

## **Appendix 6 – Planning assessment**



## Energy from Waste Facility

Australian Paper

Submission to support Planning Permit application

| C

9 March 2018



## Energy from Waste Facility

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## Contents

<b>Executive Summary</b> .....	<b>1</b>
<b>1. Introduction</b> .....	<b>2</b>
1.1 Overview.....	2
<b>2. Subject Site and Surrounds</b> .....	<b>3</b>
2.1 Land Tenure .....	4
<b>3. Community Consultation</b> .....	<b>5</b>
<b>4. The Proposal</b> .....	<b>9</b>
4.1 Background .....	9
4.2 Development .....	10
4.3 Use .....	10
4.4 Car Parking, vehicle access and bicycle facilities .....	10
<b>5. Latrobe Planning Scheme</b> .....	<b>11</b>
5.1 Planning Context .....	11
5.2 Definitions .....	11
5.3 State Planning Policy Framework .....	11
5.4 Local Planning Policy Framework .....	11
5.5 Zones.....	12
5.6 Overlays .....	12
5.7 Particular Provisions.....	12
5.7.1 Clause 52.06 (Car Parking).....	12
5.7.2 Clause 52.10 (Uses with Adverse Amenity Potential).....	13
5.7.3 Clause 52.34 (Bicycle Facilities) .....	13
5.7.4 Clause 52.47 (Planning for Bushfire) .....	14
5.8 General Provisions .....	14
5.8.1 Clause 66 Referral and Notice Provisions .....	14
5.9 Notification.....	14
<b>6. Planning Assessment</b> .....	<b>17</b>
6.1 Buildings and Works.....	17
6.1.1 Bushfire Management .....	20
6.2 Use .....	20
6.2.1 Operating hours.....	21
6.2.2 Carparking, access and traffic.....	21
6.2.3 Car parking.....	22
6.2.4 Noise effects.....	22
6.2.5 Air emissions .....	23
6.2.6 Light emissions.....	24
<b>7. Other Legislation of Relevance</b> .....	<b>25</b>
7.1 <i>Environment Effects Act 1978</i> .....	25
7.2 <i>Environment Protection Act 1970</i> .....	25
<b>8. Conclusion</b> .....	<b>26</b>

**Appendix A. Certificate of Title and associated instruments**

**Appendix B. Summary of SPPF and LPPF**

**Appendix C. Planning Permit triggers**

**Appendix D. Bushfire Management Statement**

**Appendix E. Preliminary Transport Assessment**

**Appendix F. Plans**

**Appendix G. Zoning Map**

**Appendix H. Overlay Map**

## Executive Summary

Paper Australia Pty Ltd (Australian Paper, 'AP') (the **proponent**) is a manufacturer of pulp, paper, envelopes and stationery and is Australia's only manufacturer of office and printing papers, bag, sack, lightweight packaging and industrial papers and a major supplier of kraft liner boards.

AP is one of the largest industrial users of natural gas in Victoria. To address the future energy needs and to mitigate impacts in energy prices and uncertainty of energy supply, AP propose to develop an Energy from Waste Facility (**EfW**) within the existing Australian Paper Maryvale Pulp and Paper Mill site at Maryvale (referred to as the **project**). The site is located within the City of Latrobe.

The aim of the project is to attain a sustainable and long-term stable alternative energy source to provide steam and electricity to the existing Maryvale Pulp and Paper Mill operations (the **Mill**). Although the primary aim of the project is to provide energy to the Mill, the project has the capacity to produce excess electricity which could be exported to the national grid.

Planning approval is required under the provisions of the Latrobe Planning Scheme for:

- The use of the land for an industry pursuant to Clause 33.02-1 (Industrial 2 Zone)
- Buildings and works for the development of an industry pursuant to Clause 33.02-4 (Industrial 2 Zone)
- Buildings and works associated with an industry pursuant to Clause 44.06-2 (Bushfire Management Overlay)

A Works Approval is also being sought from the Environment Protection Authority under the *Environment Protection Act 1970*.

The project will nominally divert 650,000 tonnes (+/- 10%) of Municipal Solid Waste (MSW) and Commercial and Industrial (C&I) waste from Gippsland and Melbourne landfills annually, saving over 500,000 tonnes of greenhouse gas emissions per year. If successfully implemented, the Project will have a range of important benefits for the local community and for the state/country, including:

- Helping to secure the future of the AP Maryvale site and the jobs of the 850 direct employees
- Providing an additional 1,600 jobs during the construction phase and more than 440 jobs during the operational phase.
- Diverting 650,000 tonnes (+/-10%) of waste from landfill each year, to a higher order use as per the Waste Hierarchy
- A net reduction in greenhouse gas emissions of greater than 500,000 tonnes per year, the equivalent of taking 100,000 cars off the road
- Significantly reducing purchased energy at the Mill by up to 3.5 PJ of natural gas per annum and around 25 MWe, releasing this to the broader market, helping to improve energy security for the Mill and the broader community

## **1. Introduction**

### **1.1 Overview**

This planning report has been prepared by Jacobs Group (Australia) Pty Ltd (**Jacobs**) on behalf of Australian Paper Pty Ltd (**AP**) (the **proponent**) to support a planning permit application to the Latrobe City Council for the use and development of the land for an Energy from Waste plant at the existing AP Maryvale Pulp and Paper Mill Site.

Planning approval is sought under the provisions of the Latrobe Planning Scheme for:

- The use of the land for an industry pursuant to Clause 33.02-1 (Industrial 2 Zone)
- Buildings and works for the development of an industry pursuant to Clause 33.02-4 (Industrial 2 Zone)
- Buildings and works associated with an industry pursuant to Clause 44.06-2 (Bushfire Management Overlay)

This report describes the project and provides an overview of and planning assessment against the relevant provisions of the Latrobe Planning Scheme. It is supported by the following appendices:

**Appendix A. Certificate of Title and associated instruments**

**Appendix B. Summary of SPPF and LPPF**

**Appendix C. Planning Permit triggers**

**Appendix D. Bushfire Management Statement**

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A Works Approval is also being sought from the Environment Protection Authority under the *Environment Protection Act 1970*.



## 2. Subject Site and Surrounds

The subject site is located on the existing AP Maryvale Pulp and Paper Mill site ('Mill') in the Latrobe Valley, approximately 150 km east to south-east of Melbourne. The site is approximately 1.5 km south of the Latrobe River, approximately 7 km north-west from the township of Traralgon and approximately 7 km north of the Morwell township.

The site is bound by Maryvale Road and Old Melbourne Road along the southern side of the site, Tanjil East Road along the western boundary and the La Trobe River along the northern site boundary. Traralgon West Road traverses through the southern edge of the Maryvale site. The Traralgon Cemetery is located to the east of the site, with Traralgon's residential development beyond. Figure 2.1 shows the location of the site, along with the project area.

