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20 December 2024

Ms Emma Barnet
Senior Environmental Assessment Officer
Department of Planning, Housing and Infrastructure
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Dear Ms Barnet

Weston Aluminium - Proposed Autoclave Facility - Request for SEARs

1.0 Introduction

Weston Aluminium Pty Ltd (WA) operates a resource recovery facility on Mitchell Avenue, Kurri Kurri. Due to changes in market demand and a reduction in the processing of primary aluminium dross and SPL wastes at the facility, WA is seeking to diversify its operations. WA is seeking to install and operate a new autoclave facility for the thermal treatment of medical wastes (the Project). The Project would be classified as State Significance Development (SSD) and would require approval via a new development application.

The purpose of this document is to provide an overview of the Project and to request the Secretary's Environmental Assessment Requirements (SEARs). The SEARs would guide the preparation of an Environmental Impact Statement (EIS) to support the SSD application for the Project, as required under Division 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

2.0 Approval History

The WA facility operates under three Development Consents. Development Consent (LEC 10397-1995) for the facility was granted by the Land and Environment Court of NSW on 30 August 1996. The Minister for Planning subsequently granted Development Consent (DA 86-04-01) on 20 September 2001 for additions to the facility. These two development consents have identical conditions of consent and have been modified previously to allow various alterations and additions. WA has also established a Thermal Processing Facility at the site, approved under State Significant Development Consent (SSD 7396) on 12 December 2018.

WA is currently seeking approval via a separate development application (application number SSD-24668706) to receive, consolidate, store and process additional waste streams at the facility. An Environmental Impact Statement (Entech Solutions, 2022) has been prepared for that project, and a response to submissions report is currently being finalised.

3.0 Summary of Approved Production Limits

WA is approved under its current Development Consents to process the following:

- LEC 10397-1995 and DA 86-04-01
    - up to 40,000 tonnes per year as a combination of aluminium dross, spent potlining (SPL), general solid waste (consumer product waste), and illicit and pharmaceutical waste
    - up to 35,000 tonnes of scrap metal aluminium per year
- SSD 7396
    - up to 8,000 tonnes per year of clinical and related waste; waste pharmaceuticals, drugs and medicines; waste from the production and preparation of pharmaceutical products; quarantine wastes; and other wastes (as permitted by the Environment Protection Licence (EPL)) within the Thermal Processing Facility.

4.0 The Project

WA is seeking approval to install and operate an autoclave facility within the existing Plant Building and to collect, transport, store and process up to 10,000 tonnes of autoclavable wastes per annum. The autoclave process uses steam, moisture, heat and pressure to sterilise the wastes and remove the harmful pathogens and microorganisms, creating a safe waste for disposal.

Autoclaving requires lower temperatures (up to approximately 120 ºC for specified retention times) compared to the facility's existing thermal treatment process (up to approximately 1100 ºC). The autoclave process would be simpler and less energy-intensive than the approved thermal incineration activities at the site. The autoclave operates without waste combustion (instead relies on boiler operation to produce steam) and would therefore result in lower emissions of greenhouse gases and particulates compared to the approved thermal treatment activities required to process certain waste types, such as clinical wastes.

WA is proposing to modify the northern end of the existing Plant Building (refer to **Attachment 1**) to house the autoclave along with an associated shredder, storage and bin-washing facility connected to the existing trade waste infrastructure. An indicative layout for the Project is shown in Attachment 2.

The Project would include the following key elements:

- Collection, transport and storage of up to 10,000 tpa of autoclavable wastes
- Processing of these wastes within the proposed autoclave at temperatures of around 120ºC for specified retention times, followed by shredding of the processed wastes
- Disposal of approximately 10,500 tpa (noting that the autoclave process can add around 5% mass due to the additional moisture) of the processed product to a suitably licenced facility

The proposed autoclavable wastes would include waste resulting from medical, nursing, dental, allied health, skin penetration or other related clinical activity, or bio-medical research, being waste that has the potential to cause injury, infection or offence (e.g. visibly blood-stained or body-fluid-stained materials or equipment) which has a low probability of containing infectious substances and does not contain other hazardous components. Relevant waste codes would include:

- R100: Clinical and related wastes
- R110: Pathogenic substances and quarantine wastes
- R150: Bio-security and quarantine wastes.

