix A and is reproduced below.

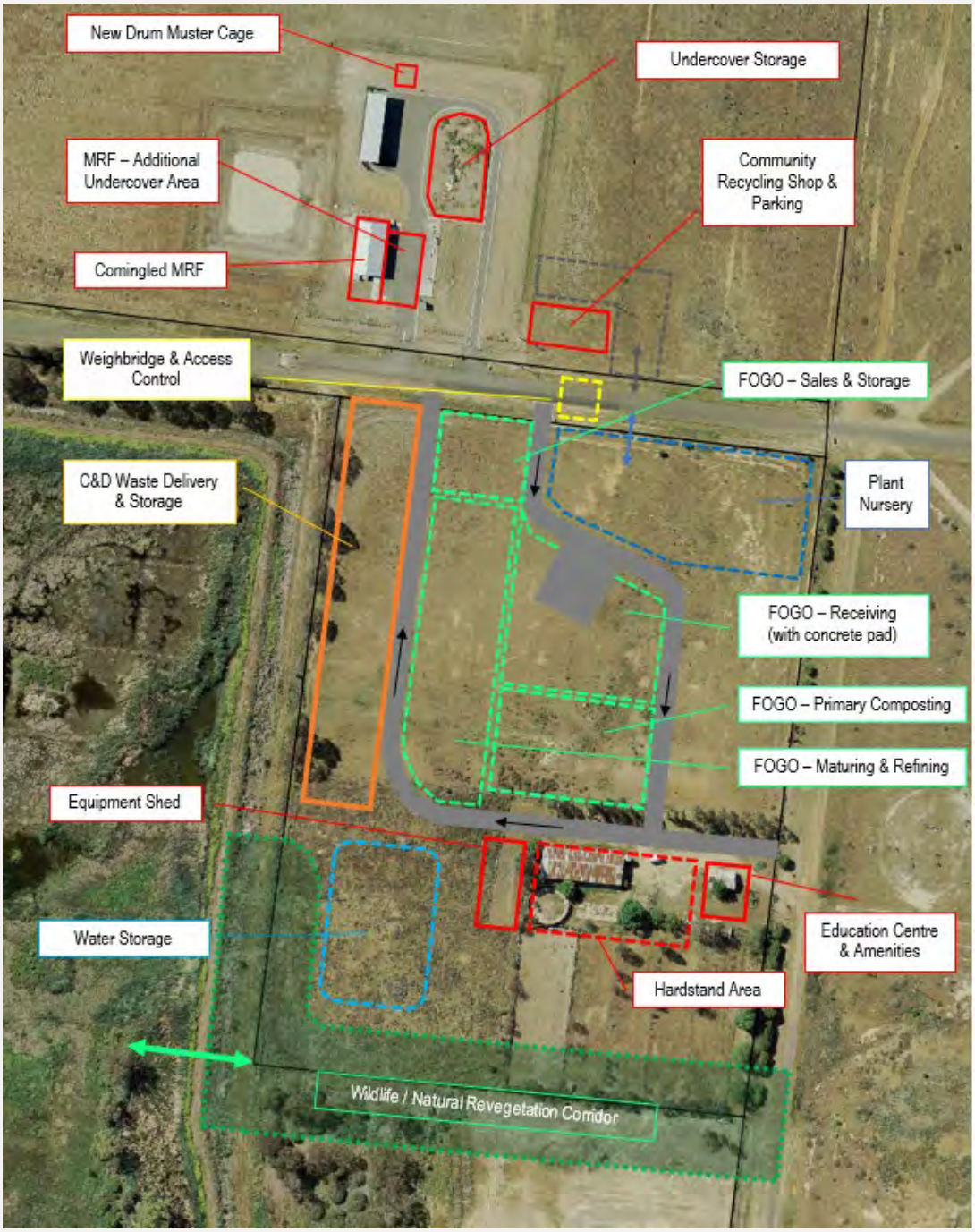

Figure 8 – Proposed Site Plan

3.2. Development Staging

The proposed works will be undertaken in two stages (subject to funding).
A summary of the proposed staging is provided below:

Stage 1:

- Drum Muster Cage
- Undercover Storage
- Food Organics and Garden Organics (FOGO) – Sales & Storage
- FOGO – Receiving (with concrete pad)
- FOGO – Primary Composting
- FOGO – Maturing & Refining
- Water Storage
- Construction and Demolition (C&D) Waste Delivery & Storage
- Weighbridge & Access Control
- Comingled Materials Recycling Facility (MRF)
- MRF – Additional Undercover Area

Stage 2:

- Community Recycling Shop & Parking
- Plant Nursery
- Education Centre & Amenities
- Hardstand Area
- Equipment Shed

Further details regarding the individual component of works are provided below.

3.3. Demolition Works & Tree Removal

Prior to any site establishment or construction works commencing on-site, the development will require the demolition of all buildings and structures including the former homestead on Lot 1. As outlined in Section 2.2 of this report, these buildings and structures already have development consent to be demolished. It is noted that no buildings or works need to be demolished on Lot 113.

Whilst every effort has been made to retain all the existing trees on-site, the development does seek approval to remove approximately 9 trees around the former homestead as shown in the figure below.

Figure 9 – Proposed Demolition and Tree Removal Plan

3.4. Site Establishment and Civil Works

Once all buildings and structure have been removed on-site, the next phase of the project will involve site establishment works. This will mainly involve the completion of civil construction works including the construction of roads and drainage ponds, as well as the connection, extension and augmentation of services including the upgrading of electricity.

A weighbridge and access control point will also be installed during this stage of the project as part of the initial establishment works.

3.5. Materials Recycling Facility & Community Recycling Shop

The subject land already operates as the Hay Community Recycling Centre with Council seeking to expand the capacity and size of this facility to further direct wastes away from traditional landfill methods.

The primary works will involve the establishment of a Comingled Materials Recycling Facility (MRF)(Stage 1), which is designed to receive and process up to 3,000 tonnes per annum of kerbside commingled waste material and recover recyclable fractions, minimising waste to landfill.

Furthermore, these works also include an additional undercover area (Stage 1) to be established on the eastern side of the existing community recycling centre.

Adjacent to the new MRF is a proposed community recycling shop (Stage 2). This shop will repurpose and re-sell all manner of goods and products and will operate as a small-scale shop for use by residents. Car parking is also proposed adjacent to this building to serve the needs of customers and staff of this facility.

3.6. Drum Muster Cage

At present, the subject land already accepts the disposal of chemical drums, which are recycled from commercial business and agricultural operations (farm chemicals). The expanded waste management facility seeks to continue to accept these on-site via the relocation and expansion of the drum muster cage to the northern side of the existing waste transfer station.

To ensure environmental protection, this area will be secured, have an impervious base (concrete) and will be bunded to prevent contamination off-site.

3.7. Education Centre & Amenities

A community education centre and amenities building are proposed as part of the stage 2 component of works. These facilities will be located within the south eastern corner of the site and will be accessed via a new internal roadway. This building will be used to host small school and community groups and will include exhibition display areas, as well as a meeting room.

A new ancillary hardstand area and associated equipment shed is also proposed on the western side of this building.

3.8. Construction and Demolition Waste Area

The development seeks to establish a construction and demolition (C&D) waste area on the southern side of the main access road. This area will be used to dispose of building demolition materials and supplies including bricks, timber, steel, roofing, as well as items such as windows and doors for re-purposing and re-use. These materials will be appropriately separated and stockpiled in their respective waste streams.

3.9. Food Organics and Garden Organics (FOGO)

One of the primary activities sought by the application is the establishment of a new Food Organics and Garden Organics (FOGO) processing area. Specifically, this will include the following activities:

- FOGO – Receiving (with concrete pad)
- FOGO – Primary Composting
- FOGO – Maturing & Refining
- FOGO – Sales & Storage

This area will be located on the southern side of the main access road and will adjoin the C&D waste disposal area. This area (like the other site activities) will operate via one-way site movements with initial receivals to occur via a 10m x 12m concrete bunded receival input pad with contaminants taken directly to the Council-owned landfill located 1 kilometre to the west.

Remaining compost materials is then transferred into a primary composting area and maturing and refining area where it is placed in open windrows on a clay liner pad, which is laid out in up to 5 open aired rows measuring 2m x 2m x 50m and separated 6 metres apart. These will be turned regularly depending on their various stage of decomposition via a wheeled loader, which will also be used for managing incoming feedstock and outgoing product. Water will be added via watercart to these rows and the temperature of the material raises to 55-75 degrees. The windrows will be turned as required to ensure material breakdown and will be screened and tested for contaminants.