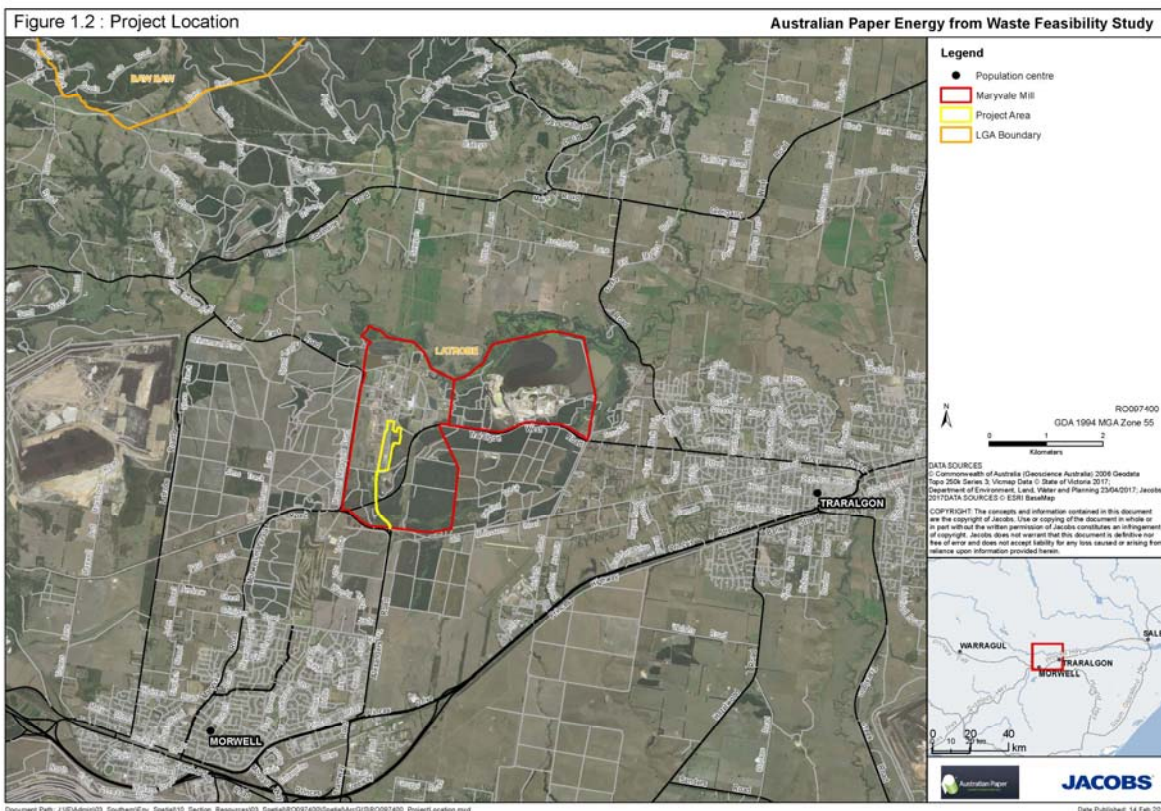


Figure 2.1 : Project Location

The site has been used a pulp and paper mill since 1937. Over the eight decades it has expanded to include five paper machines, three pulp mills and two waste paper recycling plants. Investment has been targeted at improving operational efficiency and environmental performance.

Existing heavy vehicle access to the site is from the roundabout of Old Melbourne Road, Maryvale Road and Alexanders Road (all Road Zone, Category 1) (**RDZ1**). A retention dam for wastewater operated by Gippsland Water, located to the south-west of the project site is within the Public Use Zone 1 (Service and Utility) (**PUZ1**). This retention dam is utilised for purposes that include the Mill's tradewaste system and is located on a separate title (Lot 2 TP 319581). The site has rail access from the southern end of the site for the export of products through the Port of Melbourne, which may be utilised for the project.

The existing AP Mill is located within the northern section of the site with a large wastewater polishing pond located in the far eastern section of the land parcel. The proposed EfW plant is proposed within the southern half of the site. The Maryvale site contains various vehicle access points from Traralgon West Road, Old



Melbourne Road and Tanjil East Road, and a sealed internal road network. The project site will have vehicle access points from Traralgon West Road and the existing private road to access the weighbridge. In the past, the EfW site has been disturbed and was partially used as a storage area for timber to be used by the mill prior to 1955. After this, only the western portion of the project site was used for timber storage. A small part of a larger car park has occupied an area in the northern portion since the early 1960's while the eastern portion largely remained vacant until 1999 when it was seeded for plantation timber growth, which remains on site today.

The subject site is surrounded by land used for a variety of agricultural purposes including dairy farming and grazing. Land to the east contains sand quarries and plantation forestry. The Latrobe Regional Airport is located approximately 1.6 km south-east from the site boundary.

## 2.1 Land Tenure

Australian Paper owns the subject site at Lot 2 PS 609453 and the adjoining parcel of land directly south, Plan PC 357015. The title contains a number of registered covenants, caveats and easements associated with gas, sewerage, water, electricity and access.

The existing Maryvale Mill site consists of adjoining land parcels of PC 357015 (located south-east of the main site) and Lot 1 PS 609453 (located within the southern side of the site). The project does not involve these additional land lots and is solely located on Lot 2 PS 609453.

Table 2.1 summarises the easements located on the site. The site is subject to Covenant AK373708L and Covenant H359505. The covenants relate to the creation of easement in favour of APA Gasnet Australia (Operations) Pty Ltd for the purposes of their utilities (Instrument AK373708L) and an easement in favour of Gas and Fuel Corporation of Victoria (Instrument H359505). Copies of these instruments are attached to Appendix A of this report. No easements will be impacted as a result of this project.

Table 2.1 : Summary of easements

Easement	Purpose	Land benefited / In favour of
E-1 & E-9	Sewerage	Latrobe Valley Water and Sewerage Board
E-1 & E-9	Pipeline and ancillary purposes	Central Gippsland Region Board Corporation
E-2 & E-10	Pipeline purposes	C/T Vol. 8130 Fol. 034
E-2 & E-10	Carriageway	C/T Vol. 8130 Fol. 034
E-2 & E-10	Pipeline and ancillary purposes	Central Gippsland Region Water Corporation
E-3	Transmission of electricity	SECV
E-4	Transmission of electricity	SECV
E-5	Pipeline purposes	C/T Vol. 5219 Fol. 723
E-6 & E-11	Underground powerline	Eastern Energy Limited
E-7	Powerline	Spielectricity Pty. Ltd.
E-8, E-9, E-10 & E-11	Sewerage	Central Gippsland Region Water Corporation
E-12	Gas Supply	APA Gasnet Australia (Operations) Pty. Ltd.

### 3. Community Consultation

Australian Paper is committed to engaging with all stakeholders, including community members, local businesses, agencies, regulatory authorities and State/Commonwealth government members. AP aims to engage in meaningful dialogue with stakeholders so that stakeholders can be adequately informed of the EfW Project and AP's activities. Extensive community consultation has been undertaken by AP to date, ensuring the public and key stakeholder groups have been engaged through the development of the project. It is AP's intention to continue this extensive consultation throughout the project's development.

AP is well known to the local community - it is a major employer in the region and has existed on the Maryvale site since 1937. Through the engagement and consultation efforts undertaken to date, the community has shown significant interest in the Project and what that means for the region. As the Project is important to the long-term viability of the region's largest employer, the local community is one of a range of important stakeholders that has significant interest in the proposed development.

The potential for an EfW Project was first discussed with community members through the Maryvale 'Community Consultative Committee' (CCC) in May 2017, previously set up by AP in 1994 to provide a regular interface between AP and representatives of the community. Since then, AP has undergone a series of engagement activities to inform the community of the proposed Project, to take stock of the opinions of stakeholders and address any issues raised. This has involved a number of community focus groups to gauge their views on an EfW plant to service the pulp and paper mill and the establishment of a Project Office and Information Centre in the Morwell CBD. Key issues about the proposed Project and its operations raised during these activities have included air quality, odour, social impacts, employment, community engagement, noise, management of the feedstock waste and water quality. The issues of maintaining existing Mill jobs and creating new employment opportunities have also been strongly expressed during engagement with stakeholders.

Table 3.1 and Table 3.2 outline AP's consultation tools, when these were carried out and plans for ongoing consultation.