WA intends to collect the autoclavable wastes directly from source and would transport these wastes to the WA site under an existing waste transportation licence (EPL 21838). Wastes may also be transported to the site using other licenced transport contractors. It is noted that the proposed waste types are already approved (under SSD 7396) to be received at the WA site for processing within the Thermal Processing Facility.

The autoclavable medical wastes may be transported together with other wastes received as part of existing approved activities, e.g., wastes to be processed via the Thermal Processing Facility. Thus, cytotoxic, anatomical, pharmaceutical and autoclavable waste streams, which are separated at the source, may be collected and transported concurrently to the WA site for processing within WA's existing Thermal Processing Facility (current approved activity) and the proposed autoclave (the proposed Project), respectively.

Autoclavable wastes would be received in mobile garbage bins and offloaded from trucks into the waste receival area shown in Attachment 2. The bins would then be decanted into the train carriages of the autoclave. The used bins would be moved to the Process 'Dirty' Bin Storage area prior to being washed in the Wash Bay zone. The bins would be washed / disinfected, relined and moved to the Clean Bin zone. The clean bins would be reloaded onto trucks for dispatch to medical facilities.

Once autoclave carriages are full, the four to five carriages would be automatically moved into the autoclave for processing. Following the specified retention time, the treated wastes would exit the autoclave. The treated wastes would be tipped onto a conveyor and moved into the shredder to be shredded into small particles. The shredded particles would be transported via conveyor and tipped into a mobile waste compactor. Once the compactor is full, this would be transported by hook lift truck to a licensed landfill for disposal.

The strategic need for the Project is consistent with the approved facility's objectives. That is, to respond to changes in market demand, ensure the responsible management and disposal of problem wastes, and to secure the ongoing operation of the facility and the employment it provides.

5.0 Proposed Planning Pathway

Section 4.36 of the EP&A Act defines development that is classified as SSD and notes that development can be declared to be SSD by a State Environmental Planning Policy (SEPP). The *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) provides guidance on whether development constitutes SSD. Section 2.6(1) of the Planning Systems SEPP states that projects are deemed to be SSD where the development is specified in Schedule 1 or 2.

Schedule 1, Section 23(5) of the Planning Systems SEPP relates to '*waste and resource management facilities*' and states that the following development is deemed to be SSD:

> *(5) Development for the purpose of hazardous waste facilities that transfer, store or dispose of solid or liquid waste classified in the Australian Dangerous Goods Code or medical, cytotoxic or quarantine waste that handles more than 1,000 tonnes per year of waste.*

The WA facility is a hazardous waste facility and the Project would transfer, store and dispose of over 1,000 tonnes per year of medical waste. The Project would therefore be deemed to be SSD in accordance with Schedule 1, Section 23(5) of the Planning Systems SEPP.

In accordance with section 4.5 of the EP&A Act, the consent authority for the Project would be the NSW Minister for Planning or the Independent Planning Commission (in the case of greater than 50 public objections to the application, local council objection, and/or reportable political donations made by the proponent in the two years prior to lodgement).

6.0 Identification of Issues

A comparative assessment of the proposed Project against the existing approved facility is provided in Attachment 3, to identify potential environmental issues as relevant to the Project. A scoping summary table is provided in Attachment 4.

The Project would require minor alterations to the northern end of the existing Plant Building to house the autoclave facility along with associated storage and a bin-washing facility. Construction activities would be minimal, and potential impacts during construction would be minor and temporary. These would be managed with standard environmental management measures.

The Project would not involve an increase in the development footprint, hours of operation or noise limits. The introduction of the autoclave facility is not expected to increase noise levels substantially during operation of the Project.

The Project is expected to result in up to 10 additional trucks per day. A Traffic Impact Assessment was previously undertaken as part of the EIS for WA's Additional Waste Streams Project (Entech 2022). The assessment noted that there are currently up to 25 heavy vehicle deliveries per day, with an additional 3 deliveries per day associated with the Additional Waste Streams project if it proceeds. As noted above, autoclavable wastes may be transported together with other wastes received at the facility as part of existing approved operations. This would effectively reduce vehicle frequency below the projected maximum additional 10 trucks per day, and will thus assist in minimising additional traffic as a result of the Project. Traffic impacts are not expected to be signficant and would be assessed within the EIS.