In total, the process takes approximately 12-18 weeks to mature across the following stages:

- Raw
- Pasturised
- Composting
- Stable
- Mature

Once at maturity, the material is transformed into useable compost that is sold in the sales and storage area. Any oversized screened material will be reintegrated into stage 1 for further breakdown.

For the purposes of this application, the total amount of organics processed will not exceed 5,000 tonnes per annum.

Figure 10 – Example of open windrows

3.10. Re-Vegetation Works, Water Storage Facility & Plant Nursery

In order to screen and soften the proposed works, the development will include a landscape buffer/ native revegetation corridor (Stage 1) along the southern side and south-eastern portions of the site. This corridor will be 10 metres wide, with a length of 55 metres and will consist of local native species.

Adjacent to this area is a proposed water storage area (leachate dam)(Stage 1), which will collect stormwater run-off on-site, which will be reused as part of the FOGO. Any chemically contaminated water detected will be disposed of at the adjacent Sewer Treatment Plant in accordance with the Environmental Guidelines: *Composting and Related Organics Processing Facilities, 2003.*

In addition, a community run plant nursery is proposed adjacent to the site entrance, which will be used to sell recycled landscape material supplies and plants including excess compost produced on-site and not used by Hay Shire in Council-run projects.

3.11. Existing General Landfill

As part of the expansion of the Hay Waste Management Centre, the existing general landfill will continue to operate into the future. There are no plans to change existing site arrangements as part of this application.

3.12. Traffic, Access and Parking

Road access to the site will be via an existing private council road, which will be upgraded as part of the proposed works. Site access will be controlled and all internal roads will be 8 metres, compacted and covered with gravel and regularly maintained ('Gravel Class 2'). To ensure an efficient and safe flow of traffic, all roads will operate as one way roads with the flow of traffic to occur in a clockwise direction.

Similarly, all car parking areas will be sealed, drained and line-marked and will be strategically located around the site to service the various activities being conducted.

3.13. Operational Summary

The following table sets out the operational summary of the proposed development.

Table 1 – Operational Summary

Operational Matters	Comments
EPA Licence	To be issued and enforced by the EPA
Days & hours of operation	Monday to Friday: 7am to 5pm Saturday: 8am to 5pm Sunday: 8am to 4pm
Staff/Employees	3
Facility Size	2,840m^2

Volume of waste accepted p.a.	10,143 tonnes per annum
Tree Removal	9 (approximately)
Storage of Hazardous or Potentially Hazardous Material	Nil
Car parking	Sealed and lined-marked car parking as per the enclosed site plan
Plant or Machinery	
Signage	Basic business/site identification signage installed at front gate
Security	1.8 metre high security perimeter fencing

4. Planning Assessment

Under Section 4.15(1) of the EP&A Act when considering an application for development, the consent authority must take into consideration the relevant environmental planning instruments. This section details and responds to the relevant planning framework applicable to the proposal.

4.1. Applicable Environmental Planning Policies, Instruments and Controls

- Environment Protection and Biodiversity Conservation Act 2000
- Environmental Planning and Assessment Act 1979
- Environmental Planning and Assessment Regulation 2000
- Protection of Environment Operations Act 1997
- Protection of Environment Operations (Noise Control) Regulation 2017
- Protection of Environment Operations (Clean Air) Regulation 2010
- Local Land Services Act 2013
- National Parks and Wildlife Act 1974
- Waste Avoidance and Resource Recovery Act 2001
- State Environmental Planning Policies
- Hay Local Environmental Plan 2011
- Development Control Plan

Compliance with the applicable legislation and policies is discussed below.

4.2. Environment Protection and Biodiversity Conservation Act 1999

The *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) provides the framework to assess proposed actions that will have, or are likely to have, a significant impact on Matters of National Environmental Significance (MNES), Commonwealth land, or are proposed to be undertaken by the Commonwealth or a Commonwealth Agency.

These Matters of National Environmental Significance include:

- World Heritage properties;
- National Heritages Places;
- RAMSAR wetlands;
- Cetaceans, migratory species, threatened species, critical habitats or ecological communities listed in the EPBC Act;
- Commonwealth land, marine areas or reserves; and
- Nuclear actions.

The subject land does not contain any MNES, nor does it adjoin land that contains a MNES. Similarly, the proposal does not represent a nuclear action or works by or on behalf of the Commonwealth. Accordingly, it is not anticipated that a MNES as listed under the EPBC Act will likely to be significantly impacted by the proposed works.

4.3. Environmental Planning and Assessment Act 1979

Section 4.15 of the EP&A Act 1979 sets out the statutory matters for consideration against which the proposed development is to be evaluated. The matters for consideration under Section 4.15 are as follows:

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

(iii) any development control plan, and

(iiia) any planning agreement that has been entered into under section 7.4, or any draft planning agreement that a developer has offered to enter into under section 7.4, and

(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and

(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

(c) the suitability of the site for the development,

(d) any submissions made in accordance with this Act or the regulations,

(e) the public interest."

The matters for consideration identified in Section 4.15(1) of the EP&A Act 1979 are addressed in the following section. Subsections (b) to (e) of Section 4.15(1) of the EP&A Act 1979 are addressed in Section 5 of this Statement of Environmental Effects.

The proposal is not identified as "designated development", pursuant to section 4.10 of the EP&A Act. or "integrated development", pursuant to section 4.46 of the EP&A Act.

4.2.2 Environmental Planning and Assessment Regulation 2000

Clause 4 of the *Environmental Planning & Assessment Regulations 2000* (EP&A Regulation) describes 'Designated Development' as being development which is described in Part 1 of Schedule 3.

Specifically, the following definitions may apply to the proposed works:

13 Composting facilities or works

Composting facilities or works (being works involving the controlled aerobic or anaerobic biological conversion of organic material into stable cured humus-like products, including bioconversion, biodigestion and vermiculture)—

(a) that process more than 5,000 tonnes per year of organic materials, or

(b) that are located—

(i) in or within 100 metres of a natural waterbody, wetland, coastal dune field or environmentally sensitive area, or

(ii) in an area of high watertable, highly permeable soils, acid sulphate, sodic or saline soils, or

(iii) within a drinking water catchment, or

(iv) within a catchment of an estuary where the entrance to the sea is intermittently open, or

(v) on a floodplain, or

(vi) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the opinion of the consent authority, having regard to topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood by reason of noise, visual impacts, air pollution (including odour, smoke, fumes or dust), vermin or traffic.

16 Crushing, grinding or separating works

(1) Crushing, grinding or separating works, being works that process materials (such as sand, gravel, rock or minerals) or materials for recycling or reuse (such as slag, road base, concrete, bricks, tiles, bituminous material, metal or timber) by crushing, grinding or separating into different sizes—

(a) that have an intended processing capacity of more than 150 tonnes per day or 30,000 tonnes per year, or

(b) that are located—

(i) within 40 metres of a natural waterbody or wetland, or

(ii) within 250 metres of a residential zone or dwelling not associated with the development.

(2) This clause does not apply to development specifically referred to elsewhere in this Schedule.

17 Drum or container reconditioning works

Drum or container reconditioning works that recondition, recycle or store—

(a) packaging containers (including metal, plastic or glass drums, bottles or cylinders) previously used for the transport or storage of substances classified as poisonous or radioactive in the Australian Dangerous Goods Code, or

(b) more than 100 metal drums per day, unless the works (including associated drum storage) are wholly contained within a building.