Table 3.1 : Stakeholder engagement activities completed to date

Dates	Activity	Detail
13/1/17	State Minister Briefing	Minister D'Ambrosio visit to Maryvale Mill, with EfW briefing from David Jettner and Julian Mathers
16/3/17	State Premier Briefing	Premier Andrews briefed on EfW by senior NPI and AP executives
16/3/17	Prime Minister Briefing	Prime Minister Turnbull briefed on EfW by senior NPI and AP executives
11/05/17	Presentations to the Maryvale Community Consultative Committee (CCC)	Presentation of the EfW concept and how this could integrate into the operations of AP's Maryvale plant and what will be covered by the feasibility study Update of progress
10/08/17		
09/11/17		
15/02/18		
09/07/17	European Technology Study Tour	Visit leading technology options for thermal treatment – Moving Grate, Circulating Fluidised Bed, and Bubbling Fluidised Bed. To provide additional input into the evaluation of the most appropriate technology for the AP Proposal
Throughout 2017	Regular briefings to staff of AP's Maryvale plant	AP's Maryvale staff were kept up to date with the status of the EfW feasibility study at staff briefings throughout 2017
21-22/08/17	Focus groups	One group of employees and three groups of community members were recruited through a specialist market research firm to represent a broad cross section of the region
25/09/17	Community Forum	Discussed the EfW concept and the AP Maryvale site in general with community members who attended in response to advertisements in the local paper
1/10/17	Regular advertisements in the	Advertisements to raise awareness of the EfW feasibility study and to

Dates	Activity	Detail
onwards	Latrobe Valley Express	encourage community members to visit the Information Centre
05/10/17	Meetings with EPA staff	Meetings were organised with various EPA personnel to discuss the project
01/11/17		High level discussion with senior managers at EPA
22/11/17		Discussion with different experts within EPA regarding details required for Works Approval submission
08/12/17		Visit to the Morwell Project Office and Information Centre
09/03/18		Discussion with different experts within EPA regarding details of the draft Works Approval Application.
19/10/17		Meeting with Regional Development Victoria (RDV)
October 2017	European Study Tour	Tour of 4 EfW plants in Europe attended by representatives of Planet Ark, Federation University, CFMEU, Jacobs, AP and Nippon Paper Industries
04/11/17	Meeting with Japanese Consul-General	Provided the Japanese consul general an overview of the EfW feasibility study
Regular staff briefings 22/11/2017	Maryvale Employee engagement briefings	The EfW concept was discussed with site staff and how an EfW plant could integrate into Maryvale operations and what will be covered by feasibility study
23/11/2017	Meeting with Latrobe City Council	Meeting to discuss AP's consultation program
30/11/2017	Meeting with Latrobe City Council - Planning	Overview of the Project, statutory planning considerations and a planning approvals pathway
1/12/2017	Meeting with Latrobe Valley Authority (LVA) and RDV	Meeting to discuss progress of EfW feasibility study and inclusion in LVA New Energy Jobs and Investment Prospectus
11/12/17	Information Centre opens to public	Providing the community information on energy from waste as a concept and what the Project would mean for the region. Includes interactive displays, factsheets and tours
12/12/17	Meeting with Traralgon Chamber of Commerce	Meeting with President to discuss EfW feasibility study and opportunities to engage with members
12/12//17	Meeting with Advance Morwell	Meeting with President to discuss EfW feasibility study and opportunities to engage with members
13/12/17	Media release	Media release updating on feasibility study
13/12/2017	Meeting with DELWP	Discussion on the need for a referral under the Environment Effects Act and the timing of submission
13/12/17	Interview with ABC Gippsland	Short interview on Energy from Waste
15/12/17	Traralgon Chamber of Commerce	Meeting to discuss the EfW Feasibility Study
15/12/17	EPA Regional Office tour of Information Centre	Tour of Project information centre
16/12/17	Interview with Gippsland FM	25 min live interview with Gippsland FM on Energy from waste project
10/01/18	Tour of info centre - State MP	Victorian Member of Parliament for Morwell Russell Northe toured the information centre
11/01/18	Public notice about the information centre	Win News ran a 30 second piece notifying the public that the Information Centre is open for the public to visit
19/01/18	Tour of the Information Centre by the Gippsland Local Government Network (GLGN)	Members of the GLGN toured the Project Information Centre, with a follow-up briefing back at Latrobe City Council offices including the provision of an Information Pack with Renewable Energy HuB & 5 Factsheets.

Dates	Activity	Detail
23/02/18	Committee for Gippsland presentation	Present a project update to the board of the Committee for Gippsland
27/02/18	Morwell Business Information Night	Invited local Morwell businesses to attend an information evening and briefing.
14/03/18	Interview with Gippsland FM	25 min live interview with Gippsland FM on Energy from waste project
14-17/03/18	Pop Up Info Centre – Traralgon Centre Plaza	Providing the community information on energy from waste as a concept and what the Project would mean for the region. Includes interactive displays, factsheets

Table 3.2 : Planned stakeholder engagement activities

Timing	Activity	Detail
As required following an approval	Meet with representatives from government departments	<p>The following government agencies will be engage with and educated on the project at various stages, including:</p> <ul style="list-style-type: none"> <li>• DELWP – Department of Environment, Land, Water and Planning</li> <li>• EPA – Environment Protection Authority Victoria</li> <li>• DPC – Department of Premier and Cabinet</li> <li>• RDV – Regional Development Victoria</li> <li>• WorkSafe</li> <li>• LVA – Latrobe Valley Authority</li> <li>• MWRRG - Metropolitan Waste and Resource Recovery Group</li> <li>• GWRRG – Gippsland Waste and Resource Recovery Group</li> <li>• LCC – Latrobe City Council</li> </ul>
Quarterly	Maryvale CCC meetings	Present regular project updates to the CCC, and use these opportunities to identify any issues that community has with the project
Throughout 2018	Maryvale employee briefings	Will be used to communicate the progress of the EfW feasibility study to employees at the AP Maryvale site
Throughout 2018	Ongoing community engagement	Advertising, Information Centre visits and public dissemination of material to communicate the progress of the EfW feasibility study
Throughout 2018	Ongoing business and community group engagement	Continued presentations and dissemination of material to business and community groups updating them on progress of EfW feasibility study
March 2018	Public Information Session	AP intends to hold a Public Information Session around the time of submission of the EPA Works Approval and the planning permit application. The purpose of the Information Session is to update the public on the status of the approvals and the Project and to hear any comments and feedback
25/03/2018	Maryvale Mill Open Day	AP will have an Open Day at the Maryvale Mill. This is an opportunity for the public to look around the Maryvale Mill and meet with AP personnel
April 2018	Travelling Information Centre	AP is constructing a portable Information Centre which will be temporarily located in public areas in Morwell, Traralgon and Moe. The purpose is to further raise awareness with the public of the EfW project

## 4. The Proposal

### 4.1 Background

The existing Mill's manufacturing processes require thermal energy (in the form of high pressure steam) and high voltage electricity. Steam is generated in two recovery boilers which combust black liquor (a by-product of the pulping process). Additional steam is produced by three natural gas fired boilers. The steam passes through four on-site turbine generators to generate electricity. The Mill's electricity demand is supplemented with purchased electricity from the National Energy Market (NEM).

Over time AP has invested significant effort in improving the energy efficiency and sustainability of the site. This effort has been motivated by the significant increase in the market price for natural gas, grid electricity and the desire to reduce greenhouse gas emissions. These factors have driven the need for an alternative energy source to allow the mill to continue to operate in a reliable, sustainable and cost effective manner.

The proposed EfW plant will utilise moving grate boiler technology to recover energy by thermally treating 650,000 tonnes per annum (+/-10%) of Municipal Solid Waste (MSW) and Commercial and Industrial (C&I) sourced from the Melbourne metropolitan area and the Gippsland region. The plant will be a Combined Heat and Power (CHP) system, providing steam and power to the existing pulp and paper mill. The plant is expected to produce approximately 25 Megawatts electrical energy (MWe) and 130 tonnes per hour of high pressure steam. This process is shown in the figure below (Figure 4.1).