The autoclave operations would be undertaken wholly within existing buildings and would be a less energy-intensive process compared to the existing thermal treatment process. The autoclave operation does not involve direct combustion of waste (instead relying on boiler operation to produce steam) and would reduce emissions of greenhouse gases and particulates. Also, there would be no residual ash or residue requiring disposal. As such, the Project is not expected to result in air quality impacts.

Wastewater from bin washing activities would be managed through WA's existing trade waste agreement with Hunter Water. The proposed autoclavable wastes to be received and processed would be consistent with the existing waste profile received at the facility, and the Project is not expected to increase the hazard risk profile of the facility.

While the Project may increase the volume of waste going to landfill from the facility, it is noted that without the Project, these wastes would still require treatment at a waste processing facility to remove the harmful pathogens and ultimate disposal to landfill. WA would continue to investigate potential

opportunities for further resource recovery from the treated wastes, such as the separation of metals for recycling.

Therefore, the Project is expected to result in minimal environmental impact. Key issues to be assessed within the EIS would include air quality, hazard and risk, traffic and noise impacts during the operational stage of the Project. Assessment of these issues would include consideration of the cumulative impact associated with existing approved operations in addition to the Project.

7.0 Community Engagement

WA would prepare a Community and Stakeholder Engagement Plan for the EIS once SEARs are received. The objective would be to ensure ongoing engagement and effective communication with key stakeholders and the community. The outcomes of consultation would be included in the EIS and relevant technical studies.

Engagement activities would likely include agency meetings, distribution of Project Update newsletters to residents and businesses in the immediate area, newspaper advertisement and a community drop-in information session. Key stakeholders and agencies would be identified for targeted consultation. Information relating to the Project would also be made available on the WA website.

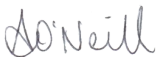
8.0 Summary

The proposed Project would be classified SSD. This document has been prepared to support an application for SEARs for the Project.

The development application would be accompanied by an EIS, which would include a description of the proposed Project and an assessment of potential environmental impacts. The EIS would be prepared in accordance with the SEARs and would address the matters for consideration listed in section 4.15 of the EP&A Act.

If you require any additional information, please contact me via the details below.

Yours faithfully



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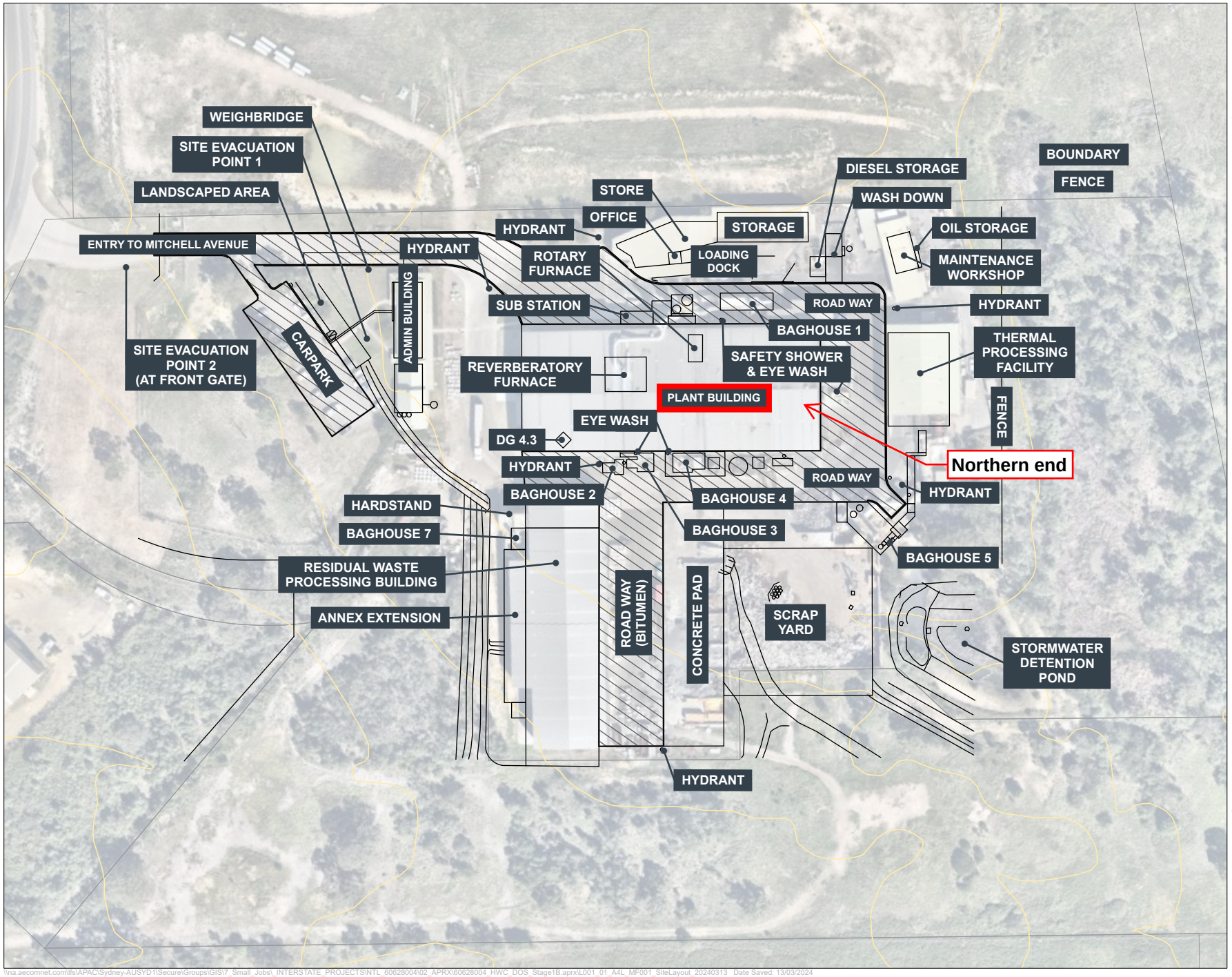