32 Waste management facilities or works

(1) Waste management facilities or works that store, treat, purify or dispose of waste or sort, process, recycle, recover, use or reuse material from waste and—

(a) that dispose (by landfilling, incinerating, storing, placing or other means) of solid or liquid waste—

(i) that includes any substance classified in the Australian Dangerous Goods Code or medical, cytotoxic or quarantine waste, or

(ii) that comprises more than 100,000 tonnes of "clean fill" (such as soil, sand, gravel, bricks or other excavated or hard material) in a manner that, in the opinion of the consent authority, is likely to cause significant impacts on drainage or flooding, or

(iii) that comprises more than 1,000 tonnes per year of sludge or effluent, or

(iv) that comprises more than 200 tonnes per year of other waste material, or

(b) that sort, consolidate or temporarily store waste at transfer stations or materials recycling facilities for transfer to another site for final disposal, permanent storage, reprocessing, recycling, use or reuse and—

(i) that handle substances classified in the Australian Dangerous Goods Code or medical, cytotoxic or quarantine waste, or

(ii) that have an intended handling capacity of more than 10,000 tonnes per year of waste containing food or livestock, agricultural or food processing industries waste or similar substances, or

(iii) that have an intended handling capacity of more than 30,000 tonnes per year of waste such as glass, plastic, paper, wood, metal, rubber or building demolition material, or

(c) that purify, recover, reprocess or process more than 5,000 tonnes per year of solid or liquid organic materials, or

(d) that are located—

(i) in or within 100 metres of a natural waterbody, wetland, coastal dune field or environmentally sensitive area, or

(ii) in an area of high watertable, highly permeable soils, acid sulphate, sodic or saline soils, or

(iii) within a drinking water catchment, or

(iv) within a catchment of an estuary where the entrance to the sea is intermittently open, or

(v) on a floodplain, or

(vi) within 500 metres of a residential zone or 250 metres of a dwelling not associated with the development and, in the opinion of the consent authority, having regard to topography and local meteorological conditions, are likely to significantly affect the amenity of the neighbourhood by reason of noise, visual impacts, air pollution (including odour, smoke, fumes or dust), vermin or traffic.

(2) This clause does not apply to—

(a) development comprising or involving any use of sludge or effluent if—

(i) the dominant purpose is not waste disposal, and

(ii) the development is carried out in a location other than one listed in subclause (1)(d), above, or

(a1) artificial waterbodies located on relevant irrigation land, or

Note—

The term relevant irrigation land is defined in clause 38.

(b) development comprising or involving waste management facilities or works specifically referred to elsewhere in this Schedule, or

(c) (Repealed)

It is confirmed that none of the proposed activities exceed these threshold requirements. Consequently, the works are not classified as Designated Development and instead are local development and are not subject to the preparation of an Environmental Impact Statement (EIS).

4.2.3 Protection of Environment Operations Act 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) provides the statutory framework for managing pollution and waste in NSW, including the procedures for issuing licences for environmental protection on aspects such as waste, air, water and noise pollution control.

Companies and property owners are legally bound to control emissions (including particulates and deposited dust) from construction sites under the POEO Act. Activities undertaken onsite must not contribute to environmental degradation, and pollution and air emissions must not exceed the standards. Where an environment protection licence applies, waste management requirements and air quality requirements (including criteria) may be specified by the licence.

Section 5 of the POEO Act specifies scheduled activities as being those activities listed in Schedule 1 of this Act. Composting works are identified as a scheduled activity, which meet the following:

Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if it meets the criteria set out in Column 2 of that Table.

Table

Column 1	***Column 2***
Activity	***Criteria***
Composting works	*(i) it has on site at any time more than 200 tonnes of organics received from off site, or* *(ii) it receives from off site more than 5,000 tonnes per year of non-putrescible organics or more than 200 tonnes per year of putrescible organics*
Resource recovery	*if the premises are in the regulated area—* *(a) involves having on site at any time more than 1,000 tonnes or 1,000 cubic metres of waste, or* *(b) involves processing more than 6,000 tonnes of waste per year* *if the premises are outside the regulated area—* *(a) involves having on site at any time more than 2,500 tonnes or 2,500 cubic metres of waste, or* *(b) involves processing more than 12,000 tonnes of waste per year*
Waste processing (non-thermal treatment)	*if the premises are in the regulated area—* *(a) involves having on site at any time more than 1,000 tonnes or 1,000 cubic metres of waste, or* *(b) involves processing more than 6,000 tonnes of waste per year* *if the premises are outside the regulated area—* *(a) involves having on site at any time more than 2,500 tonnes or 2,500 cubic metres of waste, or* *(b) involves processing more than 12,000 tonnes of waste per year*
Waste storage	*if the premises are in the regulated area—* *(a) involves having on site at any time more than 1,000 tonnes or 1,000 cubic metres of waste, or* *(b) involves processing more than 6,000 tonnes of waste per year* *if the premises are outside the regulated area—* *(a) involves having on site at any time more than 2,500 tonnes or 2,500 cubic metres of waste, or* *(b) involves processing more than 12,000 tonnes of waste per year*

The proposal involves the composting, handling and storage of wastes that exceeds the thresholds above and therefore comprises a scheduled activity. As outlined in Section 4.3 above, the works are classified as Integrated Development as they require the issuing of an Environment Protection Licence.

Consequently, the proposed waste management centre will operate in accordance with the conditions of any EPA issued license applicable to the site.

4.2.5 Protection of Environment Operations (Noise Control) Regulation 2017

The *Protection of the Environment Operations (Noise Control) Regulation 2017* regulates the requirements for persons making noise level measurements.

Accordingly, an assessment of noise has been undertaken to address the relevant requirements of this Regulation and other relevant policy controls and guidelines as provided in Section 4.7 of this Report.

In summary, the proposed development does not exceed relevant noise policy requirements.

4.2.6 Protection of Environment Operations (Clean Air) Regulation 2010

The *Protection of the Environment Operations (Clean Air) Regulation 2010* (Clean Air Regulation) provides regulatory measures to control emissions from motor vehicles, fuels, and industry.

Given the nature of the proposed development, being an agricultural produce industry, it is important to consider the requirements of the Clean Air Regulation.

An assessment of air quality impacts has been undertaken and is provided in Section 5.9 of this Report.

In summary, even when the development is at maximum capacity, it will still operate within prescribed environmental limits.

4.2.8 Local Land Services Act 2013

As the subject land is zoned rural, the *Local Land Services Act 2013* (LLS Act) applies and Local Land Services (LLS) are the relevant consent authority. Notwithstanding, the development does not involve the clearing of any native vegetation or relate to a Travelling Stock Reserve or the running of stock. Therefore, further consideration of this Act is not required.

4.2.9 National Parks and Wildlife Act 1974

Sections 86, 87 and 90 of the *National Parks and Wildlife Act 1974* (NPW Act) requires consent from the Biodiversity Conservation Division of the NSW Department of Planning, Infrastructure and Environment (formerly NSW OEH) for the destruction or damage of Indigenous objects.

An assessment of both Aboriginal and Non-Aboriginal heritage has been undertaken in Sections 5.4 and 5.5 of this Report.

In summary, the subject land is heavily disturbed and does not contain any natural features that would indicate the presence of items of Aboriginal cultural significance. Consequently, an Aboriginal Heritage Impact Permit (AHIP) is not required in this instance under Section 90 of the NPW Act.

4.2.9 Waste Avoidance and Resource Recovery Act 2001

The Waste Avoidance and Resource Recovery Act 2001 seeks to provide for a continued reduction in waste generation and the minimisation and consumption of natural resources and the final disposal of waste by encouraging avoidance or waste and the reuse and recycling of waste.

The proposed expansion of the Hay Waste Management Centre directly responds to the objectives of this Act as it seeks to divert wastes from traditional landfill and seeks to recycle and re-use wastes for their ongoing use.

The EPA has a function and role to play in the operation of waste management facilities and as outlined above, the premises is a scheduled activity under the POEO Act and requires a licence from the EPA.

4.4. State Environmental Planning Policies

4.4.1 State Environmental Planning Policy (Resilience and Hazards) 2021

Chapter 3 – Hazardous and Offensive Development (formerly SEPP 33)

Chapter 3 of SEPP Resilience and Hazards (formerly SEPP 33) requires the consent authority to consider whether a proposal is a potentially hazardous development or a potentially offensive development. The aim of this policy is to ensure that whether a development is a hazardous or offensive industry and whether any measures proposed to be employed to reduce the impact of the development are taken into account. The assessment process also establishes whether the proposal is potentially hazardous or offensive and if this is not the case, the SEPP is not applicable.

Having regard to the relevant Department Guidelines it is firstly noted that there is no reference made to composting facilities or related works within the Guidelines. Although development for the purposes of 'waste (landfilling/processing)' is listed in these guidelines, the size and scale of the proposed works (local development), is not considered to represent a hazardous or potentially hazardous development.

Apart from diesel and unleaded petrol on site there are no other dangerous goods and/or otherwise hazardous materials involved in the proposed development - including raw materials, intermediates, and products. As a consequence it is concluded from preliminary risk screening that in the circumstance that while the proposal is identified as 'potentially offensive industry', meeting the requirements for licensing by the EPA it does not in this instance require the preparation of a preliminary hazard analysis (PHA).

This SEE will however provide a qualitative assessment of hazard potential as well as an assessment of air quality, noise or other emissions with a potential for pollution; and details of known requirements for pollution control licenses, permits or agreements.