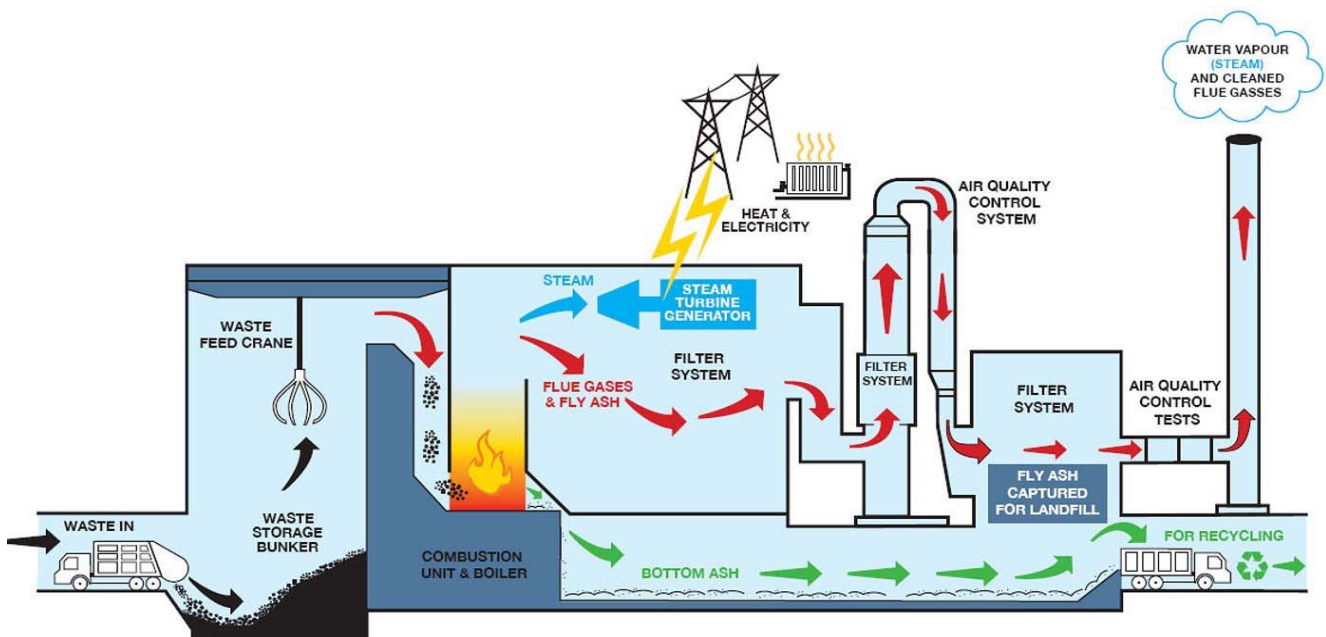


Figure 4.1 : Typical process overview for an EfW plant

The MSW and C&I from Melbourne will be delivered utilising a combination of rail and road, utilising the existing rail network and infrastructure as well as a portion utilising the existing road network. The proportion of railway delivery will be determined by negotiations with the Councils in Melbourne as part of the tender process. The MSW and C&I from Gippsland is to be transported by truck and will utilise the existing road network and vehicle access-ways into the site.

## 4.2 Development

The operational footprint of the EfW plant will be approximately 7-10 ha with construction expected to take approximately three years from commencement. The key construction activities include:

- Civil works
- Bulk earthworks
- Concrete and structural works
- Steel fabrication and installation
- Utility connections and ancillaries
- Mechanical works and plant installation
- Electrical and control systems
- Road and rail installation (within the existing site boundaries) including further development of rail siding.

Construction and temporary construction areas will take up an area of approximately 18.8 ha and will be contained within the existing Maryvale Pulp and Paper Mill site property boundaries (an area of ~620ha in total).

## 4.3 Use

The Mill is responsible for the manufacturing of pulp and paper and is Australia's only manufacturer of office and printing papers, bag, sack, lightweight package and industrial papers. Given the historic operation of the mill, the site would have the benefit of existing use rights for the use of the land as a pulp and paper mill. As the pulp and paper mill has evolved, there have been a number of planning permits issued under the Latrobe Planning Scheme, representing the ancillary buildings and works to the pulp and paper mill.

The Maryvale Site operates 24 hours a day, 7 days a week producing products and generating electricity and steam to power the processing facilities and associated infrastructure. The operation of the proposed EfW plant will be based on the existing Maryvale Mill hours.

The operation of the EfW plant may vary depending upon the required electrical generation and steam flows from the EfW plant to the Mill with engineering options to continue throughout the design phase for optimal plant performance configurations. The potential operating scenarios are as follows;

- Day to day operation of providing the Mill site with process steam. This process steam amount will vary depending on the steam requirement at the Maryvale at site as that particular point in time and will be a controlled flow that the EfW plant can respond to. For example, this can account for the times where the Mill has a reduced demand under a part mill shutdown. The times when this occur vary and are dependent on the extent of maintenance works required.
- During times of peak steam demand the EfW plant will be able to trip the turbine and provide the maximum possible amount of steam to the Mill site. This will be facilitated through the use of a turbine bypass.
- The EfW plant will operate under the scenario where the process steam requirement to the Mill is zero under a complete mill outage or at times where it is deemed beneficial to generate as much electricity as possible (for example during times of high demand on the electricity grid).

## 4.4 Car Parking, vehicle access and bicycle facilities

Existing car parking is located on the site for the Mill, however additional car parking areas have been proposed to accommodate the new land use on the site for the EfW Plant. Vehicle access for employees of the EfW Plant will be from the existing roundabout on Traralgon West Road (this is the current main access to the existing AP site).

AP intends to construct 60 car park spaces for the EfW Plant staff and visitors a secure bicycle parking facility for at least 12 bicycles.



## 5. Latrobe Planning Scheme

### 5.1 Planning Context

The project is subject to the provisions of the Latrobe Planning Scheme. The Latrobe City Council is the Responsible Authority for the administration of the planning scheme.

This section discusses the planning scheme definitions, planning permit triggers and provides an assessment of the project against the relevant planning policies.

### 5.2 Definitions

Pursuant to Clause 74 of the planning scheme, the project is defined as an Industry as follows:

*“Land used for any of the following operations:*

- a) Any process of manufacture;*
- b) Dismantling or breaking up of any article;*
- c) Treating waste materials”*

### 5.3 State Planning Policy Framework

The following Clauses of the State Planning Policy Framework relates to the project:

- Clause 11.07 (Regional Victoria)
- Clause 11.10 (Gippsland)
  - Clause 11.10-1 (A Diversified Economy)
- Clause 13 (Environmental Risks)
  - Clause 13.04-1 (Noise Abatement)
  - Clause 13.04-2 (and Air Quality)
  - Clause 13.05-1 (Bushfire Planning)
- Clause 17 (Economic Development)
  - Clause 17.02-1 (Industrial land development)
  - Clause 17.02-2 (Design of industrial development)
- Clause 19 Infrastructure
  - Clause 19.01-1 (Provision of Renewable Energy)
  - Clause 19.03-5 (Waste and Resource Recovery)
- Clause (Economic Development)
  - Clause Clause 17.02-1 (Design of industrial development)

Clause Clause An assessment against the SPPF is provided in Appendix B.

### 5.4 Local Planning Policy Framework

The following Clauses of the Local Planning Policy Framework relates to the project:

- Clause 21.02-5 (Key issue – Land use buffers)



- Clause 21.04-1 (Key issue – Greenhouse and Climate Change)
- Clause 21.04-3 (Key issue —Waste Management)
- Clause 21.04-4 (Key issue — Bushfire)
- Clause 21.07-3 (Key Issue – Industry)
- Clause 21.10-3 (Reference documents)

An assessment against the LPPF is provided in Appendix B.

## 5.5 Zones

The following zones apply to the site:

- Clause 33.02 Industrial 2 Zone (**IN2Z**)
- Clause 36.01 Public Zone 1 (Service and Utility) (**PUZ1**)
- Clause 35.07 Farming Zone (**FZ**)

Under Clause 33.02-1 (Table of uses) of the Industrial 2 Zone (**IN2Z**), a planning permit is required for the use of an industry (Section 2 use). Clause 33.02-4 (Buildings and work) of the IN2Z requires a permit to construct a building or construct or carry out works, therefore the development of the EfW plant will require a permit.