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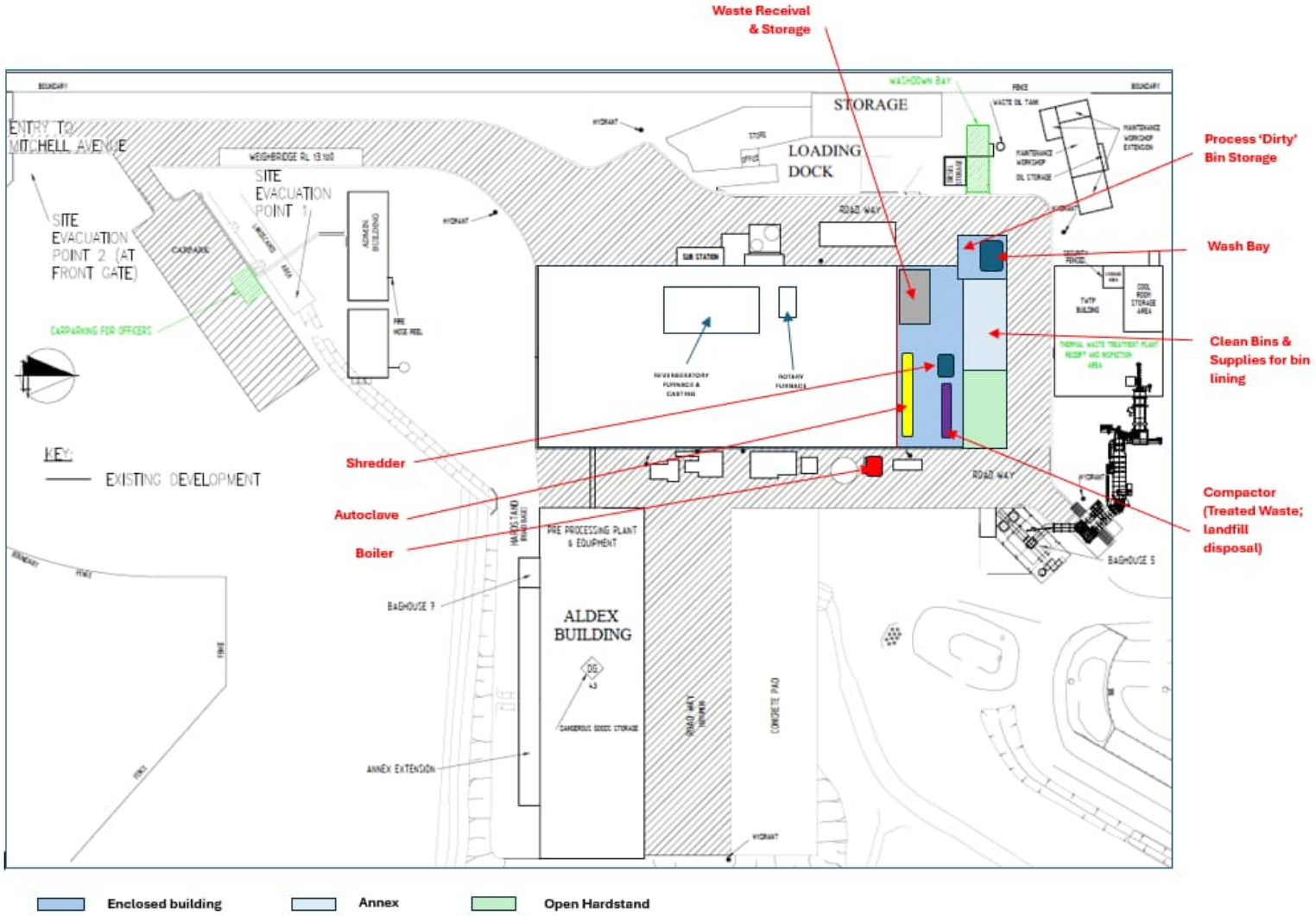
ATTACHMENT 1:
SITE LAYOUT