Chapter 4 – Remediation of Land (formerly SEPP 55)

Chapter 4 of SEPP Resilience and Hazards (formerly SEPP 55) sets out considerations relating to land contamination across the state. The intention of the SEPP is to establish 'best practice' guidelines for managing land contamination through the planning and development control process.

In the context of this application, clause 4.6 of the SEPP requires that consideration be given to whether or not land proposed for development is contaminated and fit for use for its intended purpose.

The subject land has been highly modified and is currently used as Council's waste management centre. The proposal seeks to expand this current use on-site and does not propose any 'sensitive uses' such as a residential accommodation, child care, park etc.

Consequently, the land is considered fit for use for its intended purposes and therefore the relevant considerations of the SEPP are satisfied by the current proposal.

4.4.2 State Environmental Planning Policy (Transport and Infrastructure) 2021

Chapter 2 – Infrastructure (formerly SEPP Infrastructure)

Chapter 2 of SEPP Transport and Infrastructure 2021 (formerly SEPP Infrastructure) aims to facilitate the effective delivery of infrastructure across the State by improving regulatory certainty and efficiency through a consistent planning regime for infrastructure and the provision of services by providing greater flexibility in the location of infrastructure and service facilities.

The SEPP applies to the whole of NSW and aims to facilitate the effective delivery of infrastructure, including landfill developments, across the State through increased regulatory certainty and improved efficiency and flexibility in the location of that infrastructure, while also providing for adequate stakeholder consultation

Clause 2.3 of the SEPP provides that:

> *"A word or expression used in this Policy has the same meaning as it has in the Standard Instrument unless it is otherwise defined in this Policy. [NOTE: The Standard Instrument–Principal Local Environmental Plan (the Standard Instrument) does not define waste.]*
>
> *"resource recovery facility means a facility for the recovery of resources from waste, including such works or activities as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from waste gases and water treatment, but not including re-manufacture of material or goods or disposal of the material by landfill or incineration.*

Clause 2.7 of the SEPP provides that it will prevail to the extent of any inconsistency with any other environmental planning instrument.

Division 23 of the SEPP has the effect of rendering development for the purpose of "waste or resource management facilities" permissible in a 'prescribed zone', which includes land zoned RU1 Primary Production- the current zoning of the project site.
[Note: A waste or resource management facility includes a resource recovery facility]

Clause 2.1.21 in conjunction with Schedule 3 of the SEPP identifies what is considered to be traffic generating development requiring consultation with Transport for NSW.

Schedule 3 identifies waste facilities of any size or capacity as a traffic generating activity under Column 1 of Schedule 3 and therefore this provision of this SEPP applies. The development will accordingly be forwarded to Transport for NSW for comment.

4.4.3 State Environmental Planning Policy (Primary Production) 2021

Chapter 2 Primary Production and Rural Development (formerly SEPP Primary Production and Rural Development)

Chapter 2 of SEPP Primary Production 2021 (formerly SEPP Primary Production and Rural Development) seeks amongst other things to facilitate the orderly and economic development of lands for primary production and reduce land use conflict and sterilisation of rural land.

Schedule 1 of the Primary Production SEPP outlines 'state significant agricultural land'. At the time of preparing this Report, this Schedule was blank.

Further consideration of the requirements of the Primary Production SEPP do not apply to the subject development as the works do not involve the construction of a farm dam, livestock industry or aquaculture.

4.4.4 State Environmental Planning Policy (Planning Systems) 2021

Chapter 2 State and Regional Development (Formerly SEPP State and Regional Development)

Chapter 2 of SEPP Planning Systems 2021 (formerly SEPP State and Regional Development) seeks to identify development that is State significant development, State significant infrastructure and critical State significant infrastructure, as well as regionally significant development.

Whilst it is acknowledged that the proposed waste or resource management facility is not classified as designated development, as the proposal relates to a Council related development with a Capital Investment Value CIV) over $5 million, the works are classified as 'regionally significant development'.

4.5. Hay Local Environmental Plan 2011

The *Hay Local Environmental Plan 2011* ("the LEP") is the principal planning instrument that guides development within the LGA.

The applicable provisions of the LEP are:

- Clause 2.3 – Zone objectives and Land Use Table
- Clause 5.10 – Heritage Conservation
- Clause 6.1 – Earthworks
- Clause 6.2 – Essential services

The below provides an overview of consistency and compliance of the proposal against the relevant provisions.

4.5.1. Clause 2.3 – Zone objectives and Land User Table

The subject land is zoned RU1 Primary Production ("RU1 zone") under the LEP (Figure 8).

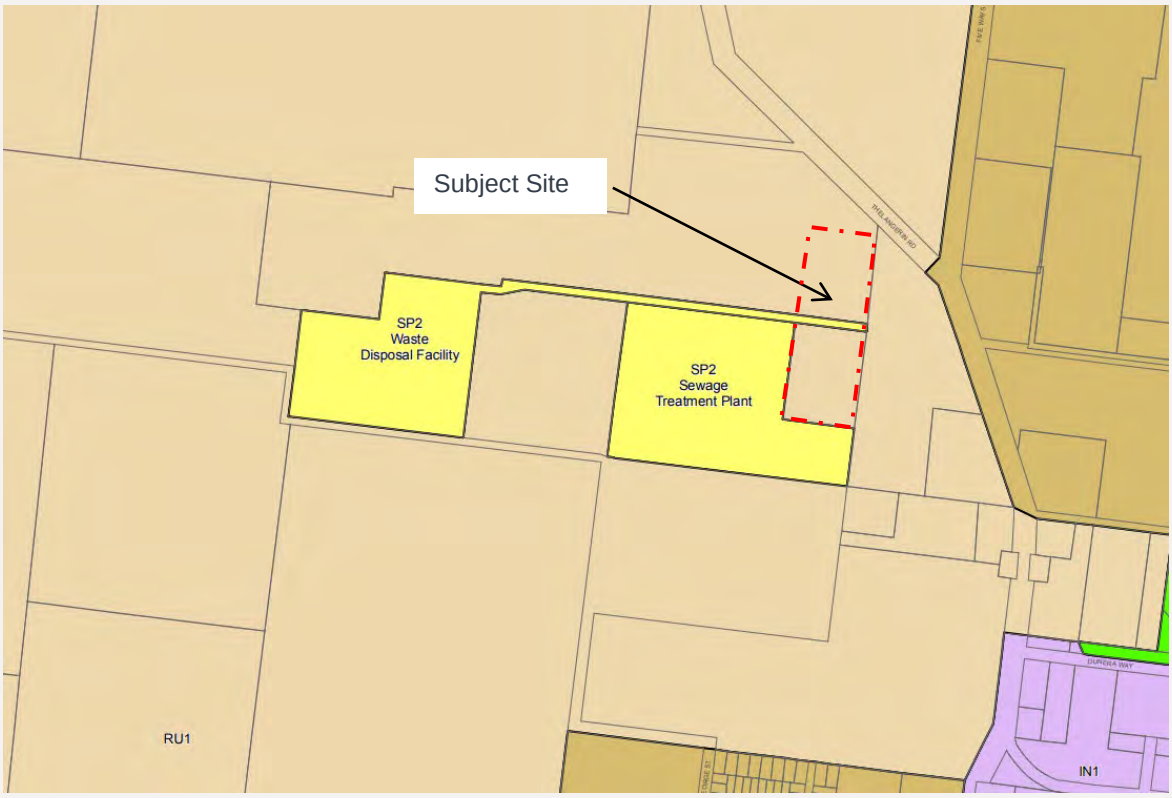

Figure 11 – Extract of Land Zoning Map (LZN_007)

The objectives of the RU1 zone are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*

The proposed development, whilst not for agricultural purposes is still considered to be generally consistent with the objectives of the RU1 zone.

Whilst it is acknowledged that development for the purposes of a Waste management centre is prohibited in the RU1, as per the requirements of SEPP (Infrastructure), the works are being undertaken within a prescribed zone by or on behalf of Council, which is permitted with consent.

Lastly, it is also worth noting that Council is proposing to rezone the subject land from RU1 to SP2 as part of the current Draft Hay Structure Plan being prepared for the township. In doing so, this will avoid any zoning anomalies that currently exist.

4.5.2. Clause 5.10 – Heritage Conservation

Clause 5.10 of the LEP relates to heritage conservation and seeks to conserve the environmental heritage of Albury, the heritage significance of heritage items and heritage conservation areas, archaeological sites and Aboriginal objects and places of heritage significance.