A small section of PUZ1 is located within the Maryvale Paper Mill site boundary. This PUZ1 is a separate parcel of land and not included on the title plan of the lot. The proposed use and development does not intersect with the area of land in the PUZ1. A portion of the FZ applies to the top north eastern section of the land parcel, to which the Maryvale site boundaries encompass. The proposed EfW plant and associated uses is fully encompassed within the IN2Z and does not extend into any other planning zone.

A map of the relevant planning zones is located in Appendix G.

## 5.6 Overlays

The following overlays apply to the site:

- Clause 43.02 Design and Development Overlay (Schedule 1 – Major pipeline infrastructure) (DDO1)
- Clause 44.04 Land Subject to Inundation Overlay (LSIO)
- Clause 44.06 Bushfire Management Overlay (BMO)

Pursuant to Clause 44.06 (Bushfire Management Overlay), a permit is required to carry out works associated with an industry. Clause 44.06-3 sets out application requirements and which documents must be submitted with the planning application.

Part of the DDO1 (Schedule 1 – Major pipeline infrastructure) and LSIO apply to the northern and north-eastern portion of the site, but do not apply to the EfW project area, therefore are not pertinent to this application.

A map of the relevant planning overlays is located in Appendix H.

## 5.7 Particular Provisions

The following particular provisions apply to the use and development of the project;

### Clause 52.06 (Car Parking)

The purpose of Clause 52.06 is:

- *To ensure that car parking is provided in accordance with the State Planning Policy Framework and Local Planning Policy Framework.*

- *To ensure the provision of an appropriate number of car parking spaces having regard to the demand likely to be generated, the activities on the land and the nature of the locality.*
- *To support sustainable transport alternatives to the motor car.*
- *To promote the efficient use of car parking spaces through the consolidation of car parking facilities.*
- *To ensure that car parking does not adversely affect the amenity of the locality.*
- *To ensure that the design and location of car parking is of a high standard, creates a safe environment for users and enables easy and efficient use.*

Clause 52.06 applies to a new use, therefore is applicable to the project. Before a new use commences, Clause 52.06-2 requires car parking to be provided meeting the requirements listed within the Clause.

The table in clause 52.06 requires 2.9 spaces to be provided to each 100 sq m of net floor area. The EfW Plant will have a net floor of approximately 11,650m<sup>2</sup>, which requires the provision of 338 car park spaces (based on 2.9 spaces per 100m<sup>2</sup> of net floor area).

As AP will provide 60 car park spaces on site, a waiver is sought for the reduced car parking requirement.

#### **Clause 52.10 (Uses with Adverse Amenity Potential)**

The purpose of Clause 52.10 is:

*To define those types of industries and warehouses which if not appropriately designed and located may cause offence or unacceptable risk to the neighbourhood.*

The project is considered under the *Recycling and Resource Recovery* section and under the *Combustion, treatment or bio-reaction of waste to produce energy* sub-section as per the functions of the EfW plant listed in Table 6.2. The threshold distance under this section is variable depending on the purpose of the development. *The Combustion, treatment or bio-reaction of waste to produce energy* sub-section is considered a Note 1; therefore the Environment Protection Authority (EPA) is the determining referral authority for the application.

The AP Maryvale Pulp and Paper Mill Site is licensed by the EPA (Licence No. 46547) and deemed a 'Scheduled Premises' on the basis that it falls under the schedule categories of: A05 (Landfills), F03 (Paper Pulp Mills) and A07 (Composting) under Schedule 1 – Schedule Premises Table of the *Environment Protection (Schedules Premises) Regulations 2017*.

A Works Approval is required for the EfW plant under Section 19A of the *Environment Protection Act 1970*. A Works Approval Application has been submitted to the EPA. The existing licence will be amended to include the EfW plant and the additional schedule category triggered, being A08 (Waste to Energy). The conditions of the Works Approval and Licence will be abided by.

#### **Clause 52.34 (Bicycle Facilities)**

The purpose of this clause is:

*To encourage cycling as a mode of transport.*

*To provide secure, accessible and convenient bicycle parking spaces and associated shower and change facilities.*

A permit may be granted to vary, reduce or waive any requirements of this clause.

The table in clause 52.34 requires 1 bicycle space be provided to each 1000 sq m of net floor area, which requires the provision of 11.65 bicycle spaces. As 12 bicycle spaces will be provided, no waiver is required.

## Clause 52.47 (Planning for Bushfire)

The purposes of Clause 52.47 (Planning for Bushfire) includes the protection of human life and ensuring development appropriately responds to bushfire hazard. This clause relates to the applications under the Bushfire Management Overlay (BMO) with Clause 52.47-2 setting out the bushfire protection objectives which the development must be in accordance with.

## 5.8 General Provisions

### 5.8.1 Clause 66 Referral and Notice Provisions

An application for use and buildings and works in the IN2Z is exempt from notice and review provisions under Section 52 of the *Planning and Environment Act 1987*. The application will require referral to the EPA and CFA as determining referral authorities pursuant to the planning scheme under Clause 66.02 (Use and development referrals) and Clause 44.06 (Bushfire Management Overlay).

Table 5.1 : Application referral requirements

Relevant Clause	Referral Authority
Clause 66.02-1 (Works approval or licence)	Environment Protection Authority ( <b>EPA</b> ) The EPA is the determining referral authority for a development that requires a Works Approval in accordance with Section 19A of the Environment Protection Act 1970 and for amendment of a licence under Section 20A of the <i>Environment Protection Act 1970</i> .
Clause 66.02-7 (Industry of warehouse)	Environment Protection Authority ( <b>EPA</b> ) as the determining referral authority for an application to use land for an industry for a purpose listed in the table to Clause 52.10 shown with a Note 1 or if the threshold distance is not met. The proposed EfW plant is listed under Clause 52.10 with a Note 1.
Clause 66.03 (Referral of permit applications under other State standard provisions)	Country Fire Authority ( <b>CFA</b> ) The CFA is the determining referral authority for applications under the BMO for applications other than an application to construct or carry out works associated with a dwelling or an application to subdivide land.

## 5.9 Notification

The proposed use and development is exempt from the notification requirements of Section 52 of the *Planning and Environment Act 1987*. As such, the application is not required to be placed on public notice. The table below specifies the clauses that exempt the application from notification requirements of the Act.

Table 5.2 : Notification exemptions

Zone, Overlay or Particular Provision	Clause	Exemption details	Comment
Industrial 2 Zone	Clause 33.02-2 (Use of land)	<p><b>Exemption from notice and review</b></p> <p><i>An application is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.</i></p> <p><i>This exemption does not apply to land within 30 metres from land (not a road) which is in a residential zone, Capital</i></p>	<p>The subject site is not located within 30 metres from land which is;</p> <ul style="list-style-type: none"> <li>• In a Residential zone</li> <li>• In a Capital City Zone or Docklands Zone</li> <li>• Land used for a hospital</li> <li>• Land use for an education centre</li> <li>• Land in a Public Acquisition Overlay to be acquired for a hospital or an</li> </ul>