CLIENT: WESTON ALUMINIUM PTY LTD

Attachment 2 Indicative layout for proposed Project



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Attachment 3 Comparative Assessment

Element	Existing Facility	Proposed Project
Approved activities	The facility is approved for the thermal treatment of aluminium dross, SPL, pharmaceutical and illicit drug wastes and scrap metal, and the non-thermal shredding of general solid wastes (consumer product wastes). The Thermal Processing Facility is approved for the thermal treatment of clinical and related waste; waste pharmaceuticals, drugs and medicines; waste from the production and preparation of pharmaceutical products; quarantine wastes; and other wastes (as permitted by the Environment Protection Licence (EPL)).	The proposed Project would include thermal treatment of autoclavable wastes within an autoclave facility. Thermal treatment via autoclaving is considered to be a minor change to, and complements, the existing approved thermal treatment activity.
Infrastructure	The approved facility includes an administration building, three large industrial buildings for the waste processing and resource recovery operations, a truck loading bay, workshop and other ancillary structures such as bag houses and bulk material storage bunds. Processing is undertaken within a rotary furnace, reverberatory furnace and Thermal Processing Facility.	The proposed Project would require an alteration to the northern end of the existing Plant Building to house the autoclave along with an associated shredder, storage and bin-washing facilities. The bin-washing facility would connect to the existing trade waste infrastructure following Hunter Water approval.
Scale of production	The facility is approved to process: • up to 40,000 tonnes per year as a combination of aluminium dross, SPL, general solid waste (consumer product waste) and pharmaceutical and illicit drug waste • up to 35,000 tonnes of scrap metal per year • up to 8,000 tonnes per year of clinical and related waste; waste pharmaceuticals, drugs and medicines; waste from the production and preparation of pharmaceutical products; quarantine wastes; and other wastes (as permitted by the EPL)	The proposed Project seeks approval to thermally treat up to 10,000 tonnes of autoclavable medical waste within the proposed autoclave facility.
Hours of operation	The facility is approved for operations 24 hours per day, seven days per week. Truck movements to and from the premises are limited to between the hours of 7am and 10pm, pursuant to the site's EPL.	No change to the existing operation hours or truck movement times would be required for the proposed Project.
Traffic impacts	The Development Consents for the site do not include a limit on the number of truck movements to and from site,	Existing site access and transport routes would be utilised for the proposed Project. The Project is