The subject land is not identified as a heritage item nor is it located within a heritage conservation area following a review of Schedule 5 and the Heritage Map of the LEP.

Similarly, matters regarding Aboriginal Cultural Heritage have also been investigated. A review of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken, and one site of Aboriginal cultural significance was found within a 200 metre radius of the subject site.

It is confirmed that there were no recorded sites either on or within 200 metres of both parcels of land. A copy of the relevant AHIMS searches is included in Appendix B.

Further details regarding environmental impacts are discussed in Section 5 of this report.

4.5.3. Clause 6.1 – Earthworks

Clause 6.1 of the LEP requires development consent for earthworks to ensure that the works will not have a detrimental impact on environmental functions and processes. In this instance, the development is seeking to undertake works to construct a new industrial warehouse and associated works, which will involve some level of excavation works. Therefore, consideration of this clause is required.

Before Council can grant development consent, it must consider the following matters:

(a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality of the development,

(b) the effect of the development on the likely future use or redevelopment of the land,

(c) the quality of the fill or the soil to be excavated, or both,

(d) the effect of the proposed development on the existing and likely amenity of adjoining properties,

(e) the source of any fill material and the destination of any excavated material,

(f) the likelihood of disturbing relics,

(g) the proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area;

(h) any measures proposed to minimise or mitigate the impacts referred to in paragraph (g).

The proposed development is consistent with these matters for consideration as follows:

- The development will not adversely affect existing drainage conditions or soil stability in the area as it does not involve works to an existing drainage line.

- The purpose of the works is to allow for the construction and expansion of the Hay Waste Management Centre;
- The soil to be excavated represents clean virgin fill;
- The proposed earthworks are not expected to adversely affect any adjoining properties and are largely limited to site scrape only;
- Any surplus excavated material will be removed off site and where possible used in other local construction projects;
- As outlined in response to Clause 5.10, the subject land has been disturbed and is not expected to contain any relics; and
- The subject land is well setback from nearby watercourses and is not expected to reduce water quality in the area.

It is considered that the proposal satisfies the objectives of Clause 6.1

4.5.4. Clause 6.2 – Essential Services

Clause 6.2 of the LEP requires that development consent must not be granted unless the consent authority is satisfied that services that are essential for the proposed development are available or that adequate arrangements have been made to make them available when required.

The subject land is already developed as the Hay Waste Management Centre (including a Waste Transfer Station) and therefore has access to all relevant infrastructure and services including reticulated water, sewerage, electricity, drainage, telecommunications, gas, and vehicular access. It is considered that these will be adequate to enable appropriate servicing of the site with the exception of a number of road and electricity upgrades that are required.

These existing services will be extended and connected to the subject land as required and it is confirmed that there is ample capacity within this infrastructure to service the proposed development.

4.6. Development Control Plan

Following a review of Council's website and discussions with Council staff, it is confirmed that there is no Development Control Plan (DCP) applicable to the Hay Local Government Area (LGA).

Consequently, the application will be assessed against the development standards of the LEP, as well as other relevant Acts, Regulations and Guidelines.

An assessment of the proposed development in accordance with Section 4.15 of the EP&A Act has also been undertaken to determine the likely environmental impacts of the development.

4.7. Guidelines & Policies

4.7.1 NSW State Waste Policy

The NSW strategic policy framework for waste management incorporates policy to drive waste reduction and resource recovery.

The Project aligns well with these overall principles. Waste legislation that currently applies to NSW includes the Waste Avoidance and Resource Recovery Act 2001 and NSW Waste Avoidance and Resource Recovery Strategy 2014-21, the latter providing a framework for maximising conservation of natural resources and minimising environmental harm from waste management and disposal of solid waste. The project meets the relevant objectives of this Strategy by assisting in reducing waste generation generally, increase recycling, diverting waste away from landfill through recycling, as well as creating more jobs in recycling. Further details of the measures proposed, consistent with the NSW Waste Avoidance and Resource Recovery Strategy 2014-21, are contained in this SEE.

The Strategy aims to support investment in infrastructure, encourage innovation and improve recycling behaviour. It will also promote the development of new markets for recycled materials.

4.7.2 NSW Waste and Sustainable Materials Strategy 2041

The NSW Waste Avoidance and Resource Recovery Act 2001 commits the NSW Government to refreshing and updating its waste strategy every five years – to review and continually improve the state's policies and targets for waste reduction and landfill diversion.

As well as waste reduction and recycling, the Strategy focuses on the environmental benefits and economic opportunities in how we manage our waste. The targets of the Strategy are to:

- reduce total waste generated by 10% per person by 2030
- have an 80% average recovery rate from all waste streams by 2030
- significantly increase the use of recycled content by governments and industry
- phase out problematic and unnecessary plastics by 2025
- halve the amount of organic waste sent to landfill by 2030.

The proposed expansion of the Hay Waste Management Centre directly responds to the aims and actions of this Strategy as it seeks to divert more wastes out of traditional landfill, which will achieve a circular economy.

4.7.3 National Waste Policy

The 2018 National Waste Policy provides a framework for collective action by businesses, governments, communities and individuals until 2030. According to the (Commonwealth) Department of Environment website the policy identifies five overarching principles underpinning waste management in a circular economy. These include:

- Avoid waste.
- Improve resource recovery.
- Increase use of recycled material and build demand and markets for recycled products.
- Better manage material flows to benefit human health, the environment and the economy.
- Improve information to support innovation, guide investment and enable informed consumer decisions.

The proposed waste facility would assist in resource recovery of waste, as well as managing waste as a resource to deliver economic, environmental and social benefits to the Hay region generally. Any waste not capable of recycling will be disposed of to Council's landfill facility.

The overall objectives of the National Waste Policy are that all wastes, including hazardous wastes, are managed in a way that is consistent with Australia's international obligations, to protect human health and the environment. The proposed waste facility would be consistent with the aims and objectives of the National Waste Policy in terms of the following:

- Managing waste as a resource and improving resource recovery, whereby valuable material can be recovered from material that would otherwise be disposed to landfill.
- Protecting human health and the environment. The proposed waste facility adopts a range of environmental management measures appropriate to the risks posed, ensuring that the project's impact on the local environment is minimised to a satisfactory degree.
- Deliver economic benefits in terms of income generation and employment opportunities, as well as ensuring the protection of the environment and local amenity.

4.7.4 NSW Fire Safety in Waste Facilities Guideline

Fire and Rescue NSW (FRNSW) first released Fire safety in waste facilities guideline in October 2019, following consultation with the waste industry, with a revised version released on 27 February 2020. As was explained by FRNSDW "this is not a guideline just for the waste industry; this is a guideline for the regulators, planners, certifiers, engineers and consultants etc. A fire safety study is not always required, hence why FRNSW provides prescriptive requirements guiding the relevant authority in their determination". The Fire safety in waste facilities guideline document provides guidance on fire safety in waste facilities that receive combustible waste material, including adequate provision for fire safety and facilitate safe fire brigade intervention to protect life, property and the environment.

'Combustible waste material' is defined in the guideline to mean the following:

"combustible waste material – means any solid waste material that can readily ignite and burn under normal conditions, which includes:

- paper and cardboard
- wood and wood-based products
- plastic
- rubber
- textiles
- waste derived fuels such as refuse derived fuels (RDF), solid recovered fuels (SRF) and processed engineered fuels (PEF)
- metal with combustible contaminants, and
- any other waste material which may pose a notable fire risk like above."

In the context of the above it is relevant to note that the proposed waste facility will be handling a limited range only of combustible waste material. Plastics and rubber pose a High fire risk, however, these materials will make up a very small proportion only of the C&D waste being handled at the proposed waste facility.

The proponent proposes various to make adequate provision for fire safety as prescribed by this guideline and meet the relevant 'acceptable solution' as described Appendix A of Fire and Rescue NSW Fire safety in waste facilities guideline.

4.7.4 NSW Noise Policy for Industry 2017

The NSW EPA published the *Noise Policy for Industry* (2017), which aims to balance the need for industrial activity with the community's desire to minimise intrusive sounds. It sets assessment noise levels, consistent methods and best practice measures to mitigate industrial noise. The policy is specifically aimed at assessing noise from industrial noise sources scheduled under the POEO Act and therefore applies in this instance.

In accordance with the requirements of this Policy, an assessment of noise has been undertaken in support of the proposed development based on the recommendations and requirements of this policy. This assessment has confirmed that the proposed waste management centre will operate within acceptable limits, particularly given that the large setbacks of the activity from nearby and surrounding neighbours.