Zone, Overlay or Particular Provision	Clause	Exemption details	Comment
		<p><i>City Zone or Docklands Zone, land used for a hospital or an education centre or land in a Public Acquisition Overlay to be acquired for a hospital or an education centre.</i></p>	<p>education centre.</p> <p>Therefore, the application is exempt from the notification requirements.</p>
	<p>Clause 33.02-4 (Buildings and works)</p>	<p><b>Exemption from notice and review</b></p> <p><i>An application is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.</i></p> <p><i>This exemption does not apply to an application for a building or works within 30 metres of land (not a road) which is in a residential zone or land used for a hospital or an education centre or land in a Public Acquisition Overlay to be acquired for a hospital or an education centre.</i></p>	<p>The subject site is not located within 30 metres from land which is;</p> <ul style="list-style-type: none"> <li>• In a Residential zone</li> <li>• In a Capital City Zone or Docklands Zone</li> <li>• Land used for a hospital</li> <li>• Land use for an education centre</li> <li>• Land in a Public Acquisition Overlay to be acquired for a hospital or an education centre.</li> </ul> <p>Therefore, the application is exempt from the notification requirements.</p>
<p>Bushfire Management Overlay</p>	<p>Clause 44.06-7</p>	<p><b>Notice and review</b></p> <p><i>An application is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act, unless a schedule to this overlay specifies otherwise.</i></p> <p><i>A schedule to this overlay may specify that notice be given to any person or body in accordance with Section 52(1)(c) of the Act.</i></p>	<p>The BMO specifies that an application within the overlay is exempt from notice and review requirements of Section 52 of the Act, unless otherwise specified in the Schedule.</p>
	<p>Schedule 1 to Clause 44.06 Sub-clause 9.0</p>	<p><b>Notice and review</b></p> <p><i>None specified.</i></p>	<p>The Schedule does not specify any notice or review requirements, therefore an application with the BMO is exempt from these requirements.</p>
<p>Car Parking</p>	<p>Clause 52.06-4</p>	<p><b>Exemption from notice and review</b></p> <p><i>An application under Clause 52.06-3 is exempt from the notice requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act if:</i></p> <p><i>the application is only for a permit under Clause 52.06-3; or</i></p> <p><i>the application is also for a permit under another provision of the planning scheme and in respect of all other permissions sought, the application is exempt from the notice</i></p>	<p>The application is exempt from all other permit requirements of the Industrial 2 Zone and Bushfire Management Overlay. Therefore, the application is also exempt from the notice and review requirements of Clause 52.06.</p>

Zone, Overlay or Particular Provision	Clause	Exemption details	Comment
		<p><i>requirements of Section 52(1)(a), (b) and (d), the decision requirements of Section 64(1), (2) and (3) and the review rights of Section 82(1) of the Act.</i></p>	

## 6. Planning Assessment

### 6.1 Buildings and Works

Under Clause 33.02-4 of the Industrial 2 Zone and Clause 44.06-1 of the Bushfire Management Overlay, a permit is required to construct a building or construct or carry out works and to construct a building or construct or carry out works associated with industrial land uses.

The project is located within the bottom south-eastern section of the land parcel, south of the existing paper mill on site on land that is presently occupied by a plantation and a car parking area. These areas will be cleared and levelled during the construction phase of the project.

The construction of the EfW plant is expected to take approximately three years from commencement with the following construction activities including;

- Civil works
- Bulk earthworks
- Concrete and structural works
- Steel fabrication and installation
- Utility connections and ancillaries
- Mechanical works and plant installation
- Electrical and control systems
- Road and rail installation (within the Maryvale Site boundaries)

The proposed EfW plant is a suitable industry type given the existing industrial land use and development on the site. The project directly aligns with the inputs required for the existing pulp and paper mill whilst having the capacity to produce energy (electricity and steam) independent of the mill. The site is located away from established residential and urban centres of the surrounding townships, with an urban amenity buffer in the local planning scheme, it also has connections to the existing transport network (both rail and road).

The Latrobe River is located to the north of the Mill site and is not impacted by the proposed development. The site of the proposed development is located approximately 2 km away from the Latrobe River. Some of the effluent from the EfW plant will be directed to the existing Maryvale wastewater treatment systems which discharge into the Latrobe River under EPA Licence conditions, however it is not expected this will result in any change to the river discharge.

Given the rural context of the site, no streetscape character exists. The broader roadside character of the area will not be impacted due to the presence of the existing site plantation located between the EfW site and the closest road (Traralgon West Road).

The bulk of the EfW plan is located within the one construction footprint on the site is made up of the components described in Table 6.1.

Table 6.1 : Construction components of the proposed EfW plant

Component	Description	Comments
Construction laydown area	This area is to be used for laydown of construction equipment including heavy vehicles, construction material, etc during the construction phase of the project.	
Gate house & Weighbridge	The gate house and weighbridge will be used to monitor incoming vehicles to the EfW Plant.	

Component	Description	Comments
Carpark	The development of the new carpark will have capacity for approximately 60 cars.	The number of car parking proposed is based on the average number of employees per shift and visitors to the visitor centre.
Walkway to site office from carpark	This walkway will be used as the main pedestrian thoroughfare between the site offices and the carpark.	
Offices and workshop	The various offices on site will include an administration office, central control room, workshop areas as well as a parts/inventory store.	
Tipping hall	The waste to be used at the EfW Plant is delivered to the facility directly by refuse collection vehicles or other bulk solids handling vehicles (e.g. container tipping vehicles, bulk tippers and walking floor trucks) and will enter the enclosed tipping hall building in preparation for disposal of the waste into the waste bunker.	Because the tipping hall is enclosed, odorous molecules and hydrocarbons associated with the waste will be destroyed in the EfW processes such as the foul air being used as combustion air in the EfW boiler. The waste tipping hall will be a fully enclosed building maintained under negative pressure whenever one of the Combustion Lines is in operation for the control of odour and dust.
Waste bunker	The waste bunker is the location where all the incoming waste to be used at the EfW Plant will be stored. The waste carrying vehicles will back up and tip the waste into the waste bunker and the waste is then mixed and handled by the overhead waste crane(s) and put into the waste feed hopper(s).	This is housed next to a building that also contains the Tipping Hall.
Feed chute (not shown in detail)	The feed chute forms part of the waste hopper and waste delivery system to the boiler. The waste hopper is where the overhead waste cranes put the waste into and the waste is then eventually pushed via a ram through the feed chute onto the combustion grate where it is then combusted in the furnace.	
Boiler house	The boiler house is where the waste will be burned inside the furnace. The boiler house will be an enclosed structure. The boiler house will contain all of the air handling equipment, combustion, heat transfer elements, feedwater pumps etc.	
Flue gas treatment area	The flue gas treatment system is used to monitor and treat the combustion 'flue' gases from the boiler prior to discharging it into the stack and ultimately to the environment.	This is where the air pollutants will be closely regulated and controlled to maintain within the allowable emissions limits i.e. State Environment Protection Policy (SEPP) Ambient Air Quality, and IED.



Component	Description	Comments
Additive silos	These silos will be used to store the chemicals for the flue gas treatment system and include activated carbon, hydrated lime and urea.	
Stack	The stack discharges the post-combustion air from the boiler and will be constructed of an inner steel chute surround by a concrete skin.	Tallest building component of the EfW plant with a total height of approximately 95 m.
Continuous Emissions Monitoring Systems (CEMS)	The online monitoring equipment used in the EfW control process and to determine compliance with licence discharge conditions.	
Turbine and generator	The turbine will be driven by steam and will be connected to the generator via a gearbox. Both the turbine and generator will be housed in the Turbine Hall building.	
Cooling towers	The cooling towers are used to reduce heat from the water used for various cooling applications including from the condenser and various heat exchangers around the plant.	
Fire water tank	This tank will contain raw water that is to be stored on site and used during a fire event.	
Fire suppression systems	This will include smoke detectors, water cannons etc.	
Demin water tank	This tank will contain demineralized water for use in processes that require demineralized water.	The tank will be used during times where the demineralization plant is offline or during peak demands.
Fly-ash silos	The fly-ash silos will be used to collect the fly-ash or 'boiler ash' particles which are formed as part of the waste burning process in the boiler passes.	This fly ash will be mixed with the flue gas treatment chemicals and then collected by the fabric filters and this mixed particulate is commonly referred to as air pollution control residue (APCr).
Residue silos	The residue silos will be used to collect the air pollution control chemicals used throughout the flue gas treatment system.	The residue silo and fly-ash silos will ultimately form the same collection matter and are commonly referred to as air pollution control residue (APCr) .
Emergency diesel generators (6MW for black-start and 0.2MW for emergency shutdown) and related diesel storage	As part of the project, two diesel generators – a 6MW for black starts and 0.2MW for emergency shutdown will be included.  Black start operations refers to when the plant is disconnected from the grid supplied electricity, therefore preventing nominal start-up operations. The generator may also be used at times of peak electricity demand.  The emergency diesel generator will be used to provide power to facilitate an orderly shutdown of the generating station following the loss of all main and auxiliary power services.	The storage area will be bunded where the diesel fuel will be located
Potential visitor centre	If this centre is constructed, it will be used for educating the public about the EfW Plant and waste recovery process.	