Element	Existing Facility	Proposed Project
	however this is limited by approved production limits. Access to the site is via Mitchell Avenue, which connects to Government Road, Hart Road and the Hunter Expressway.	expected to generate up to 10 additional trucks per day. Autoclavable wastes may be transported together with other wastes to be received at the facility as part of existing approved operations. This would reduce vehicle frequency below the projected maximum of 10 additional truck movements per day, and would minimise additional traffic generated as a result of the Project. Traffic impacts are not expected to be significant and would be assessed within the EIS.
Noise	The site is located within an existing industrial estate. The nearest residences in a residentially zoned area are more than 700m from the site. The Development Consents include specific receptor noise limits prescribed for day, evening and night-time periods	The autoclave facility is not expected to increase noise levels substantially during operation. Noise generated would be balanced by a reduction in the noise generated from the processing of aluminium dross and SPL. The Project may generate up to 10 additional truck movements per day, however this is not expected to result in significant traffic noise impacts. Given the existing context of the site within an industrial area, noise impacts are expected to be minimal.
Air quality & Odour	Air quality assessments were undertaken for the existing operations (including recent modifications). Dispersion modelling identified that WA's incremental contribution for all pollutants would meet their respective EPA criterion for all averaging periods. The cumulative assessment identified that all assessed pollutants, with the exception of NO_2 (due to significant background contribution), would be below the relevant criteria.	The autoclave operates without combustion, instead utilising a natural-gas fired boiler unit to produce steam, which would reduce greenhouse gas and particulate emissions compared to approved thermal treatment activities. Emissions would consist of carbon dioxide and water and would be ventred directly to atmosphere (similar to that currently approved for the Holding Side of the existing scap remelt furnace). The proposed autoclave facility would be operated within an enclosed building, with emission control systems installed including fume hoods with a fan to vent the steam outside the building. There would be no residual ash requiring disposal. Therefore, the proposed Project is not expected to have a significant impact on air quality. An odour assessment will be undertaken to investigate potential odour impacts and determine management measures or control

Element	Existing Facility	Proposed Project
		systems that may need to be implemented to address potential odour impacts.
Hazards and risk	The WA facility is a potentially hazardous industry and several Preliminary Hazard Analyses (PHA) have previously been prepared. The PHAs identified hazardous incidents that could potentially occur and, where necessary, recommended management measures to minimise and manage the risks. WA implements a Safety Management System (certified to *AS/NZS ISO 45001:2018 Occupational Health and Safety Management Systems*).	The proposed wastes would be consistent with the existing waste profile received at the facility and the Project is not expected to increase the hazard risk profile of the facility.
Visual amenity	The site is located within an established industrial estate and visual access to the site is generally limited to views from vehicles travelling along Mitchell Avenue. The closest residential zoned areas are located approximately 700m to the south. The facility is considered to be consistent with the industrial nature of the surrounding area.	Visual access to the WA site is generally limited. The proposed Project would require internal alterations to the northern end of the existing Plant Building and would not be visible from outside the site. Given the existing context of the site, this change would be negligible and the visual amenity of the facility would remain generally unchanged.
Waste management	The primary wastes generated at the facility include shredded consumer product wastes and residual ash, which is beneficiated for reuse. Other wastes include general sewage and regulated trade wastewater (from excess cooling water, truck washdown facilities, amenities and crib facilities), wastes from general maintenance activities (waste oil (recycled), scrap steel (recycled) and other general waste) and office waste.	The proposed Project would increase the volume of waste going to landfill from the facility. However, without the proposed Project, these wastes would still require treatment at a waste processing facility to remove the harmful pathogens and ultimate disposal to landfill. WA would continue to investigate further opportunities for resource recovery from the treated wastes (e.g. separation of metals).

Attachment 4 Scoping Summary Table

Level of assessment	Matter	Cumulative impact assessment*	Engagement	Relevant government plans, policies, and guidelines
Standard	Air Quality & Odour	Yes	General	• The Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2022)
Standard	Hazard and Risk	Yes	General	• Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP 2011) • Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition) (National Transport Commission 2007) • Waste Classification Guidelines (DECCW 2009)
Standard	Traffic and transport	Yes	General	• Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads 2013)
Standard	Noise	Yes	General	• Noise Policy for Industry (EPA 2017) • NSW Road Noise Policy (DECCW 2011)
Standard	Waste management	No	General	• Waste Classification Guidelines (DECCW 2009) • Storage and Handling of Dangerous Goods Code of Practice (WorkCover 2005)
Standard	Surface water	No	General	• Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (DECC 2008)
Standard	Biodiversity	No	General	• Biodiversity Assessment Method (DPIE 2020)
Standard	Aboriginal Heritage	No	General	• Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH 2011) • Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW 2010)
No further assessment	Non-Aboriginal Heritage	No	General	-
No further assessment	Visual amenity	No	General	-

**Assessment would include consideration of cumulative impact of the Project and existing approved operations*.