Further details regarding noise are discussed in Section 5.9 of this Report and Appendix C.

4.7.5 NSW Road Noise Policy 2011

The NSW EPA published the *NSW Road Noise Policy* in March 2011, which replaced the previous Environmental Criteria for Road Traffic Noise. The Policy contains strategies to address the issue of road traffic noise from, amongst other things, traffic generating developments.

Accordingly, an assessment of noise of the proposal against this Policy was undertaken. Similar to the Noise Policy for Industry, the proposed waste management centre will operate within acceptable limits.

Furthermore, these vehicle movements will be limited to between 7:00am to 5:00pm Monday to Friday, Saturday, 7:00am to 5:00pm and Sunday 8:00am to 4:00pm. Consequently, road noise will be minimised due to the operations of the site.

In addition, the proposed works are only expected to create an additional 4 truck movements per day, which will not create issues of road noise given the remote location of the site.

Further details regarding noise are discussed in Section 5.9 of this Report and Appendix C.

4.7.6 Approved Methods for the Modelling and Assessment of Air Pollutants in NSW 2016

Air quality impact assessment criteria are prescribed by the NSW EPA document titled *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (known as 'the Approved Methods'). The document lists the methods that are legally approved for modelling and assessing air pollutants from industrial premises when conducting air quality impact assessments.

In accordance with the requirements of this Policy, an assessment of air quality has been undertaken in support of the proposed development based on the recommendations and requirements of this policy. This assessment has confirmed that the proposed waste management facility will operate within acceptable limits.

Further details regarding air quality are discussed in Section 5.10 of this Report and Appendix C.

4.7.7 Guide to Traffic Generating Development 2002

The NSW Roads and Maritime Service document titled a *Guide to Traffic Generating Development 2002* ('the guide') outlines all aspects of traffic generation considerations relating to developments. The guide provides information regarding traffic issues for those submitting Development Applications, and for those involved in the assessment of these applications.

An assessment of traffic volumes has been undertaken, which concludes that the proposed development will not have any adverse impacts with regards to the generation of traffic and will operate within acceptable limits subject to a number of recommended mitigation measures as outlined below:

Further details regarding traffic and access are discussed in Section 5.2 of this Report.

4.7.8 Managing Urban Stormwater: Soils and Construction, 2004

The Landcom guidelines titled *Managing Urban Stormwater: Soils and Construction, 2004* ("the blue book") seek to help mitigate the impacts of land disturbance activities on soils, landforms and receiving waters by focussing on erosion and sediment control. In turn this will help:

- *Reduce pollution to downstream areas and receiving water;*
- *Reduce land degradation; and*
- *Raise awareness of ecologically sustainable development (ESD) principles and their application to development.*

In response, an erosion and sediment control plan will be prepared prior to the issue of a construction certificate which will detail specific techniques to maintain stormwater and runoff. More specifically, the development will utilise sediment fencing, hay bales, cut off drains and bunding where necessary. Furthermore, roof water will be collected and used or stored on-site.

Further details regarding surface and groundwater are discussed in Section 5.7 of this Report.

4.7.9 Assessment and Management of Odour from Stationary Sources in NSW 2006

The NSW EPA document titled Assessment and Management of Odour from Stationary Sources in NSW 2006 seeks to introduce a system that will help protect the environment and the community from the impacts of odour emissions while promoting fair and equitable outcomes for the operators of activities that emit odour.

Following a review of the proposed development and the requirements of this Guideline and the POEO Act, it is confirmed that the proposed waste management facility will not emit offensive odours. Therefore, further consideration of this Guideline is not required in this instance.

Further details regarding air quality are discussed in Section 5.10 of this Report and Appendix C.

4.7.10 NSW State Groundwater Policy Framework, 1997

The former Department of Land & Water Conservation prepared the *NSW State Groundwater Policy Framework, 1997*. The goal for the management of groundwater in NSW is:

> *To manage the State's groundwater resources so that they can sustain environmental, social and economic uses for the people of NSW.*

The proposed development is consistent with this policy as it will not adversely affect the existing groundwater and water table. More specifically, the development involves limited excavation works outside of the construction of a new water storage dam and other civil construction works.

Furthermore, the proposed works do not propose land application or the disposal of chemical wastes via the ground. Similarly, no deep-rooted vegetation is proposed to be removed.

Further details regarding groundwater are discussed in Section 5.7 of this Report.

4.8. Integrated Development and Approval Requirements

Section 4.46 of the EP&A Act applies to development that in order for it to be carried out requires approval under another Act.

As outlined within Section 4.2.3 of this report, Section 5 of the POEO Act specifies scheduled activities as being those activities listed in Schedule 1 of this Act. 'Composting works', 'resource recovery', 'waste treatment (non-thermal treatment)' and 'waste storage' are identified as a scheduled activity, where they meet a certain criteria as outlined in Section 4.2.3.

As outlined above, the works require the issuing of an EPA licence under the POEO Act and the works are therefore classified as 'Integrated Development'.

5. Assessment of Environmental Impacts

This section of the SEE identifies potential impacts which may occur as a result of the proposed development and are relevant matters for the consideration of the DA under Section 4.15(1)(b) to (e) of the EP&A Act 1979.

These impacts and mitigating measures have been identified following comprehensive analysis of the site and the development plans. The analysis and impact identification were undertaken by:

- Site analysis of the subject land and surrounding properties.
- Analysis of the proposed plans for development.
- Desktop review of applicable Environmental Planning Instruments
- Consideration of a similar waste management facility at Lockhart
- Consultation with Council

5.1. Context and Setting

The subject land is zoned RU1 Primary Production and is located on the urban fringe of the main township of Hay. The land adjoins the existing Hay Waste Management Centre and is already partially developed as the Hay Waste Transfer Station. The subject land is owned by Council and the site adjoins Council's sewerage treatment works to the west and south west.

Council is now seeking to expand the operations of the existing Hay Waste Management Centre to allow for a greater array of recycling and re-use to occur on-site. The site immediately adjoins Council's Sewerage Treatment Works, as well as the existing landfill located further west.

Council has acquired the land and proposes to expand the existing waste management centre. In doing so, this will consolidate all council infrastructure works in the one location and avoid land use conflicts with adjoining neighbours given the large setbacks to the nearest residential dwellings.

Council's long-term planning as proposed in the draft Hay Structure Plan has earmarked this area for Council infrastructure related works and the proposed expansion of the waste management centre is therefore considered to be consistent with the context and setting of the area.

5.2. Traffic, Access and Parking

Access to the subject land will continue to occur via a private road that connects with the sealed Thelangerin Road located to the east. As part of the proposed works, this existing access road will be upgraded and an access control point will be established to restrict access to the site.

As part of the proposed works, a number of new internal roads will be constructed. These roads will be appropriately sealed and drained to cater for the demands of the predicted vehicles using these roadways. To improve site safety and access, the internal road network will be one way with vehicles travelling in a clockwise direction.

Formalised car parking areas are proposed across the site adjacent to key destination points, which will cater for the needs of staff and patrons. These spaces will be appropriately sealed, line-marked and drained. Similarly, dedicated receival/drop off points are proposed within the site to allow for the safe disposal/receipt of waste.

At present, the average number of vehicles accessing the site consists of approximately 20 vehicles per day (average of 2.5 vehicles per hour based on an 8 hour day) accessing the landfill and 72 vehicles accessing the waste transfer station per day (average 9 vehicles per hour).

Vehicle volumes to the site are not expected to significantly increase beyond current levels as the purpose of the works is to better separate the different waste streams, rather than cater for additional wastes. More specifically, the proposed operation will involve 3-4 extra collection drop-offs per week once fully established and is highly unlikely to impact any sensitive receptor.

5.3. Infrastructure and Services

The subject land is located on the fringe of the main urban area of the township and is already partially developed as part of Council's waste management centre. Therefore, the site has access to all relevant infrastructure and services including reticulated water, sewerage, electricity, drainage, telecommunications and vehicular access.

It is noted however that as part of the proposed works, existing road access and electricity services will need to be upgraded.

5.4. Heritage

As outlined in Section 4.6.4, the subject land is not identified as a heritage item nor is it located within a heritage conservation area following a review of Schedule 5 and the Heritage Map of the LEP.

5.5. Cultural Heritage

Matters regarding Aboriginal Cultural Heritage have also been investigated as part of the proposed works. A review of the Aboriginal Heritage Information Management System (AHIMS) database was undertaken and it is confirmed that there is a recorded item of Aboriginal cultural significance within 200 metres of the subject site.