The layout of the main buildings consists of the following footprint areas;

- Tipping hall 2,450 sqm
- Waste bunker 3,825 sqm
- Boiler house 3,250 sqm
- Flue Gas Treatment Area 1,250 sqm
- Office/Administration areas 875 sqm

The development will utilise building materials to match the existing pulp and paper plant being galvanised steel sheet. Detailed construction plans will be available once tender for the project has been finalised.

Storm water from the proposed development will discharge into the existing Maryvale site storm water system.

### 6.1.1 Bushfire Management

Under the BMO, a permit is required for buildings and works associated with an industry. The requirements for an application under the BMO include a Bushfire Management Statement (BMS). A BMS has been undertaken and is attached to this report in Appendix D. The BMS shows that the measures required by the overlay have been met in terms of landscape, building siting and building design. Bushfire management is also integrated into the existing Mill's emergency response procedures, provision of fire-fighting systems and CFA brigade.

## 6.2 Use

Under Clause 33.02-1 of the Industrial 2 Zone, a permit is required for the use of the land for an Industry. The following addresses the application requirements and decision guidelines under the Industrial 2 Zone. Under Clause 52.06 car parking requirements apply to a new land use, therefore are applicable to the assessment of the project.

The site has been strategically selected due to the zoning of the land, the presence of the existing paper mill and extensive buffer setbacks from sensitive land uses such as residential and urban developments. The site exceeds the 1,500 m buffer from land which is in a residential zone, Capital City Zone or Docklands Zone, land used for a hospital or an education centre or land in a Public Acquisition Overlay to be acquired for a hospital or an education centre. The closest point of the proposed EfW plant to a residential zone is approximately 3.3 km although there are several residences within this distance that are in other planning zones (i.e. SUZ, FZ). This is the measurement from the site boundary to the boundary of the residential zone to the east (Traralgon West). The nearest residence (not located within a residential zone) is located 1.7 km south of the EfW plant. The next nearest residence is located 2.6 km west to the site. With the exception of the two residences identified, most residences are located greater than 3 km from the site.

Under Clause 52.10 (Uses with Adverse Amenity Potential), the project is specified as *Combustion, treatment or bio-reaction of waste to produce energy* under the Recycling and Resource Recovery heading. This use is listed with a Note 1, resulting in a variable setback distance, dependent on the processes to be used and materials to be processed or stored. Table 6.2 describes the processes and functions proposed on the site as part of the project. A Works Approval will be submitted with the EPA. The requirements of the Works Approval and conditions of the amended EPA licence will be adhered to by the project.

EfW is a term applying to the recovery of energy from a number of different waste types using a variety of energy recovery technologies. The main technologies are;

- Combustion of solid waste
- Gasification of solid waste
- Anaerobic digestion of solid or liquid waste
- Pyrolysis of solid waste

- Landfill gas collection from solid waste landfills

The proposed EfW plant at the AP site utilises a direct combustion process which can produce a high temperature flue gas from energy which can be recovered by heat transfer in a boiler as hot water, low or high pressure steam. The high pressure steam can be converted to electrical power by the use of a steam turbine and generator. This electricity can be fed into the National Electricity Market (NEM) or supplied to local industrial users (such as the Maryvale mill).

Table 6.2 : Functions of EfW Facility

Function	Comments
Receival of waste materials	Two types of waste (Municipal Solid Waste and Commercial and Industrial Waste) will be sourced and transported to the site via the existing road and rail network.
Waste sorting	Waste sorting will be at source, will have a quality assurance regime which includes periodic audit sampling
Combustion of waste materials for energy	Combustion of waste to produce steam and electricity generation
Combustion of raw materials for energy	Combustion of natural gas for boiler warm up.
Process control and air emissions monitoring	Inline and manual testing of EfW Boilers for process control and licence compliance.
Transmission of electricity	Electricity generated on site to be distributed to site substation. Surplus electricity (volume still to be determined but less than 4%) to be on sold.
Transmission of high pressure steam	Transmission of lower pressure steam from turbine exhaust to be distributed around site for thermal energy needs in the manufacture of pulp and paper.
Waste recycling	Metal (ferrous and non-ferrous) extracted from the bottom ash are to be separated and collected post combustion prior to be sent onto recyclers.
Waste material recovery for beneficial re-use.	Bottom ash is intended to be sold for aggregate replacement in applications such as road base - once markets are established and waste classification testing can be completed.
Waste disposal	Liquid waste water will be processed on site. Bottom ash is intended to be disposed to industrial waste landfills (until beneficial re-use markets are established and relevant approvals obtained). Fly ash and air pollution control residues are to be disposed to prescribed waste landfill (Suez Taylors Road). Waste that cannot be processed at EfW facility (e.g. during planned EfW maintenance shuts) is to be diverted to offsite landfills.

### 6.2.1 Operating hours

The EfW plant will operate on a baseload basis of 24 hours a day, 7 days a week with the exception of maintenance outages and is anticipated to operate for approximately 8,000 hours per annum, similar to the existing mill.

### 6.2.2 Site access and traffic

The existing AP pulp and paper mill site consists of an established sealed road network made up of existing access points suitable for heavy freight operations.

One of the factors determining the location of the EfW plant located on the Mill site was excellent and readily available access for rail and road without compromising existing operational infrastructure or storage areas of the Mill. The southern portion of the site has efficient access to the main weighbridge entrance and exit locations, including access leading to Alexanders Road and then towards the Princes Freeway (M1). All freight on the site will pass via a weighbridge on site.

During the construction phase of the project, 780-800 cars, 25 truck and 1 over-dimensional truck are expected on average to access the site each day. Once the EfW plant is built and is operating under standard conditions,

it is expected that on an average day a total of 79 vehicles will access and exit the site. It is anticipated that the EfW plant could result in an additional 6 trains a week delivering waste to the site. These rail movements will occur within the existing rail line and the proposed additional rail siding areas.

During the operation of the EfW, employee vehicle access to the site will be via the existing roundabout on Traralgon West Road (this is the current access used for the AP pulp and paper mill site). The traffic generated as a result of the proposal will have a minimal impact on the existing road network, relative to current traffic movements. A Preliminary Traffic Assessment for the proposed EfW plant has been undertaken and is attached at Appendix E.

### 6.2.3 Car parking

The development proposes a new car parking space, north of the main building footprint of the EfW plant. Prior to the use commencing, car parking must be provided on the land meeting the requirements of Clause 52.06. Under Clause 52.06-6 (Number of car parking spaces required for other uses), 2.9 spaces are required per 100 net sqm – in this case, the full number of spaces required to be provided is 338. As the use of this development relates to industrial purposes, the number of car parking spaces is related to employees and visitors on site. The 338 figure is not deemed necessary in this context.

The following car parking spaces have been provided on the land, based on the number of employees required for daily EfW plant operations and the average number of visitors expected for the visitor centre.

An estimated 30-40 employees per shift will be onsite at any one time during the plant's operations. It is anticipated that on average, 10 visitors would access the site and require onsite car parking. Allowing for some buffer, a total of 60 car parking spaces have been provided on site in association with the operation of the proposed EfW plant. Given the size of the available land parcel, additional car parking spaces can be provided if required to meet employee and visitor numbers. Car parking access ways and spaces will be designed to meet the requirements of Clause 52.06-9 (Design standards for car parking).

Bicycle parking will be provided in accordance with the requirements of the planning scheme.