The subject land is already developed and highly disturbed and is therefore not expected to contain any items of Aboriginal cultural heritage significance.

Notwithstanding the above, in the event that a site or artefact (as defined by the *National Parks and Wildlife Act 1974* or *Heritage Act 1977*) is identified during construction works, works shall cease at the location and no further harm to the object shall occur. The find shall be immediately reported to the developer, and the regulator in accordance with legislation ('unexpected finds protocol').

No work shall commence in the vicinity of the find until any required approvals have been given by the regulator. In the event that skeletal remains are encountered during the activity, works will stop immediately, the area secured to prevent unauthorised access and NSW Police, BCD and the developer contacted.

5.6. Soils

The proposed works will involve disturbance of the existing site during construction. Excavation works will be required as part of the extension and connection of services, as well as the construction of the proposed building and car parking areas.

Soil and water management devices will be installed and managed throughout the construction stage. These measures will prevent the uncontrolled movement of stormwater and sediment off-site.

An Erosion and Sediment Control Plan (ESCP) shall be prepared as part of the CEMP. All erosion and sediment control measures shall be designed, implemented and maintained in accordance with relevant sections of Managing Urban Stormwater: Soil and Construction Volume 1 (Landcom, 2004) ('the Blue Book) (particularly Section 2.2) and Managing Urban Stormwater: Soil and Construction Volume 2A – Installation of Services (DECC, 2008).

5.7. Surface and Groundwater

The subject land, like much of Hay is flat and the region is characterised by low rainfall. Advice received from Council has confirmed that the existing local aquifer is quite deep with the closest groundwater bore (GW404462.1.1) located 1.3 kilometres from the proposed facility has a depth of 96 metres.

In addition, soil profiles from Espade v2.1, survey no. 1004554, indicate that the local physiography is alluvial plain, with a poorly drained profile, moderate erosion hazard and no evidence of salting (NSW Department of Planning Industry and Environment, 2020). Given the geotechnical properties of the surrounding environment, including a deep aquifer and poorly drained soil profile, it is not expected that groundwater contamination will be an issue.

It is confirmed that the subject land is not identified on Council's groundwater vulnerability map and any run-off from the waste management facility (particularly, the FOGO) will be directed to the water storage dam on-site to prevent leaching of the groundwater. The hardstand area will be bunded to exclude uncontaminated stormwater and be constructed so that leachate generated on-site is discharged into a water storage area for re-circulation.

Furthermore, a leachate barrier system is proposed for the FOGO, which will have a compacted thickness of low permeability clay liner to prevent contamination of the groundwater. Coupled with the low rainfall, depth of the aquifer and clay liner, this should provide appropriate protection to the sub-surface water from contamination.

Notwithstanding the above, Council is also proposing to install a groundwater bore to monitor any potential impact on groundwater quality.

Similarly, surface water will be managed via the use of bunding around the works areas and cut-off drains. Clean stormwater generated outside of the composting area will be excluded from the FOGO area and prevented from becoming leachate. Bunds will surround the active composting area and will be vegetated, whilst drains will follow the lines of the bund and be directed into sediment traps to maximise retention on-site.

5.8. Flora and Fauna

The property contains little vegetation primarily limited to non-native and exotic pasture grasses. Whilst it is acknowledged that Lot 1 does contain a number of trees, namely around the existing dwelling, these mainly consist of planted vegetation.

Following a review of the State Vegetation Map, it is confirmed that the subject land contains non-native vegetation. The closest land classified as environmentally sensitive is located approximately 1.8 kilometres away to the south.

Despite this, the feedstocks used in the composting process are predicted to contain weeds which could pose environmental harm to surrounding land use. Moisture will be managed to minimise windblown matter. Regular site assessments of weeds will be carried out and, if needed, sprayed to ensure that weeds do not take root onsite or spread to surrounding land.

The feedstock may attract vermin in the form or birds and rodents. This will be managed by thorough mixing of the incoming feedstock and covering each incoming FOGO load with a layer of mulched green waste.

Therefore, the removal of any non-native vegetation on-site is not expected to have any impacts upon biodiversity or habitat values.

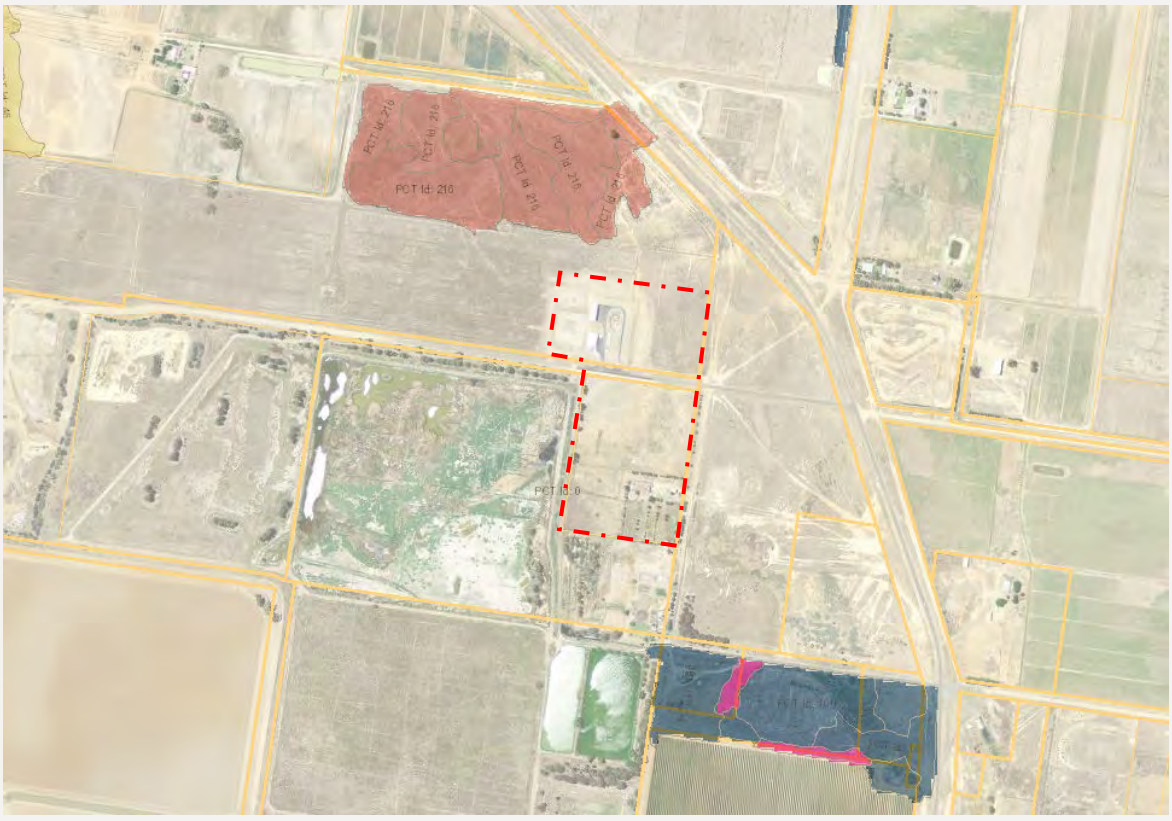

Figure 12 – Extract of State Vegetation Map

5.9. Noise

The impacts of demolition and construction noise will be only for a short period of time and will be limited to appropriate hours. It is considered that some level of demolition and construction noise is acceptable given that it will only occur for a finite period and will be controlled by relevant conditions of development consent.

Matters regarding noise during the operation of the waste management centre have also been assessed and are considered appropriate in this instance. Specifically, noise will be generated from the use of vehicles and machinery on-site including forklifts, back hoes and front end loaders, as well as tipping and unloading of trucks and other vehicles.

The use of machinery on site will increase as a result of the development. Readings were taken on site at the current Waste Transfer Station) during the gathering and removal of waste, in which a single utility vehicle, a backhoe, and a truck was used, with also the cardboard baler being in operation. The reading was 79dB. The supplier for the proposed shredder and baler indicated that the noise levels will not exceed 75dB, so it is envisaged that noise will be roughly equal to the status quo.

Decibel readings were taken at the closest sensitive receptors, and it is found that it is unlikely for the poposed MRF to have a noise impact on the receptors, as other sources of noise dominated the surroundings. These sources include:

- A Saleyard to the north
- A Truck Wash with constant use to the east
- A Gun Club to the east
- An industrial area, truck depot and feed depot to the south.

No surrounding land uses are likely to be impacted by the proposed site operation given the generally remote location of the property and the large setbacks of the development from the closest sensitive receiver, being a dwelling located approximately 750 metres away to the north west at 173 Thelangerin Road, the proposed operation of the facility is not expected to create adverse impacts with regards to noise.

In addition, the site will be subject to compliance with relevant conditions of an EPA licence in terms of noise levels and Council will keep a noise complaint register to monitor any issues that arise.

A table and plan showing the closest sensitive receptors is provided below.

Further details regarding noise are discussed in an Odour Assessment contained in Appendix C.

Figure 13 – Sensitive Receptors Map

Table 2 – Summary of Sensitive Receptors

Receptor No.	Receptor Type	Address	Distance from works
R1	Rural Dwelling	173 Thelangerin Road, Hay	750m
R2	Rural Dwelling	34 Five Ways Lane, Hay	530m
R3	Rural Dwelling	8 Five Ways Lane, Hay	375m
R4	Rural Dwelling	107 Thelangerin Road, Hay	540m

Surrounding land uses (impacting noise)(marked yellow), with Decibel readings taken (marked blue) when machinery operated on northern part of site.

Figure 14 – Map showing nearby noise sources

5.10. Odours

Similar to matters regarding noise, odour impacts have also been considered as part of the subject application. Potential odour sources include the composting process, as well as un-composted feedstock and the water storage pond.

If conditions within the windrows become anaerobic, the emission of gaseous compounds including sulphur, nitrogen, methane and volatile fatty acids can cause the generation of unpleasant odours (NRCS, 2007). The volatilisation of ammonia is the most common source of odorous emission during normal composting conditions (NRCS, 2007). The production of methane under anaerobic conditions is undesirable both because of the unpleasant odour and also because it is considered a potent greenhouse gas which is more than 20 times more potent than carbon dioxide (NRCS, 2007).

The risk of emitting and dispersing odorous gases is greatest upon the delivery of feedstocks, during compost turning, and the screening of mature compost. Emissions can be minimised through good management of the composting process.

The key parameters for pasteurisation and odour control include:

- Maintain a nutrient balance between carbon and nitrogen of between 25:1 and 35:1. High nitrogen feedstocks should be mixed with carbon-rich feedstocks to achieve the ideal carbon to nitrogen ratio (EPA Victoria, 2017).
- Moisture levels should be maintained between 45%-60%. Moisture levels above 60% will lead to anaerobic conditions and the production of odorous emissions (EPA Victoria, 2017).
- Available oxygen should be maintained at greater than or equal to 10%. Oxygen levels are influenced by porosity, moisture content, bulk density, windrow size or bed depth and frequency of turning. Lack of oxygen will result in the release of odorous methane gas (EPA Victoria, 2017).
- Maintain a pH between 6.5 and 8.0. Lower pH, coupled with anaerobic conditions, can lead to the production of odorous compounds such as sulphides, amines, ammonia, and volatile fatty acids while a higher pH can lead to gaseous losses of ammonia (EPA Victoria, 2017).
- The porosity and bulk density of the pile should be maintained at 45%-65% and 400-700 kg/m3, respectively. Porosity and bulk density have a great influence on oxygen availability. Anaerobic conditions are most likely with low porosity and high-density feedstocks. Piles should be constructed to between 1.5-3.0 m in height to minimise the effects of compression yet enable material to heat up sufficiently and allow oxygen to move throughout the pile (EPA Victoria, 2017).
- The temperature should be maintained between 55°C and 75°C. Temperature influences the rate of decomposition and thus oxygen demand, microbial population, and overall propensity to generate odorous compounds. This temperature range is optimal for pasteurizing the compost (EPA Victoria, 2017).

Using non-putrescible category 1 organics including leaves, plants, branches, tree trunks to blend with rapidly biodegradable organics is a good way to manage odour risks. Kerbside FOGO bins are generally 70-80% garden material and Hay Shire Council will have access to 320 tpa of mulched green waste to blend with the FOGO feedstock. Given the proposed area does not have heavy rainfall to create excessive moisture levels within the windrows, and the feedstock will be dominated by high carbon, category 1 organics, it is not expected that the site will generate excessive odour emissions.

Consequently, given the generally remote location of the site from surrounding land uses, the development is not expected to create odour issues for nearby sensitive receptors.

Again, the site will operate in accordance with relevant conditions of an EPA licence and will be subject to periodic inspection.

Further details regarding odour are discussed in an Odour Assessment contained in Appendix C.

5.11. Natural Hazards

The subject land is not identified as being bushfire prone or flood prone.

Similarly, the land is also not known to be contaminated and is considered ‘fit for purpose’.

Notwithstanding the above, large piles of organic material can be considered fuel, susceptible to random combustion and as feedstock for a moving bushfire. As such, risk will be mitigated by maintaining a fire break around the site, in addition to an on-site water storage tank fitted with a STORZ valve for fire-fighting purposes. Windrows will be monitored for temperature, moisture and air content and maintained within optimal parameters to ensure that anerobic methane production is limited and random combustion does not occur.

5.12. Social Impacts

The proposed works will have a positive social impact as it will encourage resource recovery and will divert waste away from traditional landfill disposal options. Hay Shire Council consistent with both state and federal policies is committed to reducing the amount of waste that goes to landfill and encourage the recycling and reuse of materials.

The expansion of the Hay Waste Management Centre will be partly the result of grant funding received by Council, which will have long term environmental and economic benefits to Council.

The works are largely isolated from nearby and surrounding sensitive receptors, which will minimise impacts such as noise and odour and the scale and size of the facility will ensure that it is not classified as designated development.

The site will operate under an EPA licence, which will ensure that it is appropriately managed and monitored ongoing.

5.13. Economic Impacts

The proposed expansion of the Hay Waste Management Centre will have a positive economic impact as it will support job creation and create opportunities for new businesses.

As outlined above, the works will be partly funded by grant funding, thereby reducing the financial burden on Council and the site will generate an additional revenue stream for Council.

It is expected that the proposal will also generate flow on effects, including to local trades and services.

The cost associated with the establishment of the site is approximately $2,974,087 of which a portion may come from the NSW EPA Waste Less Recycle More (Organics Infrastructure – Large and Small) grant stream, providing the application is successful. The remaining capital expenditure has been budgeted for. The RRC is estimated to cost $150,000 pa to operate but will generate savings of greater than $50,800 pa.

The diversion of organic materials from the council-owned landfill will extend the life of the landfill, reduce environmental impacts, and contribute to a more resilient waste management system. There is also the possibility of accepting more feedstocks from the agricultural sector at a small gate fee, thus increasing the volume of mature compost available for sale to the public. There is little risk in the proposed operation’s finances as Council owns and operates the nearby landfill.

5.14. Suitability of the site

The subject land adjoins Council’s sewerage treatment works as well as Council’s existing waste management facility (Part Lot 113 is already developed as Council’s waste transfer station).

Therefore, the expansion of this facility on the subject land is considered suitable in this instance.

5.15. Submissions

No submissions have been received as the development has yet to be notified.

It is expected that the development will be advertised in accordance with Council's notification policy.

5.16. Public Interest

The proposed development is considered to be in the public interest for the reasons outlined in this report.

6. Conclusion

The Concept Development Application seeks approval for alterations and additions to the Hay Waste Management Centre at Lot 1, DP 517869 and Part Lot 113, DP 448476 and addressed as 107-109 Thelangerin Road, Hay.

The application seeks development consent under Part 4 of the EP&A Act and has been assessed against the provisions of Section 4.15(1) of the EP&A Act.

As demonstrated by the detailed assessment above, the proposal satisfies the intent of the provisions of the applicable EPIs and will result in a positive development outcome in terms of social, environmental, and economic impacts.

Having regard for the content of this report, the proposal deserves the support of Council because:

- it is consistent with the relevant environmental planning instruments and development control plan;
- it proposes an expansion of the existing waste management centre in a remote location of Hay;
- it will encourage resource recovery and will divert wastes away from traditional landfill methods;
- it will have no adverse amenity impacts to surrounding land due to the sites' remote location and will be managed in accordance with the conditions of an EPA licence;
- it will encourage recycling and re-use; and
- it is serviced by all essential infrastructure and services.

In light of the above considerations, it is our opinion that the proposal is appropriate from a planning point of view and is in the public interest. The proposed development warrants support by Council.

Appendix A: Proposed Site Plan

Appendix B: Aboriginal Heritage Information Management Search (AHIMS) Results

Appendix C: Noise and Odour Assessment

Appendix D: Previous Statement of Environmental Effects