### 6.2.4 Noise effects

The main noise sources associated with the proposed EfW site have been identified as the following plant items;

- Water cooled condensers (WCC)
- Induced draft fans
- Ash extraction fans
- Lime pack blowers
- Stack
- Compressor
- High pressure steam line
- Transformer
- Truck movements
- EfW plant buildings including;
  - Tipping hall
  - Waste bunker
  - Bag house
  - Turbine Hall

A noise impact assessment was undertaken to determine compliance with EPA agreed noise limits and to provide recommendations where further noise mitigation works are deemed to be required and is attached in Appendix F of this report. The proposed site for the EfW plant and the Noise Sensitive Areas (NSA) are located outside of the *State Environmental Protection Policy (Control of noise from Industry, Commerce and Trade) No.N-1* area of application (major urban area). Therefore, the applicable guideline is the *Noise from Industry in Regional Victoria (NIRV)*.

Noise assessments have been undertaken to predict the anticipated noise emissions by the EfW plant. These assessments did not take into account the implementation of noise attenuation measures such as acoustic design that will be incorporated into the design of the plant during the detailed design phase because the detailed design phase of the project has yet to commence. It is likely these additional detailed design measures will further mitigate noise impacts.

It is predicted that noise from the EfW Plant will contribute to the overall noise level experienced at NSAs North and South during Night under neutral meteorological conditions and NSAs North, South and West during Day and Evening periods under predominant meteorological conditions.

In order to achieve a noise level under which noise from the EfW Plant does not contribute to the overall noise level from the combined existing industrial sources and EfW Plant (i.e. Effective Recommended Maximum Noise Levels minus 10 dB), mitigation measures will be required to be implemented during the detailed design phase.

It is important to note that the Project is currently in the feasibility phase and there are a number of design parameters that have yet to be fully developed. The next phase of the Project involves the appointment of an EPC contractor to progress the detailed design and subsequent final design and construction of the Project (should the project proceed).

It is during the detailed design phase where acoustic design is conducted and noise mitigation measures are incorporated into the design. This process is iterative and will involve risk and hazard identification (e.g. risk and HAZOP/HAZID workshops) to quantify and manage risks, such as adherence to statutory noise limits. Experience has shown that typical noise mitigation measures can reduce the noise contribution of a plant by up to 10 dB(A) and can be incorporated in to the plant design. If the noise contribution of the subject plant is above 10 dB(A), more detailed engineering for noise mitigation is normally required to reduce noise impacts.

### 6.2.5 Air emissions

An Air Quality Assessment was undertaken for the proposed EfW plant in accordance with the State Environment Protection Policy (SEPP) Air Quality Management (AGM) and EPA guidelines for the use of the regulatory model. The potential air emissions were analysed and estimated following the EPA's guidelines: *Energy from Waste (EPA, 2013a)* and *Recommended separation distances for industrial residual air emissions (EPA, 2013b)*. The Project has also been assessed against the best practice European emission standards (Industrial Emissions Directive 2010/75/EU) as required by the *Energy from Waste Guidelines*. The conclusion of the air quality modelling assessment was that there is a low risk of air quality impact from the EfW emissions.

The modelling overall signalled that there is a low risk of air quality impact from the project's EfW emissions. All aspects of potential air quality impacts will be investigated and assessed by EPA during the Works Approval assessment process.

Table 6.3 : Potential Air Emissions from the EfW plant

Project component	Comments
EfW boiler	The project will have two boilers providing steam to a single turbine capable of generating up to 70 MW of electricity. Each boiler will have a flue and these flues will be ducted in a common stack discharging to a height of 95 m Above Ground Level.
Tipping hall odour	The waste is delivered to the facility directly by Refuse Collection Vehicles or other bulk solids

Project component	Comments
	<p>handling vehicles (e.g. sealed container tipping vehicles, bulk tippers and walking floor trucks) via waste transfer stations and enters the enclosed tipping hall building.</p> <p>Automatic roller doors will open and close quickly as the vehicles enter and leave the tipping hall to minimise fugitive odour escaping the building.</p> <p>The vehicles back up and tip waste into the waste storage bunker. The waste feed crane mixes the waste before depositing waste into the feed hopper. Waste is pushed from the bottom of the hopper onto the combustion grate via a hydraulically driven ram feeder. Under grate supplied combustion air is drawn from within the tipping hall, normally with some form of air preheating to promote waste drying on the grate. This also maintains the tipping hall under negative air pressure, continually controlling odour emissions from the tipping hall unloading and storage area while one or two boilers are operational.</p> <p>In the event that both boilers were offline, odorous air would be contained within the enclosed tipping hall building with any odour release only occurring for short periods to maintain safe working conditions until the boilers are brought back on-line. Any odour release would be via roof ventilation.</p>
<p>Back-up generators (6MW for black-start and 0.2MW for emergency shutdown)</p>	<p>As part of the project, two diesel generators – a 6MW for black starts and 0.2MW for emergency shutdown will be included.</p> <p>Black start operations refers to when the plant is disconnected from the grid supplied electricity, therefore preventing nominal start-up operations. The generator may also be used at times of peak electricity demand.</p> <p>The emergency diesel generator will be used to provide power to facilitate an orderly shutdown of the generating station following the loss of all main and auxiliary power services.</p>

**6.2.6 Light emissions**

Any lighting proposed will be directly associated with the operation of the EfW plant. The large land parcel area and setback distances from the EfW building footprint to the closest boundary (being shared with the road) allows for any light glare to fade and be buffered by the existing landscaping. The rural setting of the site ensures minimal to no light disturbance of any adjoining properties. All lighting proposed will be in compliance with Australian Standards.

## **7. Other Legislation of Relevance**

### **7.1 *Environment Effects Act 1978***

A referral under the Environment Effects Act 1978 has been submitted to the Minister for Planning to determine whether an Environment Effects Statement is required for the project.

### **7.2 *Environment Protection Act 1970***

This Act applies to noise emissions and the air, water and land in Victoria, the territorial sea along the Victorian coast and to the discharge of waste to the Murray River from any premises in Victoria. Works approvals are required under the EPA Act for industrial and waste management activities that have the potential for significant environmental impact.

A Works Approval has been prepared and submitted to the EPA for the project.



## 8. Conclusion

The proposed use and development of the EfW plant is appropriately located within the Industrial 2 Zone and aligns with the State and Local Planning Policies of the Latrobe Planning Scheme. The proposed EfW plant contributes to the state transitioning towards sustainable energy alternatives, greenhouse gas reduction targets, and reducing waste to landfill (by implementing a higher order use of the waste) whilst securing future employment within the Latrobe Valley.

The proposed EfW Plant is a significant project that will provide a suitable baseload energy supply to the Maryvale Mill which is an important employer in the region, currently employing 850 people directly. The energy security that will be established from the Project will help AP to continue to operate in an economically viable manner, generate new employment opportunities throughout the construction and operational phases, and bring significant social and economic benefits to Maryvale and the Latrobe Valley region. There will also be a significant reduction in greenhouse gasses produced primarily due to the diversion from landfill of the feed stock, but also due to the replacement of fossil fuel energy sources (natural gas and electricity).

Environmental impacts associated with the Project have been assessed through detailed risk assessments and technical environmental assessments, in order to identify all environmental impacts and provide suitable mitigation measures. These assessments have identified a number of improvements to the plant design to further minimise the environmental impact of the Project.

Detailed environmental assessments have indicated that the Project will meet the best practice European emission standards (Industrial Emissions Directive 2010/75/EU) and all relevant SEPP requirements. Noise, waste and water impacts are expected to be low risk. Opportunities to further reduce environmental impacts will continue throughout the detailed design stages.

AP is dedicated to ensuring the Gippsland community and other stakeholders are involved in the Project, and early and transparent communications are a core value. A consultation program is already underway which includes regular meetings with local consultative committees, the general public and the project's information centre. This program will continue to be implemented to inform relevant stakeholders of any updates, progress, and to answer any queries or concerns around the Project.

Therefore, it is considered that the Project is acceptable from a planning perspective, has numerous potential benefits for economic, social and environmental aspects and should be supported by Council.